



Early Abortion Training Workbook

Training in Early Abortion for Comprehensive Healthcare

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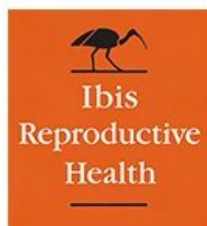
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1. ORIENTATION

Welcome to your early pregnancy options and abortion training. We are excited to provide this opportunity for you in an ongoing effort to assist primary care providers in delivering comprehensive health care to patients.

Whether or not you choose to participate in all aspects of family planning, this curriculum can help you be a better primary care provider for women (aka patients; see [Emerging Terminology](#) Section below) of reproductive age. There are many skills to gain in pregnancy dating, options counseling, timely referrals, miscarriage management, and family planning.

Primary care providers serve an important role in the provision of reproductive health services as they practice in diverse, rural, and underserved areas ([Graham 2005](#)), receive procedural training, and care for patients throughout their reproductive years.

It is beneficial to read Chapters 1 and 2 before beginning your training to help you clarify your personal values about pregnancy options and abortion and think about those values in the context of professional judgments you may be called upon to make.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be better able to:

- Identify your personal values and feelings about pregnancy options
- Clarify your individual training goals and expectations, and agree on a strategy with your faculty to achieve these goals
- Describe the range of constraints on quality reproductive and abortion care, and ways this affects access to health care
- Understand the influence of abortion-related stigma on patients and providers
- Understand unintended pregnancy within a public health, rights-based, and patient-centered framework.

READINGS / RESOURCES

- Paul et al (eds). *Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care* (Wiley-Blackwell, 2009)
 - Chapter 3: Unintended pregnancy and abortion in the USA: epidemiology and public health impact
- Planned Parenthood [Pregnancy Options Information](#)
- [The Donaldson Adoption Institute](#)
- State Legal and Reporting Requirements
 - Guttmacher Institute [State Policy Updates](#)
 - U.S. Department of Health and Human Services [Statutory Rape Reporting Guidelines](#)

SUMMARY POINTS

SKILLS

- It is valuable to identify and understand the life experiences that have affected your opinions in order to promote a non-judgmental climate for patient care.
- When counseling about pregnancy or contraceptive options, use a non-directive approach with active listening, open-ended questions, and accurate information.

SAFETY

- Abortion is safe, and access to legal abortion is associated with significant reductions in maternal morbidity and mortality (Upadhyay 2015, White 2015).
- Patients who received an abortion were not at risk for mental health problems, and were at no higher risk of PTSD than women denied an abortion (Biggs 2016, Cohen 2013).
- Providers face security risks in some settings. Safety may be enhanced by remaining alert and avoiding wearing a white coat or scrubs outside the clinic.

ROLE

- Abortion is common; it is the most common outpatient procedure performed among women. One in 3 U.S. women will have an abortion in her lifetime.
- Nearly half of all abortions worldwide are unsafe, and nearly all unsafe abortions (98%) occur in developing countries.
- Given high rates of unintended pregnancy, abortion, and early pregnancy loss in the U.S., most health care providers will interact with patients navigating these issues.
- Restrictive state laws being implemented at a rapid rate across the country create harmful obstacles to care, increase gestational age at which patients obtain abortions, increase disparity in access, and do not lower abortion rates.
- Reproductive health access and training are becoming limited due to hospital mergers, religious restrictions at training sites, and lack of transparency for patients and trainees.
- The 89% of U.S. counties without an abortion provider are home to 38% of reproductive-aged women.
- By providing high-quality pregnancy options counseling and either family planning services or timely referrals, you improve the access and quality of care patients receive.
- If you do not provide abortion services directly, it is important to know how to refer patients and handle follow-up issues in your community.

PROGRAM OVERVIEW

PROGRAM OBJECTIVES

At the conclusion of the program, you should be able to:

1. List key elements of pregnancy options and informed consent counseling
2. Describe management options for early pregnancy loss
3. Perform uterine aspiration for abortion and / or early pregnancy loss
4. Describe the steps involved in, and / or provide, early medication abortion
5. Describe the management of complications related to early pregnancy loss, medication abortion, and uterine aspiration
6. And provide patient-centered contraceptive counseling and management.

EMERGING TERMINOLOGY

- Abortion Modifiers:
 - We use the term “medication abortion” instead of the previously common term “medical abortion” as it more accurately represents the use of effective medication-based methods to terminate unwanted pregnancies. The term “medical abortion” can be associated with medical necessity (Weitz 2004).
 - We have adopted the term “aspiration abortion” instead of “surgical abortion” as this avoids the connotation of abortion as a surgical procedure that requires an operating room and/or incisions.
- Gender-neutral language:
 - In recognition of a non-binary gender spectrum, we have incorporated gender-neutral language where appropriate including using the term “patient” and the singular “they” instead of “he” or “she.”
 - We continue to use gender-specific language to report most research and legal decisions. Also see [Chapter 2: Gender Spectrum and Pregnancy](#).
- Pregnancy loss:
 - We have chosen to use “early pregnancy loss” and “miscarriage” interchangeably, and have purposefully avoided terms like “pregnancy failure” that can leave patients with a sense of responsibility for the pregnancy loss.

PROFESSIONAL ETHICS IN REPRODUCTIVE HEALTH

Prevention is increasingly recognized as the most effective means of ensuring health within populations and is receiving heightened focus by recent initiatives including Healthy People 2020 and the Affordable Care Act. Because unintended pregnancy rates in the U.S. are higher than in any other developed country and pose a significant challenge to individual patients and the public health, a comprehensive approach to unintended pregnancy is an essential component within the national public health framework (Taylor 2011).

When assisting patients with the prevention of unintended pregnancies is considered within this framework, there are important expectations that fall on primary care providers. Prevention through contraceptive provision, pregnancy options counseling and provision or referral to appropriate services are among the ethical responsibilities of healthcare providers to assist patients if they desire pregnancy prevention. The availability of modern contraception can reduce but not eliminate the need for abortion.

The concept of pregnancy intention is complex, and not all unintended pregnancies are created equal. While unintended pregnancy pertains to both unplanned and mistimed pregnancies, the index is meant to help us understand fertility, the need for contraception, and a patient's ability to determine whether and when to have children (Santelli 2003). New research suggests that our current conceptual framework that views pregnancy-related behaviors from a strict planned behavior perspective is limited, particularly among low-income populations (Borrero 2014). Ambivalence, partner influence, and cultural perspective all inform how patients feel about pregnancy intention.

Even with this variation, the significant political and emotional dissonance surrounding reproduction and sexuality has limited funding, research, and guidelines for unintended pregnancy prevention. This in turn poses a significant burden on patients, their families, and the medical system at large. Additionally, it has limited training for providers interested in comprehensive reproductive health care.

Without national guidelines that incorporate prevention and management of unintended pregnancies, approaches vary widely between states and organizations. Until recently there has been a considerable lack of progress with regard to unintended pregnancy in the U.S. (Finer 2016, Institute of Medicine 2010). As the national approach to public health issues shifts toward the promotion of prevention, there is the potential for pregnancy planning, when aligned with patient priorities, to be addressed as a part of a comprehensive public health framework.

While attempting to make reproductive health more accessible, we must bear in mind a reproductive justice or rights framework. Given that coercive practices have historically devalued the childbearing of marginalized populations (Brown 2014), we must remain focused on providing care that is respectful of, and responsive to, individual patient preferences, needs, and values (Gomez 2014) and ensure that patient values guide all our clinical decisions (Institute of Medicine 2001).

TRAINING SUMMARY

This program will vary depending on the training setting. We encourage use in professional training programs, higher-volume clinics, or individual practice in the U.S. or abroad. During this training program, each trainee should:

- Review the training plan and meet with faculty for orientation
- Participate in values clarification around pregnancy options
- Have the opportunity to follow patient(s) through an abortion visit from counseling to recovery
- Review routine aftercare and follow-up
- Discuss case studies involving immediate and delayed abortion complications and manage rare complications when they occur
- Learn contraceptive options, initiation, and contraindications to specific methods
- Discuss case studies and participate in the counseling, evaluation, and treatment of patients experiencing early pregnancy loss
- Complete evaluations to provide feedback about the training program

Those participating in uterine aspiration training for abortion and / or early pregnancy loss will also:

- Handle procedure instruments and manual vacuum aspirator (MVA) with the “no touch” technique
- Observe faculty performing first-trimester uterine aspiration procedures
- Perform uterine aspiration under the direct supervision of faculty
- Perform tissue examinations to identify pregnancy elements accurately

LENGTH OF TRAINING

- For all participants (including opt-out or partial participants): time for orientation, observation, workbook review, and completion of Training Plan and Evaluations
- For those learning uterine aspiration: time for “hands on” procedural training plus workbook review.
- We encourage evaluation focused on [core competencies](#) for individual learners rather than a specific number of procedures or sessions. As a general guide, 4-8 day long sessions may be adequate for a full participant and 1-4 sessions may provide adequate exposure for a partial participant not learning uterine aspiration.

ADVANCED TRAINING OPPORTUNITIES

- See Advanced Column of [Training Plan](#) for suggested skills (next page), for which shaded boxes indicate optional activities depending on training goals.
- Those interested in gaining more in-depth skill and knowledge may add:
 - Complete elective clinical sessions and procedural exposure
 - Complete further training on complex cases and complication simulations
 - Read [Chapter 9 on Becoming a Provider](#)
 - Complete suggested supplemental readings in the Textbook: Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Consider participating in networking, advocacy, and leadership activities ([Chapter 9](#)).
 - Plan for additional training, mentorship, fellowship opportunities, and / or future practice in reproductive health.

TRAINING PLAN

NAME: _____

TRAINING INITIATION DATE: _____

TRAINING COMPLETION DATE: _____

Note: SHADING indicates optional activities depending on training goals.

Date	Activity	Basic	Advanced
1. ORIENTATION			
	Discuss Chapter 1 in Training Workbook		
	Review Training Plan		
	Discuss readings and clarify training goals		
	Discuss policies and safety issues		
	Review emergency cart location / contents		
	Follow patient(s) through abortion visit		
	Review instruments, simulate aspiration procedure, and practice "no touch" technique		
	Discuss Values Clarification Exercises		
	Textbook Chapter 3: Unintended Pregnancy & Abortion in the U.S.		
2. COUNSELING & INFORMED CONSENT			
	Discuss Workbook Readings		
	Observe or role play pregnancy options counseling		
	Observe or role play abortion counseling		
	Discuss Counseling Exercises		
	Textbook Chapter 5 & 16: Informed Consent and Counseling, and Answering Questions about Long-term Outcomes		
3. EVALUATION BEFORE UTERINE ASPIRATION			
	Discuss Workbook Readings		
	Review pregnancy testing and dating methods		
	Review medical history pertinent to uterine aspiration		
	Observe early pregnancy ultrasound examinations		
	Perform ultrasound examinations		
	Perform pelvic examinations for uterine sizing		
	Discuss diagnosis of viable, non-viable and ectopic pregnancy		
	Discuss Evaluation Before Uterine Aspiration Exercises		
	Textbook Chapter 6 & 7 – Clinical Assessment and Ultrasound in Early Pregnancy and Medical Evaluation		
4. MEDICATIONS & PAIN MANAGEMENT			
	Discuss Workbook Readings		
	Review medications including antibiotics, & pain medications used for oral and IV sedation, patient selection, and monitoring		
	Review agents and methods used for cervical anesthesia		
	Administer effective cervical anesthesia		
	Discuss Medications & Pain Management Exercises		
	Administer IV sedation medication		
	Textbook Chapter 8 – Pain Management		

Note: SHADING indicates optional activities depending on training goals.

Date	Activity	Basic	Advanced
5. UTERINE ASPIRATION PROCEDURE			
	Discuss Workbook Readings		
	Observe procedure and review use of equipment and instruments with faculty		
	Perform accurate tissue examinations		
	Review strategies for minimizing and managing complications		
	Discuss Uterine Aspiration Exercises		
	Perform MVA to competency		
	Perform EVA to competency		
	Textbook Chapters 10, 13, & 15 – First Trimester Aspiration, The Challenging Abortion, & Surgical Complications		
6. AFTERCARE & CONTRACEPTION			
	Discuss Workbook Readings		
	Review post-procedure medications, instructions, and initiation of contraception		
	Perform IUD and contraceptive implant placement		
	Observe recovery room procedures		
	Discuss Aftercare & Contraception Exercises		
	Textbook Chapter 14 – Contraception & Surgical Abortion Aftercare		
7. EARLY MEDICATION ABORTION			
	Discuss regimens (FDA and Evidence-Based)		
	Review counseling, patient information, and patient selection		
	Provide regimen and patient information		
	Review follow-up to assess completion of abortion		
	Discuss Medication Abortion Exercises		
	Textbook Chapter 9 – Medical Abortion in Early Pregnancy		
8. MANAGEMENT OF EARLY PREGNANCY LOSS			
	Discuss Workbook Readings		
	Review counseling for Early Pregnancy Loss		
	Discuss management options for Early Pregnancy Loss		
	Discuss Early Pregnancy Loss Exercises		
9. BEYOND TRAINING: BECOMING A PROVIDER			
	Discuss Workbook Readings		
	Complete Textbook Supplemental Readings		
	Discuss Beyond Training Exercises		
	Discuss advanced opportunities		
TEACHING POINTS			
	Review Content		
10. BECOMING A TRAINER			
	Review Content and Exercises		
11. OFFICE PRACTICE INTEGRATION			
	Review Content and Exercises		
12. EVALUATION			
	Complete Skills Assessment		
	Complete Training Program Evaluation		

OPT-OUT, PARTIAL PARTICIPATION, OR ALTERNATIVE CURRICULUM OPTIONS

This training workbook and program are designed to help all trainees achieve their individualized learning objectives in reproductive health care. Not everyone will go on to provide abortion care. However, as a primary care provider it is important that you become familiar with both services your patients seek and knowledge to help manage their follow-up care.

Professional organizations such as the [AAFP](#), [ACNM](#), and [NONPF](#) recommend trainees receive exposure to many core skills covered in this curriculum, including:

- Evaluation of pregnancy dating and pregnancy risk
- Pregnancy options and contraceptive counseling
- Management of uncomplicated spontaneous abortion
- IUD and contraceptive implant counseling, placement, and removal
- First trimester uterine aspiration (considered advanced training by provider organizations of Family Physicians, Certified Nurse Midwives, Women’s Health Nurse Practitioners)

After the initial Orientation and Values Clarification, all trainees can benefit from discussing training options with their faculty to arrive at a balanced appraisal of the appropriate training content.

The alternative or opt out curriculum recommendation below is for partial participants to cover the foundation of values clarification, options counseling, contraception, follow-up care, complication management, and early pregnancy loss. Additional material can be added based on individual training goals.

Benefits commonly reported from partial participants in training include improved counseling skills, gynecologic procedural exposure, and reflection on individual values ([Steinauer 2014](#)).

SUGGESTED EXERCISES FOR PARTIAL PARTICIPATION or OPT OUT CURRICULUM

Date	Chapter / Activity	Reading / Exercises	Initials
	1. Orientation	All / All	
	2. Counseling and Informed Consent	All / All	
	3. Evaluation before Uterine Aspiration	All / All	
	4. Medications and Pain Control		
	5. Uterine Aspiration Procedure (for EPL and / or Abortion)		
	6. Contraception and Aftercare	All / All	
	7. Medication Abortion	All / 7.2 (1), 7.3 (1-3)	
	8. Management of Early Pregnancy Loss	All / All	
	9. Becoming a Provider		

Note: SHADING indicates optional activities depending on training goals.

ABORTION FACTS AT A GLANCE

Abstracted from Guttmacher Institute, Facts on induced abortion in the United States, *Fact Sheet*, 2016

ABORTION BY THE NUMBERS

- Currently 45% of pregnancies in the U.S. are unintended ([Finer 2016](#)).
- Unintended pregnancy is more common among patients with lower socioeconomic status, and this disparity is growing.
- Abortion is common and safe in the U.S., but there is a shortage of providers.
- Of all U.S. pregnancies, 21% end in abortion.
- Most abortions occur early in pregnancy; about 89% occur in the first 12 weeks.
- Medication abortions account for 36% of U.S. abortions below 9 weeks.
- Most U.S. counties (89%) lack an abortion provider, and these counties are home to 38% of reproductive age women.

WHO HAS ABORTIONS

- Patients of all backgrounds have abortions, including 1 of every 3 U.S. women.
- Over 60% of abortions are among patients who have had 1 or more children.
- Of patients obtaining abortions 37% identify as Protestant and 28% as Catholic.
- On average, patients report ≥ 3 reasons for choosing abortion: $\frac{3}{4}$ say a baby would interfere with work, school, or responsibilities; $\frac{3}{4}$ say they cannot afford a child; and $\frac{1}{2}$ do not want to be a single parent or report relationship problems.
- Nearly 60% of patients who experienced a delay in obtaining an abortion cite it was due to the time it took to make arrangements for the abortion and raise money.
- Transgender men can experience unintended pregnancy after transitioning socially, medically, or both, and may seek prenatal care or abortion services ([Light 2014](#)).

WHO PROVIDES ABORTIONS

- The number of providers and clinics providing abortion has declined in recent years.
- The number of providers decreases with increasing gestational age: 95% offer abortion at 8 weeks, 34% to 20 weeks, and 16% to 24 weeks.
- While most states allow for refusal to provide on the basis of conscientious objection, many abortion providers characterize their provision as conscience-based.
- At least 17% of providers offer medication abortion services only ([Jones 2011](#)).

CONTRACEPTIVE USE

- Over 50% of patients having abortions used a contraceptive method during the month they became pregnant.
- Of these, 33% perceived themselves to be at low risk for pregnancy, 32% had method concerns, 26% had unexpected sex, and 1% were forced to have sex.
- 76% of pill users and 49% of condom users reported inconsistent use.

SAFETY OF ABORTION

- First trimester abortions pose no long-term risk of infertility, ectopic pregnancy, spontaneous abortion, or breast cancer (Guttmacher 2016).
- Leading experts conclude that abortion does not pose a hazard to patient's mental health (Biggs 2016, Cohen 2013). The most common emotional response following an abortion is a sense of relief.
- The mortality associated with childbirth is 14 times that of legal abortion (Raymond 2012).
- The risk of abortion complications is minimal in the U.S., with less than 0.5% of patients experiencing a complication that requires hospitalization (White 2015).
- Global data indicate that legal restrictions do not affect abortion rates but instead shift the balance of abortion procedures from those that are legal and safe to those that are unsafe.
- More than half of abortions performed in developing countries are considered unsafe, accounting for 13% of maternal mortality worldwide, or 70,000 deaths annually.
- Many global efforts have focused to ensure reproductive health care and technologies are widely available at reasonable cost, provided in the context of high-quality services, and offered in a way that recognizes the dignity and autonomy of each individual.

THE IMPACT OF ABORTION-RELATED STIGMA

- Because abortion is highly stigmatized, patients who seek or undergo abortion may keep their decision a secret. In many regions of the world, stigma is a recognized contributor to maternal morbidity and mortality from unsafe abortion, even when abortion is legal.
- A patient may choose not to disclose their decision with family or friends, include abortion in their medical history, or delay care or management of emergencies.
- A systematic review on the topic showed that patients who have had abortions experience fear of social judgment, self-judgment and a need for secrecy. Secrecy was associated with increased psychological distress and social isolation (Guttmacher 2016).
- “Stigma and silence produce a vicious cycle: when (patients do not disclose their experience) or providers do not disclose their work, their silence can perpetuate a stereotype that abortion remains rare, or that legitimate, mainstream providers do not perform abortions. This can in turn contribute to marginalization of patients and abortion providers.” (Harris 2013)
- Stigma can lead to the social, medical, and legal marginalization of abortion care around the world and is a barrier to access to high quality, safe abortion care.

AN OVERVIEW OF ABORTION LAW

Key U.S. Supreme Court decisions serve as the foundation for state abortion laws.

In the **1973** *Roe v. Wade* decision, the Court established that:

- In the first trimester (up to 14 weeks), state laws cannot interfere with a woman's right to end a pregnancy; decisions are left to a woman and her medical provider.
- During second trimester (14 to 24 weeks), state laws may regulate abortion procedures only in order to protect the woman's health.
- During third trimester (after 24 weeks), state laws may prohibit abortion except when it is necessary to preserve the life or health of the woman.

In the **1992** *Planned Parenthood of SE Pennsylvania v. Casey* decision, the Court established that:

- States can restrict abortions, even in the first trimester, as long as restrictions do not place "undue burden" on women.
- In 2016 *Texas Whole Woman's Health v. Hellerstedt*, the Supreme Court ruled that when applying the "undue burden" standard of *PP v. Casey*, requiring abortion clinics to meet ambulatory surgical center requirements or providers to have admitting privileges places an undue burden on women. This causes significant reduction of services, while failing to advance the state's interest in promoting health

Many state laws requiring waiting periods, mandatory counseling, and parental consent or notification have been implemented. Record numbers of restrictive state laws have been passed since 2010.

LAW AND POLICY HIGHLIGHTS

Abstracted from Guttmacher Institute's [State Policies in Brief](#): An Overview of Abortion Law, April 1, 2016.

- *Gestational Limits*: 43 states prohibit abortions, except to protect the woman's life or health, after a specified point in pregnancy (most often fetal viability).
- *Public Funding*: The Hyde Amendment bars the use of federal funds to pay for abortion unless the pregnancy arises from incest or rape, or to save the life of the patient. 32 states and Washington D.C. prohibit the use of state funds except in cases of danger to life, rape, or incest. 17 states use their own funds to pay for all or most medically necessary abortions for Medicaid enrollees in the state.
- *Coverage by Private Insurance*: 11 states restrict coverage of abortion in private insurance plans, most often limiting coverage only to when the woman's life would be endangered if the pregnancy were carried to term. Most states allow the purchase of additional abortion coverage at an additional cost.
- *Waiting Periods*: 28 states require a specified waiting period, usually 24 hours, between counseling and abortion; 14 of these require two separate clinic trips because the counseling must take place in person.
- *State-Mandated Counseling*: 17 states mandate a woman be given pre-abortion counseling with inaccurate information on at least one of the following: a purported link to breast cancer (5 states), early fetal pain (12 states), long-term mental health consequences (9 states), life at conception (6 states), or required ultrasound (13 states).

- *Parental Involvement*: 38 states require parental involvement in a minor's decision to have an abortion; the majority requires parental consent, and the rest require notification.
- *Targeted Regulation of Abortion Providers*: 24 states regulate abortion providers beyond what is necessary to ensure patients' safety; 17 of these even apply to sites where only medication abortion is provided. 14 states require providers have hospital affiliation.
- *Federal Abortion Ban*: In 2007 the "so-called PBA Ban" Act was upheld. This decision retreats from an unbroken line of precedent that a woman's health must remain the paramount concern in any abortion regulation, as it includes no health exception.
- *Physician Requirements*: 37 states require an abortion to be performed by a licensed physician, and 1 state (MS) restricts abortion provision to obstetrician gynecologists. At the time of this writing, advanced practice clinicians can provide medication abortion in 13 states, and aspiration abortions in 5 states (VT, NH, MT, OR, and CA). Eighteen states require that the clinician providing a medication abortion be physically present during the procedure, thus prohibiting the use of telemedicine for this purpose.
- *Hospital Requirements*: 19 states require an abortion to be performed in a hospital after a specified point in the pregnancy, and 18 states require the involvement of a second physician after a specified point.
- *Protection Against Clinic Violence*: The Freedom of Access to Clinic Entrances (FACE) Act is a federal law that was enacted in 1994 to protect clinics, medical personnel, and patients seeking reproductive health care against blockades and violence. Sixteen states and the District of Columbia have passed similar laws to prohibit specific actions or provide protected "bubble zones" outside of clinics.
- *Refusal clauses*: 45 states allow individual health care providers to refuse to participate in an abortion. 42 states allow institutions to refuse to perform abortions, 16 of which limit refusal to private or religious institutions. 12 states allow institutions or providers including pharmacists to refuse to provide services related to contraception.

Ask faculty at your site to assist you in learning important state reporting requirements for abortion, domestic violence, child abuse, and STIs. For the most current information on state legislation, visit: <http://www.guttmacher.org/statecenter/index.html>.

ADOPTION FACTS AT A GLANCE

THE ADOPTION PROCESS

- In adoption, a patient places the child in the care of another person or family in a permanent, legal agreement.
- The birth mother selects the type of adoption (open vs. closed) and may influence who will facilitate the process (agency, attorney, facilitator).
- Social workers are a helpful resource for patients navigating adoption.
- Prospective adoptive parents undergo an evaluative home study, which includes interviews, home visits, health evaluation, income, and references (NAICH 2004).
- The birth mother may be given a limited period of time during which she may change her mind. After that, the courts reverse few adoptions.

TYPES OF ADOPTION	
<i>Open</i>	<i>Closed/Confidential</i>
The birth mother may select and have contact with the adopting family (through ongoing visits, phone calls, pictures, or sometimes in a more limited manner through an intermediary). Patients may choose open adoption to be reassured and maintain contact as child grows.	The birth mother and adopting parents have no contact, but do share relevant medical history. All court records are sealed. Patients may choose confidential adoption for more privacy.

INCIDENCE OF ADOPTION

- There is no updated central database on adoption and available data are limited.
- The proportion of infants given up for adoption has declined from 9% of those born before 1973 (the year Roe v. Wade was decided) to 1% of those born between 1996 and 2002 (Jones 2009).
- People who have adopted are more likely to be over 30, to be men, to be ever married, to have given birth or fathered a child, and to have ever used infertility services than people who have not adopted (Jones 2009).
- Women who have ever used infertility services are 10 times more likely to have adopted than women who have never used infertility services (Jones 2009).
- Of U.S. infant adoptions, 59% occur through the child welfare system, 26% involve children born internationally, and 15% involve U.S.-born infants who are voluntarily placed (Arons 2010).
- Information is limited on patients choosing to place a child for adoption, but the majority have never been married, are white, and are in their early 20s. They have higher incomes and aspire to more education than those choosing parenting (Arons 2010).

EXERCISES: VALUES CLARIFICATION

Adapted from *The Abortion Option: A Values Clarification Guide for Health Care Professionals*. NAF 2005.

In spite of our efforts at objectivity, we all hold personal values that can influence how we respond to patients. These exercises are intended to help you clarify your personal values about pregnancy options and abortion training, and to think about those values in the context of professional judgments you may be called upon to make.

EXERCISE 1.1: General Feelings about Pregnancy Options

Purpose: This exercise is designed to illustrate the range of beliefs about the acceptability of pregnancy options and to help you clarify your personal views about your patients choosing abortion, adoption, or parenthood.

1. In general, how do you feel about your patients choosing abortion, adoption, or parenting in each of these situations? Are you challenged to accept a patient's decision in the following circumstances?
 - If the pregnancy threatens their physical health or life
 - If the pregnancy involves significant fetal abnormality
 - If the patient is an active substance use disorder or has had previous children removed by Child Protective Services
 - If having a child would interfere with their career or education goals
 - I can accept an informed decision to choose abortion in any circumstance.
2. Were you surprised by any of your reactions? How have your life experiences contributed to these feelings?

Teaching Points

EXERCISE 1.2: Gestational Age and Abortion

Purpose: This exercise is designed to help you clarify whether your beliefs are influenced by the gestational age of a pregnancy.

1. At what gestational age do you start feeling uncomfortable about your patient choosing to have an abortion? Check all that apply.
 - At conception / implantation
 - At quickening (i.e. fetal movement) or the end of the first trimester
 - At viability or the end of the second trimester
 - At some point in the third trimester
 - It depends on the reason for the abortion
 - Other (please explain):
2. Do you feel different about the gestational age if you are making a referral vs. performing an abortion? If so, why?

Teaching Points

EXERCISE 1.3: Your Feelings about Patient's Reasons

Purpose: This exercise will help you clarify your feelings about some potentially challenging situations than may arise in abortion care.

1. How would you feel about referring or providing an abortion for a patient who:
 - a. is ambivalent about the pregnancy but whose partner wants them to terminate.
 - b. wishes to obtain an abortion because they are carrying a female fetus.
 - c. has had many previous abortions.
 - d. indicates that they do not want any birth control method to use in the future.
2. What factors influenced your choices? How might you handle your discomfort when caring for patients under these circumstances?

Teaching Points

EXERCISE 2: Feelings about Providing Abortions

Purpose: This exercise will help you clarify your feeling about abortion provision.

1. As you embark on this experience, consider how you might disclose this training to others. Do you think there are any parallels between the stigma that patients and providers experience?
2. Consider the following quotation on the role of “conscience” in abortion provision, and not just the historical focus on the refusal to participate. What are your thoughts on how this view affects stigma?

“[Providers] continue to offer abortion care because deeply held, core ethical beliefs compel them to do so. They see women’s reproductive autonomy as the linchpin of full personhood and self-determination, or they believe that women themselves best understand the life contexts in which childbearing decisions are made, among other reasons” (Harris 2012).

Teaching Points

EXERCISE 3: Abortion Access (Optional)

Purpose: The negative public health impact of restrictive abortion laws is well documented. The following exercise is designed to help you think through the consequences of limited access. How might your decision to offer options counseling, referrals, or services influence the accessibility of abortion where you may practice?

1. What is your reaction to the following account?

It is estimated that for every 99 U.S. patients receiving abortion, 1 presents for care beyond the capabilities of a particular clinic. Many factors delay patients seeking care. Here are two patients’ explanations of what caused a delay in access to care from the ANSIRH [Turnaway Study](#):

“Still trying to get Medicaid and arrangements to stay for the procedure since it was out of town. Still trying to get insurance.” 23-year old Hispanic patient from New Mexico, at 22 weeks

“I didn’t find out until I was 22 weeks and getting the funding. I was determined but there was so much preventing me from getting up there.” 24-year old white patient from Minnesota, at 24 weeks

Teaching Points

2. COUNSELING AND INFORMED CONSENT

This chapter covers the fundamentals of presenting patients with their full range of pregnancy options, including parenting, abortion and adoption, as well as supporting them through the decision-making process. It also looks specifically at communication techniques, informed consent, and providing assistance during a uterine aspiration.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be able to:

- Give patients pregnancy test results in a non-judgmental manner in a private setting
- Describe the full range of pregnancy options
- Guide and support patients through a patient-centered decision making process
- Address issues of ambivalence, if needed, and ensure that patient's decisions are informed, voluntary and free of coercion
- Provide information to compare medication and aspiration abortion
- Use language that is mindful, sensitive and unassuming during counseling and during an aspiration procedure

READINGS / RESOURCES:

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (Wiley-Blackwell, 2009)
 - Chapter 5: Informed Consent, Counseling, and Patient Preparation
 - Chapter 16: Answering Questions About Long-Term Outcomes
- Perrucci A. Decision Assessment and Counseling in Abortion Care: Philosophy and Practice. Lanham, Maryland: Rowman and Littlefield, 2012
- Ferre Institute [Pregnancy Options Workbook](#)
- Backline [Pregnancy Options Workshop](#)
- Related Workbook Content:
 - [Chapter 7: Medication Abortion: Counseling issues](#)
 - [Chapter 8: Early Pregnancy Loss: Counseling issues](#)

SUMMARY POINTS

SKILLS

- Use language and tone that demonstrate respect, is not stigmatizing, and supports their process of decision making.
- Ask patients about their name and pronouns; ensure staff is aware of preferences.
- Use open-ended questions and nonjudgmental listening.
- Allow time for a patient to think, talk further, and ask additional questions.
- Know when to seek help from experienced providers or staff in a challenging counseling situation.
- Be aware of assumptions you make about patients' feelings.

SAFETY

- Attend to patients' need for more anesthesia, or management options that suggest another more optimal setting for their abortion.

ROLE

- Options counseling for unintended pregnancy and abortion are similar to that necessary for other medical decisions, and is within the scope of primary care providers. Know when and how to refer for services beyond what you can provide.
- Provide patient-centered decision making to support preferences in health decisions.
- Maintain patient privacy and confidentiality.
- Direct your attention to the patient and include them in any conversations while in the procedure room.
- Provide opportunity to see a patient alone, as well as to involve the patients' partners in the counseling and as a support person if feasible and requested by the patient.

PREGNANCY OPTIONS COUNSELING TECHNIQUES

Adapted from: Perrucci A. 2012

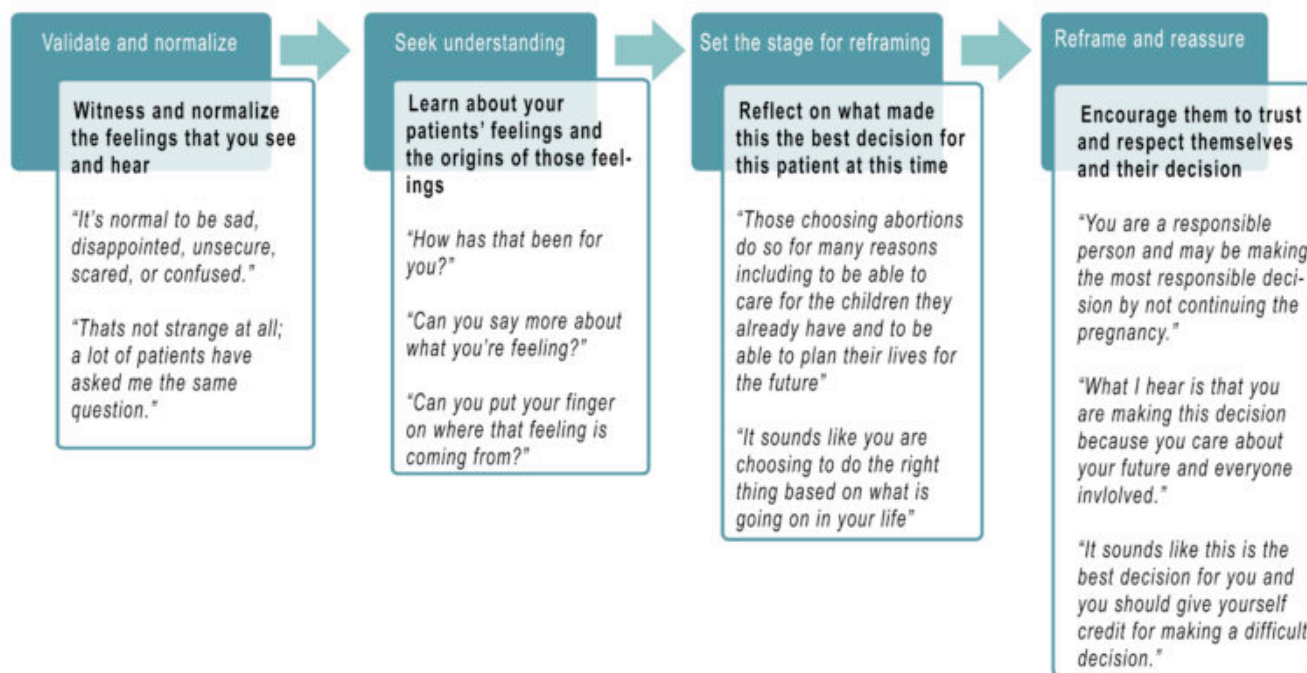
When providing pregnancy test results, some patients will be surprised while others will have taken a test at home and only seek confirmation. In either case, the patient may or may not require support in their decision making process. Our role is to listen and provide them with the appropriate level of support to come to a decision about this pregnancy, if they have not already (Singer 2004). When providing positive results:

- Be clear what the result means: *"Your pregnancy test came back positive, which means you are pregnant."*
- Allow some time for the patient to process the information.
- Use open-ended questions to start, such as *"How do you feel about this result?"*
- Avoid assuming how a patient will react to the result.

For many patients the decision to have an abortion is clear. They won't need options counseling; we can help them with planning the next steps. Gauging this is important to respecting their decision. Similarly, avoid making assumptions about what emotions the patient may be experiencing or the reasons behind them. For example, avoid assuming abortion itself will be a sad experience; even if the patient shows sadness, Some people are actually sad about their life circumstances leading to the choice to have an abortion and ultimately feel relief after completing the process (Rocca 2015). For patients who are less sure, provide basic information in a non-directive manner.

- *I want to look at this situation with you so you can come to a decision you are sure of.*
- *No matter whether you choose to continue or end this pregnancy, a decision has to be made, and some patients feel conflicting emotions.*
- *What part of this situation is challenging for you?*
- *Is there anyone in your life who can help you in a supportive way, without judging you or pushing their opinions on you?*

The following framework and examples may assist your counseling conversation



Helpful Exercise for Ambivalent Patients

Try to have the patient imagine their life and how they might feel about this decision now and in a few years, depending on the choice they make. *“What is your picture of the next year or five years of your life? How does this pregnancy change or affect your goals?”*

	Continuing Pregnancy	Ending Pregnancy
Pros:		
Short Term		
Long Term		
Cons:		
Short Term		
Long Term		

Dealing with Spiritual or Moral Conflict

People of all faiths and religions have abortions. You do not need any background in religious or spiritual matters to talk to patients about abortion. You do not have to know the answer to the patient’s dilemma. Explore what this conflict means for them and what is getting in the way of their feeling like a good person. It may be beneficial to make a plan with them that can include readings (Maguire 2001), internet resources (www.faithaloud.org), discussions with their own clergy and/or a pro-choice religious group, or other counseling referrals.

Patients can experience moral conflict when they seek abortion and they believe that life begins at conception and that abortion is an act of murder. The counseling framework discussed above can be helpful to explore the patient’s beliefs and whether they allow for exceptions that can help them reconcile this conflict.

COUNSELING QUICK GUIDE

Ask open-ended questions	<i>“What questions do you have for me?” “What can I do that is most helpful for you?”</i>
Clarify the facts	<i>“How far along you are means you have more time to decide.”</i>
Reflect / Normalize	<i>“You seem to be feeling...” “It is ok to cry here.” “Many patients feel confused/scared/ambivalent...”</i>
Seek to understand	<i>“Can you say more about that?”</i>
Validate; don’t fix	<i>“Being a hard decision doesn’t make it wrong.”</i>
Reframe the situation	<i>“It sounds like you are being thoughtful and making the most responsible decision by ...”</i>
Reassure the patient	<i>Encourage them to trust and respect their decisions.</i>
Check in about support	<i>“It may be helpful to tell or bring someone you trust. Do you have someone like that?”</i>
Communicate acceptance with tone and body language	<i>Be mindful of your tone. Use eye contact. Sit at their level.</i>
Use silence	<i>Give them time to finish their sentences and thoughts.</i>
Give the patient control	<i>“Which would you prefer?” Keep your patient informed about the next steps</i>
Address Common Fears	
Pain	<i>Review options for pain control and relaxation.</i>
Spiritual conflict	<i>“Can you tell me more about your beliefs?”</i>
Impact on health	<i>Review safety and lack of impact on fertility, mental health and overall health.</i>
Consider language and literacy level	<i>Approach counseling based on appropriate language and exercises based on literacy level.</i>
AVOID	
False reassurances	<i>“This won’t hurt.” Instead prepare them for some discomfort and reassure them that it is fast.</i>
Over-identification	<i>“I know exactly how you feel.”</i>
Medical or stigmatizing jargon	<i>“Pregnancy termination” is overly medical. “Elective abortion,” implies a chosen vs. indicated procedure. Instead use “abortion” or “induced abortion.”</i>
Loaded statements	<i>“Your family supports your decision, right?”</i>

EARLY ABORTION OPTIONS

Adapted from 2014 RHAP/RHEDI, and *Management of Unintended and Abnormal Pregnancy*. 2009: p.138.

When helping a patient decide on medication versus aspiration abortion, get a sense of what factors are important to them (e.g., timing of completion, amount of bleeding, instrumentation). There might also be external factors (e.g., childcare, work/school schedule, housing situation) that make one option a better fit.

	Medication Abortion	Aspiration Abortion
Quick Summary for Patient	<i>“Both work very well, both are safe, and neither change your chances to get pregnant in the future.”</i>	
	<i>“You take one pill that stops the pregnancy from growing, then take other pills later, which will cause cramping and bleeding.”</i>	<i>“This is quick, done with me, on an exam table with instruments inside you.”</i>
Gestational Age	Up to 10 weeks in U.S.	Aspiration up to 14 weeks D&E beyond 14 weeks
Advantages	Occurs wherever patient chooses Avoids invasive procedure More support options possible Perceived as more natural, like a miscarriage	Procedure over in 5-10 minutes Generally less bleeding after the procedure is done Options for moderate or deep sedation Leaves the office visit not pregnant Medical staff members with patient
Disadvantages	Completed in multiple days May experience heavier and longer bleeding and cramps The abortion happens at home	Requires clinical setting Risks of instrumentation Risks of anesthesia, if used May be fewer options for support person(s) during procedure Suction machine may be audible
Protocol	Mifepristone (See Chapter 7) Misoprostol 0-72 hours later	Procedure in office
Effectiveness	95-99% up to 9 weeks, 91-93% up to 10 weeks If fails, will need aspiration	Over 99% of the time If fails, may repeat aspiration
Duration	One to several days to complete	One visit; 5-10 minute procedure
Pain	Mild to strong cramps after taking misoprostol lasting a few hours	Mild to strong cramps during and just after the procedure
Bleeding	Possible heavier bleeding with clots during the abortion Light bleeding can persist on and off for 1-2 weeks or more	Heaviest bleeding during procedure Light bleeding can persist on and off for 1-2 weeks or more
Pain management	Oral pain medication	Options of: Oral pain medication Local anesthesia Moderate or deep sedation
Safety	Used safely for > 20 years At least 10 fold safer than continuing a pregnancy to term	Used safely for > 40 years At least 10 fold safer than continuing a pregnancy to term

CONFIDENTIALITY AND INFORMED CONSENT

Patient information should be confidential and only shared with people directly involved in that patient's care, if the patient gives permission to do so, or by exception, such as to comply with:

- Health department laws about required infectious disease reporting
- Required reporting of suspected child abuse
- Required reporting of domestic violence
- A formal subpoena
- Insurance company (if patient consents to submitting claim)

Disclosure of information under any other circumstance is a breach of confidentiality. Voluntary and informed consent must be obtained from the patient and documented prior to the procedure. Use appropriate translation services for comprehension, privacy, and true informed consent. State laws, malpractice standards, and the ethical standards of medical practice define the parameters of the informed consent process. Follow all applicable laws related to the consent process. For current state laws: <http://www.guttmacher.org/statecenter/updates/index.html> or <https://www.aclu.org/issues/reproductive-freedom/abortion>.

REFERRAL

Referral begins with providing information to your patient if they need services beyond what you can provide in clinic. In addition to referrals for abortion services not offered at your site, competent referral making may involve the following (Zurek 2015):

- Prenatal care or adoption facilitators (open and closed adoption)
- A pregnancy options talk line for undecided patients
- Intimate partner violence specialists
- Sexual abuse care
- Mental health and/or substance use services
- Post-abortion counseling referrals

Improving care coordination is critical in settings with limited access where patients face greater stigma. Taking a more active role in referral making can help clear up misperceptions or deliberate misinformation about legality and safety of abortion, and can assist with complex social or medical circumstances (Zurek 2015). Important next steps to fully assist the patient may include:

- Scheduling an appointment
- Helping access supportive services such as transportation, childcare, abortion funding or insurance coverage, interpreter services
- Following up on the patient's satisfaction and outcomes with the care received.

ADDITIONAL CONSIDERATIONS

First pelvic exam

If the patient has never experienced a pelvic exam, take extra care and time to explain what will happen, what a speculum is, and how to best position and relax their body. Explain that future pelvic exams/pap tests will only involve speculum placement so they do not anticipate the additional experiences of the abortion.

Gender spectrum and pregnancy

“Transgender” is an umbrella term that refers to an individual whose gender identity (one’s innermost sense of male, female, both or neither) does not match the sex assigned to them at birth. As with anyone who may become pregnant, gender diverse people may experience intended or unintended pregnancy, and may desire prenatal care or may need abortion or adoption services. (Light 2014, Richards 2014)

Many of these patients have limited interaction with the medical field, and may have faced stigmatizing care in the past. Patients may prefer to refer to their body parts using alternative terminology (e.g. “chest exam” instead of “breast exam”). For some transgender patients, gynecological or pregnancy care can be a difficult experience and may trigger gender dysphoria. Fortunately there are a number of excellent resources available to clinicians to help provide medically appropriate and culturally sensitive care to this population. The [UCSF Center for Excellence in Transgender Care](#) and information from [bedsider.org](#) can provide more in depth information on [sex and gender orientation](#) and [excellent provision of care](#).

Provide patient-centered, nonjudgmental care to all clients. To create an affirming environment for transgender and gender non-conforming people, ask patients about their name and pronouns, ensure all staff are aware of these preferences, provide patient intake forms that use gender-neutral language, and include a way to share current gender. (CDC 2016)

The services provided to transgender patients should be based not only on their gender expression but also on hormonal status, and surgical status (i.e. the organs present) which guides appropriate screening. A key concept for transgender men on testosterone is that testosterone is not birth control, and that testosterone is potentially teratogenic.

Contraception counseling in the setting of abortion care

It can be helpful to provide contraceptive options to patients at the time of abortion. While some patients are ready to start contraception and may have chosen a method, many prefer to return for that care or decline contraception (Matulich 2014). Stay focused on the patient’s priorities when discussing options, and see [Chapter 6: Contraceptive Counseling](#) for details.

When the provider does not do the abortion counseling/consenting

Depending on how your services are set up, a counselor may conduct pre-abortion counseling instead of the provider. In this case, the provider might check in with patient, “*I know you have spoken to the counselor. I wanted to see what questions you may still have for me;*” or use teach back on any subject, “*Tell me what you learned about (the topic, i.e. breathing)*” as a method to assess your patient’s absorption of counseling.

Early Pregnancy Loss

If a pregnancy loss is diagnosed, be sure that the patient understands the diagnosis, implications, and various management options. Reassure the patient that most pregnancy loss is caused by random genetic errors, not something they might have thought/wished for/done. Do not assume how they will react in the context of abortion care, as some patients feel relief, while others still feel sadness or guilt about the loss. See [Chapter 8 Counseling Tips](#) for EPL for more information.

Multiple Pregnancies

Twin pregnancies currently make up approximately 1% of all pregnancies but occur at higher rates with assisted reproductive technologies and increasing maternal age; additionally miscarriage and complication rates are higher among twin pregnancies. It is not uncommon to discover a multiple gestation during the ultrasound evaluation. While many patients want to know if they have a multiple pregnancy, others do not. This information will occasionally change a patient's decision. Unless state law requires ultrasound viewing, routinely ask each patient if they want to know **prior** to the ultrasound, so you can honor their wishes.

Sexual Abuse, Rape and Incest

Patients who have endured sexual abuse, rape, or incest have had little control over the abusive situation and are likely to feel especially vulnerable. You might help a patient feel safe and supported by suggesting:

- *"This isn't your fault. I'm so sorry this has happened to you."*
- *"I'm glad you told me; you're brave to do that."*
- *"Many patients in this situation feel alone; you don't have to feel alone with us."*
- *"No one ever deserves for this to happen to them."*

Ask for permission to begin the exam, check in frequently, and explain each step so the patient is prepared. Assure that they control the pace. Consider stating your intention to be gentle. For example, *"I am going to gently insert the speculum. Please let me know if it is uncomfortable, so I can stop or readjust it."* You can also offer to let the patient insert it.

If the experience was recent, confirm it has been reported. If not, you can identify the closest sexual assault service providers ([from RAINN.org](http://RAINN.org)) who are most familiar with local reporting laws and counseling.

Reproductive Coercion

While many clinical settings have integrated intimate partner violence screenings, some miss subtle acts of power and control in relationships. Reproductive coercion (RC) refers to explicit attempts to coerce a partner to have unprotected sex, interfere with contraceptive methods, or control outcomes of a pregnancy. These actions limit a patient's reproductive autonomy and compromise their ability to make decisions around contraception, pregnancy and abortion.

Recent research has shown that RC is common and may lead to an unintended pregnancy. Among women in family planning clinics, 19% of respondents reported ever experiencing pregnancy coercion and 15% reported birth control sabotage by a partner ([Miller, 2010](#)). In addition to asking generally about your patient's support people, you might ask them if anyone is pressuring them to make a decision about this pregnancy or has tampered with or prevented their contraceptive use.

COUNSELING DURING THE PROCEDURE

ESTABLISHING RAPPORT AND RESPONDING TO PATIENTS

A friendly introduction and taking a seat demonstrates respect and helps ease anxiety that typically occurs prior to a procedure. These conversations are best held with you sitting at the patient's level, with them sitting up. It is a good time to discuss questions and relaxation techniques. Use your intuition as to what will be most helpful: sometimes quiet, sometimes humor, and sometimes talking about work, kids, school or goals will resonate well with a patient.

HELPFUL TECHNIQUES DURING THE PROCEDURE

- Use description, distraction, and breathing techniques discussed in [Chapter 4](#).
- Use supportive statements, such as *"Everything is going really well"* or *"You are doing a good job relaxing your bottom into the table."*
- Alert the patient to what they might feel to avoid alarming them. It can also be helpful to say, *"We're about two thirds through"* or *"This part takes about one minute."*
- Check in about whether they want physical and / or emotional support during the procedure, offering an assistant's reassurance or hand to squeeze.
- Take breaks during natural pauses in the procedure, saying something like *"We have a break right now. You can take some slow deep breaths."*
- If the patient asks to stop, do so adding *"Do you need a break now? Let's try taking some deep breaths, and let me know when you are ready to proceed."*
- Gentle firm directions given in a kind, steady tone may be appropriate for a patient who is very upset and unable to hold still, to help them regain control.
- Continue to communicate with a quiet or silent patient at regular intervals throughout the procedure. It can help to ask how the patient is doing.
- Offer patients to have a support person there if possible, such as a partner, friend, family member, or trained doula. Those receiving doula support are less likely to require additional clinic support resources, although pain and satisfaction are unchanged ([Chor 2015](#)). Where possible, encourage institutional policies allowing presence of a support person.

When is it appropriate to defer an abortion?

Some patients feel a new sense of ambivalence immediately before the procedure begins. This may be another way a patient communicates heightened fear, or it may be that the reality of being in the procedure room is making the patient reconsider their decision.

It is not appropriate to try to facilitate a decision-making process while the patient is sitting, undressed, on the table. They should be offered supportive counseling and more time to think.

In deciding how to proceed, it is appropriate to trust your instincts. Some patients, who may be having difficulty accepting responsibility for their decision, recant in an effort to make the provider or the agency “responsible”. In such a case, the provider must ask for a clear statement of the patient's intent before proceeding. For example:

“I'm not sure if you are ready to go on with the procedure today. If you are not sure, we can postpone. Do you need some more time?”

For many patients, this last moment is what they need; when faced with the possibility of NOT going forward, the other option is less appealing, and they know they want to proceed.

RESPONDING TO CHALLENGING QUESTIONS

One of the most difficult tasks is responding to tough patient questions. Here we will review some of the most common questions that arise. General guidelines are that you:

- Remain sensitive to both verbal and non-verbal expressions of emotion
- Acknowledge the patient's feelings
- Clarify the patient's true question to avoid assumptions
- Provide accurate information.

“What do you do with the baby after the abortion?”

The word “baby” may cause the provider to assume that the patient is feeling guilt. To avoid responding based on assumption, providers might say, *“A lot of patients ask about that. Can you tell me a little more about what is concerning you?”* Consider responding, *“I examine the pregnancy tissue to make sure that you are no longer pregnant.”* If there are follow up questions you can say the pregnancy tissue is handled like tissue from any medical procedure. Sites have different policies for handling tissue based on local and hospital policies. You could say, *“We send the tissue to the pathology lab if there is any concern, and otherwise it is handled similar to cremation.”*

“Can I see it?”

In first-trimester abortion, many providers explain the process of fetal development and show the patient the pregnancy tissue if asked. Consider describing what the pregnancy tissue looks like at that stage, so they can make an informed choice about seeing it.

“Will this hurt the baby?”

Evidence regarding the capacity for fetal pain indicates that fetal perception of pain is unlikely before the third trimester (Lee 2005). For patients having a first-trimester abortion procedure, explaining the facts may alleviate this concern. For example, *“At this point in the pregnancy, the fetal nervous system is still not developed enough to feel pain.”*

Post-Procedure Support

After the procedure, you can reassure the patient that everything went well, and offer guidance for next steps. Let them know that the cramps they are feeling are a sign that the uterus is healthy and returning to its non-pregnant size. Reassure them that emotions arising with abortion are normal, that you are there with them, and that there are various outlets and resources to support them beyond the procedure day.

You can reassure them that your staff will be available to them. They can be offered a follow-up visit if desired or you think it would be helpful, especially if there is a continuity relationship. However, it is not always indicated. (Grossman 2004).

Additional ideas:

- Many patients respond well to encouragements of artistic expression, through writing (www.projectvoice.org), visual art, or music.
- Consider providing a journal in clinic where patients can share their thoughts or art.
- All patients can be offered post-abortion support through:
 - Exhale (1-866-4 EXHALE, www.exhaleprovoice.org)
 - Backline (1-888-493-0092; <http://yourbackline.org>)
 - Faith Aloud (1-888-717-5010; <http://www.faithaloud.org/>)
 - Connect and Breathe (1-866-647-1764; <http://www.connectandbreathe.org>)

EXERCISES: COUNSELING AND INFORMED CONSENT

EXERCISE 2.1: Pregnancy Options Counseling

Purpose: The following exercise is designed to review pregnancy options counseling. Consider role-playing the following scenarios.

1. One of your patients presents with an unexpected positive pregnancy test during clinic or in the ED. How would you approach this?
2. When you ask a patient what questions they have, they want to know if an abortion will affect their ability to have children in the future. How would you respond?
3. A patient is leaning toward adoption but is trying to decide, and wants to know more about the process and options. How would you respond?
4. Consider the following responses to a common patient statement, in terms of what it allows or disallows in further conversation. Which response do you think is most helpful? What other questions/phrases might be helpful? (Adapted from [Perrucci 2012](#), Exercise 3.3)
A patient says, *"I feel sad."*
 - Response 1: *"Is that making you feel less sure about your decision?"*
 - Response 2: *"Would you like me to give you a referral for a talk line?"*
 - Response 3: *"What things have you done in the past to help cope with sadness?"*
 - Response 4: *"Can you say more about that?"*
5. While you are explaining the protocol for a medication abortion to a patient, they mention that their boyfriend *"absolutely cannot find out about this pregnancy"*. What concerns does this raise and how can you explore the situation further?

Teaching Points

EXERCISE 2.2: Counseling Around Clinical Care

Purpose: Discuss what you might do or what you might say to the patient in each of the following situations in the context of a uterine aspiration for abortion or early pregnancy loss.

1. As you enter the exam room you hear the patient's partner criticizing them for "*acting stupid*" and telling them angrily to "*just shut up.*" The partner is looking at the wall and ignores your efforts to introduce yourself.
2. When you come into the room and ask the patient how she is feeling, she starts crying uncontrollably. She has her head turned away from you and does not make eye contact.
3. Before you begin an exam or procedure, the patient asks, "*Is this going to hurt?*"
4. The patient is a 14-year-old rape survivor who is 7 weeks pregnant. Every time you attempt to insert the speculum, they raise their hips off the table.
5. You have just completed an aspiration for a patient at 8 weeks gestation. The patient asks, "*Can I see what it looks like?*" How would your response differ at 12 weeks gestation?

Teaching Points

3. EVALUATION BEFORE UTERINE ASPIRATION

This chapter will address methods for evaluation of pregnancy dating, location, and viability, including the use of human chorionic gonadotropin (hCG) testing and diagnostic ultrasound (US). Persons of childbearing age are typically healthy. Uterine aspiration can be done safely for most patients in a clinic setting. However, this chapter will also address issues in the medical history that may either determine the setting in which uterine aspiration can be most safely provided.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be better able to:

- Use clinical and sonographic findings to accurately estimate gestational age
- Differentiate sonographic characteristics of a true gestational sac from a pseudosac
- Use laboratory and sonographic findings to diagnose a non-viable pregnancy
- List clinical, lab, and sonographic findings that constitute red flags for ectopic pregnancy
- Gather appropriate historical, physical exam, and lab information to safely perform uterine aspiration in an outpatient setting, and know when to consult/refer.

READINGS / RESOURCES

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (2009)
 - Chapter 6: Clinical Assessment and Ultrasound in Early Pregnancy
 - Chapter 7: Medical Evaluation and Management
- Ultrasound Curricula
 - Affiliates Risk Management Services, Inc. Ultrasound in Abortion Care Training Workbook, 2007
 - AUIM Ultrasound Lecture Series: Obstetrics and Gynecology, 2013
- Organization of Teratogenic Information Specialists
 - <http://mothertobaby.org/health-professionals/>
- Related Chapter Content
 - Chapter 8 Early Pregnancy Loss: [Pregnancy of Unknown Location Algorithm](#)

SUMMARY POINTS

SKILL

- Accurate gestational age assessment is a key component of the pre-procedural evaluation and prevents complications associated with underestimation.
- If clinical dating is uncertain, ultrasound can help to more accurately estimate the gestational age of an intrauterine pregnancy. It may also provide crucial information when an evaluation for ectopic pregnancy or early pregnancy loss is indicated.

SAFETY

- If relying on ultrasound records from the chart, confirm the date of exam to calculate current gestational age.
- If ectopic pregnancy is suspected, diagnostic testing will likely include pelvic exam, serial serum hCG levels, transvaginal US, and possibly diagnostic aspiration. A “normal” rise or fall in hCG levels alone is not sufficient to exclude an ectopic.
- The pre-procedural medical evaluation may reveal conditions that warrant further management or that modify the optimal timing or setting for the uterine aspiration.
- Patients with chronic medical conditions planning a first-trimester uterine aspiration should be encouraged to continue their regular medications, with rare modifications, as needed.

ROLE

- Providers in settings with limited ultrasound access can safely provide medication abortion or aspiration by clinical dating with ultrasound as needed.

PREGNANCY DATING

PREGNANCY TESTS

- High sensitivity urine pregnancy test (HSPT):
 - Is a simple, accurate, inexpensive urine test available over the counter in pharmacies or clinics.
 - Qualitative: most detect hCG at urine concentrations of 20-25 mIU/mL.
 - Usually positive by cycle day 32-35 (95% of pregnancies).
 - May remain positive for up to 4-6 weeks following a complete, uncomplicated abortion (therefore, generally not useful in monitoring completion).
- Serum quantitative hCG test:
 - Detects serum levels of hCG as low as 2-10 mIU/mL.
 - Serial quantitative measurements are often used to evaluate for ectopic gestations, early pregnancy loss, or to follow molar pregnancy. May be used as an adjunct to monitor completion of abortion when there is clinical concern.
 - Wide variability in hCGs exist for any gestational age; therefore, not useful in determining EGA. Initial rapid decline in levels post-abortion (by 50% in 48 hours, or 80% in 7 days), followed by a slower decline for several weeks.
 - See [Chapter 8](#) for details on the clinical utilization of serum hCG.
- Other hCG assays in limited use:
 - Low sensitivity urine test (detects hCG of at least 1000-2000 mIU/mL)
 - Multi-level pregnancy test (MLPT; a graduated urine test being researched for at-home medication abortion follow-up).

BIMANUAL EXAM

Dating by uterine size in centimeters	<ul style="list-style-type: none"> • After 4 weeks, uterus increases by approximately 1 cm per week • After 12 weeks, uterus rises out of pelvis • At 15-16 weeks, uterus reaches midpoint between symphysis and umbilicus • At 20 weeks, uterus reaches umbilicus • After 20 weeks, fundal height from pubic symphysis in centimeters approximately equals weeks 	
Dating by uterine size in fruit comparisons	lemon medium orange grapefruit	5-6 weeks 7-8 weeks 9-10 weeks
Limitations to bimanual sizing:	<ul style="list-style-type: none"> • Abdominal scarring (multiple cesareans); less uterine mobility* • Fibroids* • Multiple gestations* • Uterine retroversion • Obesity 	

*Consider US guidance or additional management

ULTRASOUND: OVERVIEW, METHODS, TIPS & IMAGES

Ultrasound can be used to estimate gestational age, determine the location of the pregnancy, and / or provide procedural support. US is not a requirement for uterine aspiration, however, learning its benefits and limitations will help strengthen clinical acumen.

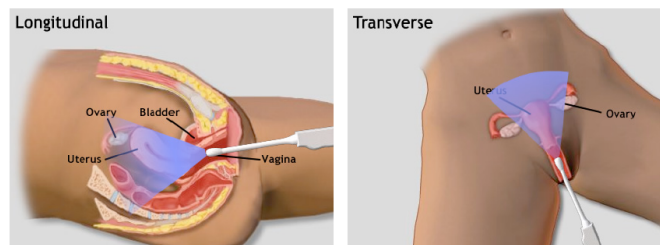
Clinicians who use US should understand the discriminatory level (DL). This is the level of serum hCG at which a singleton viable IUP should be visible on US, although there is a lack of consensus regarding the actual hCG level (Connolly 2013), and some question using one hCG level to guide management in a desired pregnancy.

Transvaginal US must be performed if an IUP is not identified on transabdominal US.

Transvaginal Probe	Transabdominal Probe
<ul style="list-style-type: none">• More invasive• Better view with empty bladder• Easier to detect earlier pregnancy• Better resolution but less depth• Probe usually 7.5 -10 mHz• Discriminatory Level 1800 – 2300 mIU/ml	<ul style="list-style-type: none">• Less invasive• Better view with full bladder• Difficult to see pregnancy of <6 wks• Better depth but less resolution• Probe usually 3-5 mHz

When Performing US:

- Ask if the patient wants to view image, be informed of multiple gestations, and / or insert probe
- Confirm no latex allergy; use appropriate gloves and probe cover
- Use appropriate language to discuss US findings with patient
- Systematically scan in 2 planes to avoid missing twins, fibroids, anomalies, etc.
 - In longitudinal view of cervix and fundus, scan side to side from ovary to ovary.
 - To get a transverse view, turn probe 90 degrees. Then scan anterior to posterior, and fundus to cervix.



Challenger 2007

- A limited first trimester US exam must include the following (NAF '16):
 - Uterine scan in both transverse and longitudinal planes to confirm intrauterine pregnancy (IUP)
 - Evaluation of pregnancy number
 - Measurements to document gestational age
 - Evaluation of pregnancy landmarks, such as yolk sac or the presence or absence of fetal/embryonic cardiac activity.
- Switch to the other probe (abdominal or vaginal) if initial scan is inadequate.

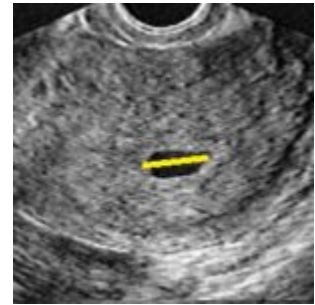
The Gestational Sac

The Gestational Sac (GS) is the first US evidence of a pregnancy, and can appear as early as 4 weeks. Until the presence of a yolk sac or embryo is seen on US, the goal of assessing an intrauterine sac is to determine if it is morphologically consistent with an early intrauterine pregnancy, or concerning for a pseudosac, which is associated with an ectopic pregnancy. After the passage of time, the GS should grow in size and show signs of development in a normal pregnancy. Absence of these signs is concerning for a non-viable pregnancy and will be reviewed below.

GS Measurement and Calculation of Gestational Age:

Measure 3 dimensions in 2 planes:

- Longitudinal Plane: Length (L) & height (H)
- Transverse Plane: Width (W)



Calculate the Mean Sac Diameter (MSD):

- $MSD = (L + W + H)/3$

Calculate the Gestational Age (GA):

- $GA \text{ (in days)} = MSD \text{ (in mm)} + 30$

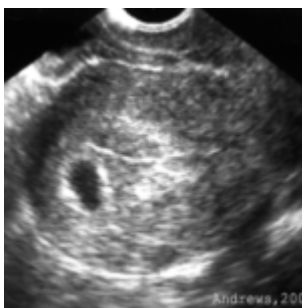
Diagnosis of non-viable pregnancy:

- Empty GS >25 mm diameter

Images: Fjerstad, M

A normal early GS can be characterized by the FEEDS mnemonic, although meeting all criteria does not exclude the possibility of ectopic pregnancy (Fjerstad 2004). See below for more images of abnormal pregnancies, including signs of ectopic pregnancy.

Gestational Sac or Pseudosac?



Gestational Sac



Pseudosac

- F** – Fundal (in mid to upper uterus)
- E** – Elliptical or round shape in 2 views
- E** – Eccentric to the endometrial stripe
- D** – Decidual reaction (surrounded by a thickened choriodecidual reaction; appears like fluffy white cloud or ring surrounding sac)
- S** – Size > 4 mm (soft criteria)

Compared to the GS, the pseudosac is more irregular, central, smaller, and without a decidual reaction, and can be seen with an ectopic pregnancy. Note the “beak-shaped” appearance of the sac, which can look similar to an early GS, although may only meet the F (fundal) criteria of FEEDS

Images: Fjerstad, M, Andrews, M, Gatter, M. *US in Very Early Pregnancy and Management*. CAPS, 2004.

Yolk Sac

The Yolk Sac (YS) is the first US finding that confirms an intrauterine pregnancy. Its presence excludes a pseudosac and confirms an intrauterine pregnancy. The YS is a round echoic ring with anechoic (dark) center seen within the GS. It appears typically at 5 ½ weeks when the MSD is 5-10 mm. The size of the YS is not generally significant, unless large and no embryonic pole.

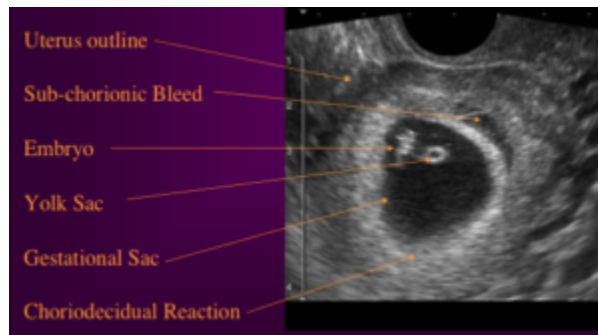


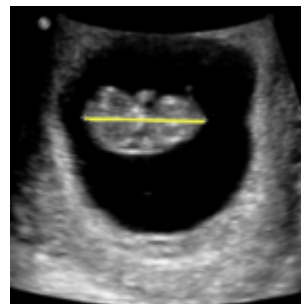
Image from ARHP & Physicians, 2000

The Embryo and Cardiac Activity

The embryo follows a predictable path of development and therefore can be used to date a pregnancy based on its size. The embryo appears at approximately 6 weeks and grows 1 mm per day thereafter until 12-14 weeks. After 12 weeks, fetal flexion and extension make measuring length more challenging and using the fetal biparietal diameter (BPD) is preferred. Cardiac activity appears around 6 ½ weeks.

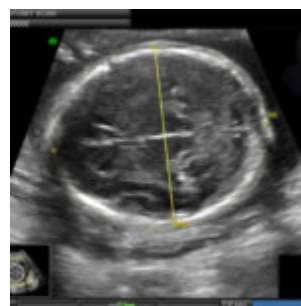
Crown Rump Length (CRL) Measurement

- CRL = fetal pole (in mm)
- Long axis not including limbs or YS
- Calculate: GA (days) = CRL + 42



Biparietal Diameter (BPD) Measurement

- > 12 – 14 weeks
- Inside to outside of skull
- At the level of the thalamus
- No nuchal or eye structures



Images from AIUM 2013

Determining Pregnancy Viability

The following data on viability evaluated patients with desired pregnancies ([Doubilet 2013](#)). If a pregnancy is **undesired**, there is no reason to delay uterine aspiration to wait for diagnosis; and a diagnostic aspiration will assist in the evaluation of a possible ectopic pregnancy (Edwards 1997). If a pregnancy is **desired**, and findings are suggestive of early pregnancy loss, recheck ultrasound in 7-10 days.

Guidelines for Transvaginal Ultrasonographic Diagnosis of Early Pregnancy Loss in a Patients with an Intrauterine Pregnancy of Uncertain Viability* ([Doubilet 2013](#))

US findings HIGHLY SUGGESTIVE of EPL †	US findings DIAGNOSTIC of EPL
<ul style="list-style-type: none"> • CRL 5-7mm and no cardiac activity • MSD 16-24mm and no embryo • MSD 13 mm or more and no YS • Absence of embryo with heartbeat: <ul style="list-style-type: none"> ◦ 7-13 days after a scan that showed a gestational sac without a yolk sac ◦ 7-10 days after a scan that showed a gestational sac with a yolk sac • Absence of embryo 6+ wks after LMP • Empty amnion (amnion seen adjacent to yolk sac with no visible embryo) • Enlarged yolk sac (>7mm) • Small gestational sac in relation to the size of the embryo (<5mm difference between MSD and CRL) 	<ul style="list-style-type: none"> • CRL 7+mm and no cardiac activity • MSD 25+mm and no embryo • Absence of embryo with heartbeat: <ul style="list-style-type: none"> ◦ 2+ weeks after a scan that showed a gestational sac without a yolk sac ◦ 11+ days after a scan that showed a gestational sac with a yolk sac

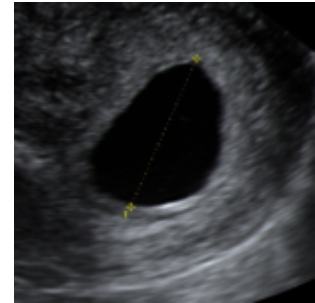
* Criteria are from the Society of Radiologists in Ultrasound Multispecialty [Consensus Conference](#), October 2012.

† If a pregnancy is desired, and findings are suggestive of early pregnancy loss, recheck ultrasound in 7-10 days.

ULTRASOUND FINDINGS WITH ABNORMAL PREGNANCIES

Anembryonic pregnancy

Empty GS without fetal pole
(only 1 view of 3 needed for a MSD).
An empty GS with a MSD of ≥ 25 mm is
diagnostic for an anembryonic pregnancy.



Ectopic pregnancy

Note that this GS with fetal pole is not
intrauterine (no cervix is seen in
the same plane).



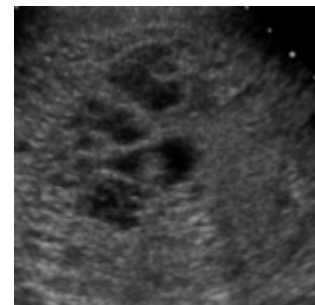
Free Fluid in Cul-de-Sac

Sagittal view of the uterus. Note the
presence of heterogeneous fluid in the
posterior cul-de-sac. This may be a
finding with ectopic pregnancy or
uterine perforation.



Gestational trophoblastic disease (molar pregnancy)

Often has a swiss cheese or moth-eaten
appearance on ultrasound. Image of complete
mole (no embryo); partial moles usually present as
non-viable pregnancy on US. Precautions should
be taken due to increased risk for bleeding;
often refer for inpatient management > 12 weeks.
Send POC for pathology and obtain baseline serum hCG.
See [Exercise 3.2.e](#) for details.



Images AIUM Ultrasound Lecture Series 2013 and Reeves, M.

EVALUATION FOR ECTOPIC vs. EARLY PREGNANCY LOSS (EPL)

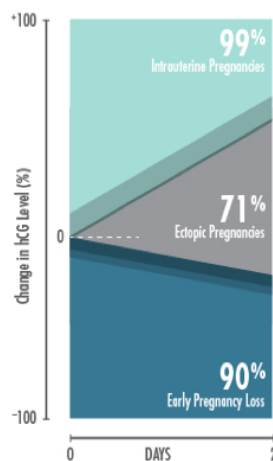
Patients presenting in early pregnancy with symptoms of bleeding and / or pain require evaluation for ectopic pregnancy with US and / or serial hCGs, as well as exam. A referral for formal diagnostic ultrasound and / or emergency attention may be indicated.

Ultrasound

- A patient with a positive pregnancy test and no visible pregnancy on ultrasound is said to have a Pregnancy of Unknown Location (PUL). There is a PUL Algorithm in [Chapter 8](#) to assist in management decisions.

Serial hCGs

- Rate of hCG rise with either an ectopic pregnancy or an EPL is usually slower than expected for a viable intrauterine pregnancy.
- The minimum rate of decline expected for EPL depends on the initial hCG at presentation, but it ranges from 35-50% at 2 days ([Butts 2013](#)).
- Rate of hCG decline with ectopic is usually slower than that expected for EPL.
- Among women diagnosed with ectopic pregnancies:
 - The majority had serial hCGs outside the normal range for either a viable intrauterine pregnancy (i.e. level rose < 35-53% in 2 days) or a resolving EPL (i.e. level fell < 35-50% in 2 days).
 - Almost a third of women had a rise or fall of hCG that was within the limits of a potential viable IUP or completed EPL.
- Therefore, use caution when following patients with symptomatic early pregnancy.
 - A “normal” rise or fall in levels is **not sufficient to exclude ectopic** – but should be used in conjunction with other clinical data including exam, ultrasound or diagnostic aspiration.
- See [Chapter 8](#) for more on the diagnosis of ectopic and management of EPL.



Change in the hCG Level in Intrauterine Pregnancy, Ectopic Pregnancy, and Spontaneous Abortion

(Note: Studies from ED not abortion care setting; therefore ectopic rate is higher)

An increase or decrease in the serial hCG level in a woman with an ectopic pregnancy is outside the range expected for that of a woman with a growing IUP or a EPL 71% of the time. However, the increase in the hCG level in a woman with an ectopic pregnancy can mimic that of a growing IUP, and the decrease in the hCG level can mimic that of an EPL. ([Barnhart 2009](#))

Adapted from Barnhart KE. *WOM 2009*; 361: 379-87

MEDICAL EVALUATION PRIOR TO ASPIRATION

History and Physical

- Review medical, obstetrical, gynecologic, psychosocial history: medications and allergies
- Review information for the following medical conditions: (Paul 2009)
 - Cardiovascular (hypertension, cardiac valvular disease or arrhythmias)
 - Pulmonary (asthma, respiratory infection)
 - Hematologic (bleeding / clotting disorders, anticoagulant use, severe anemia)
 - Hemorrhage risk factors: See Chapter 5: [Managing Complications Table](#)
 - Endocrine (diabetes, hyperthyroidism)
 - Renal and hepatic disease (affecting drug metabolism, clearance, contraception)
 - Allergy to latex, iodine, shellfish and medications
- Assist client with a contraceptive plan; complete informed consent before sedation given
- Perform a focused physical exam:
 - Vital signs, height and weight (BMI)
 - Mallampati score (required in some settings prior to moderate sedation)
 - Cardiac, pulmonary, and / or abdominal exam as indicated by history
 - If elevated, confirm BP with appropriate sized cuff after sitting quietly; may warrant pre-procedure treatment (i.e. >160/110) or referral
 - Tachycardia or arrhythmia: consider anxiety, stimulants, etc. If significant and previously undiagnosed, may warrant delay for evaluation
 - Obesity (may be associated with greater procedural difficulty).
- Perform pelvic exam prior to the procedure:
 - Bimanual for uterine size, position, fibroids, anomalies, pain
 - Speculum exam for cervicitis or vaginitis warranting testing / treatment

Diagnostic Tests

- Chlamydia (CT) / Gonorrhea (GC):
 - For asymptomatic clients, refer to CDC [STD Guidelines](#): annual screening for women <25-years-old; others if increased risk (i.e. new or multiple partner, etc).
 - If cervicitis is present on exam, test for GC / CT and begin presumptive treatment at least one hour prior to aspiration. Note: Untreated CT / GC increases risk of postabortal endometritis, with associated sequelae.
 - Even in asymptomatic clients, pre-procedural antibiotic prophylaxis for uterine aspiration is well supported by the available evidence ([Low 2012](#); [Achilles 2011](#)).
- Rh (D) immune globulin: See [Chapter 4](#) for details
- Hemoglobin / Hematocrit
 - Consider Hgb or Hct with history of anemia (complete CBC not needed)
 - Although limited data support routine screening ([NAF CPGs 2016](#)), a baseline POCT may inform the decision for treatment (FeS04) post-aspiration.
- Tests pertinent to underlying conditions
 - Glucose for IDDM patients
 - INR for patients on anti-coagulants

EXERCISES: EVALUATION PRIOR TO UTERINE ASPIRATION

EXERCISE 3.1

Purpose: To distinguish appropriate uses for choosing different types of pregnancy tests. For the following scenarios, indicate whether you would use a high sensitivity urine pregnancy test (HSPT) or a serum quantitative hCG test, the reasons why. Address related questions.

1. A patient comes to your office requesting pregnancy confirmation and to discuss her options. She is 4 weeks 2 days LMP.
2. A patient is 6 weeks by LMP with a pregnancy of unknown location (transvaginal ultrasound examination shows no intrauterine gestational sac and no ectopic pregnancy). The patient has been spotting intermittently but is otherwise asymptomatic. A quantitative hCG you draw comes back at 1000, and another 48 hours later comes back at 1400.
 - What is the differential diagnosis?
 - Would your approach to care differ with a desired vs. undesired pregnancy?
3. A patient returns for a follow-up visit 3 weeks after a first-trimester aspiration because of intermittent bleeding since. The patient started taking oral contraceptive pills the day following the abortion, and has been sexual active since the uterine aspiration.

Teaching Points

EXERCISE 3.2

Purpose: To review key information about ultrasound in early pregnancy.

1. What is the differential diagnosis of the following ultrasound findings? What steps would you take to clarify the diagnosis?
 - a. Mean gestational sac diameter 18 mm with no yolk sac or embryo visible.
 - b. Embryonic pole length 5 mm with no visible cardiac activity.
 - c. 3 mm x 3 mm central anechoic sac in pregnant patient 5w3d by LMP with history of intermittent right lower quadrant cramping.
 - d. Embryonic pole length 8 mm with no visible cardiac activity.
 - e. Irregular, flattened gestational sac without embryo, with cystic changes present resembling “swiss cheese” pattern in patient who is 8 weeks LMP.

Teaching Points

EXERCISE 3.3

Purpose: To identify conditions prior to uterine aspiration that may warrant special management, consider how you would manage the following case scenarios. Not all material is covered in the Chapter.

1. A 41-year-old patient presents for uterine aspiration at 5 weeks LMP. Pelvic examination reveals an irregular uterus that is 17 weeks in size. Ultrasound examination shows an intrauterine sac in the fundus consistent with 5 weeks gestation and multiple submucosal uterine fibroids.
2. A 26-year-old patient presents to your office at 7 weeks gestation. They had a chest x-ray and abdominal series after a motor vehicle accident 2 weeks ago and decided to have an abortion because of concerns about the effects of the radiation on the fetus.
3. You are preparing to perform a uterine aspiration for a patient who is 5 weeks pregnant. When you insert the speculum, you note that the cervix looks inflamed and friable and has pus at the os.
4. A 40-year-old G4P3 patient at 7w4d presents for uterine aspiration. She has a BMI of 35 and a history of 3 previous cesareans.
5. A 29-year-old patient presents for uterine aspiration at 7 weeks gestation. They have a prior history of venous thromboembolism and is currently anticoagulated on warfarin; the INR is in the therapeutic range.
6. A 38-year-old patient presents for a uterine aspiration at 6 weeks gestation, with a blood pressure of 170/110 and a headache.
7. A 26-year-old patient with a history of diabetes presents for a uterine aspiration at 8 weeks gestation. A pre-operative glucose level is 520 mg/dL.

Teaching Points

4. MEDICATIONS AND PAIN MANAGEMENT

This chapter describes methods of pain control as well as routine medications used before, during, and after uterine aspiration. Medications indicated for clinical emergencies are also reviewed.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be able to:

- Describe the role of routine antibiotics for infection prevention and cervical ripening in uterine aspiration
- List how to use Rh-D immunoglobulin in the prevention of isoimmunization of Rh-negative patients in first trimester uterine aspiration
- List the options for pain control used during uterine aspiration, their effectiveness, and considerations for patients with a tolerance to opiates
- Perform techniques and describe precautions for paracervical block
- Identify appropriate responses to, and medications for, a number of clinical emergencies

READINGS / RESOURCES

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (Wiley-Blackwell, 2009)
 - Chapter 8: Pain Management
- National Clinicians' [Post-Exposure Prophylaxis Hotline](#)

SUMMARY POINTS

SKILL

- Pain perception includes both physical and psychosocial elements, and is best managed with both non-pharmacological and pharmacological techniques.
- Paracervical block helps reduce pain, and there are many variations on technique.
- Oral medications such as NSAIDs, opioids or anxiolytics may be used individually or together during uterine aspiration.
- Intravenous pain management may be chosen if monitoring and staffing are available; patients may require provision of respiratory support.
- Deep sedation (a.k.a. general anesthesia) is used, but is not routinely recommended ([Ipas 2016](#)).

SAFETY

- Universal pre-procedure antibiotic prophylaxis for uterine aspiration is well supported by the available evidence.
- Attention to allergies, concurrent medications, conditions that compromise respiratory status, recommended dose limits, and antidotes will improve safety.
- The supplies in your emergency cart should be reviewed, along with procedures and regular simulations for emergency management.

ROLE

- In addition to pain medications, utilize gentle procedural technique, deep-breathing techniques, distraction through conversation, the support of a partner, friend, doula, or medical assistant, and the reassuring tone of your voice.

PRE-PROCEDURE MEDICATIONS

PROPHYLACTIC ANTIBIOTICS

There is strong evidence for the use of routine antibiotic prophylaxis in patients undergoing uterine aspiration for abortion. Patients who received antibiotics were 0.59 times as likely to experience post-abort infection compared to those who received placebo in a Cochrane review of 15 randomized controlled trials (Low 2012). This protective effect was evident in patients with and without risk factors (history of PID, positive CT, or pre-procedural BV). Limited evidence suggests that routine antibiotics are optional for asymptomatic patients undergoing uterine aspiration for EPL (Prieto 1995).

Evidence supports pre-procedure dosing of prophylactic antibiotics for the maximal effect, and the shortest possible course to give the lowest risk of adverse reactions and antibiotic resistance (Achilles 2011). Effective regimens include metronidazole or tetracyclines (e.g. doxycycline) or azithromycin. Despite varying practices in choice of antibiotic and duration of use, there is little data to support post-procedure antibiotics (Achilles 2011) which are often used to maintain NPO status prior to an abortion.

CERVICAL PREPARATION

There has been much research into the role of misoprostol and other methods of cervical ripening for uterine aspiration. Cervical preparation with misoprostol is generally safe and may decrease procedure time for some patients, but it is not routinely indicated prior to a first trimester uterine aspiration due to increased waiting time, bleeding, cramping, other side effects, and minimal demonstrated benefit in terms of ease of dilation or pain (Ipas 2016, Kapp 2010, Allen 2007). Its use can be considered on an individual basis when a challenging dilatation is anticipated (such as history of difficult dilation). An early study suggests the priming interval for first trimester may be 1 hour after sublingual administration, but with vaginal and buccal administration, 2 to 3 hours provides a better effect (Saav 2015). The most common regimen prior to first trimester aspiration abortion is 400 mcg.

Rh-D IMMUNOGLOBULIN

Rh-D immunoglobulin (anti-D IgG or RhoGam) is recommended to prevent the isoimmunization of Rho-D negative patients at the time of threatened, therapeutic, or spontaneous abortion, and ectopic pregnancy (Fung Kee Fung 2003). The minimal gestational age at which sensitization can occur is uncertain. Since the introduction of RhoGam in late pregnancy and postpartum, the incidence of isoimmunization has fallen over 8-fold (Fung Kee Fung 2003). Given its success in term pregnancies, its use in a lower dose (50 mcg compared to the 300 mcg full dose) has been extended to miscarriage and abortion up to and including 12 weeks, even though the evidence is sparse for early pregnancy (Jabara 2003). At or beyond 13 weeks, full dose RhoGam is recommended to prevent isoimmunization.

Antibodies to Rho-D can develop if a patient has already been sensitized from prior pregnancies or from a RhoGam injection within the last 3 months. If a patient has received RhoGam in the past 3 months, an additional injection is only indicated if the previous injection was greater than 3 weeks prior (Bichler 2003). For those who have become sensitized, an additional RhoGam injection will not prevent isoimmunization.

PAIN MANAGEMENT

Perception of pain during uterine aspiration is a complex phenomenon influenced by both physical and psychosocial elements, and as such, can vary considerably between individuals. The table below summarizes the research to date. In the multivariable analyses, no single factor predicts procedure-associated pain (Singh 2008).

FACTORS ASSOCIATED WITH PAIN DURING UTERINE ASPIRATION

Increased Pain	Decreased Pain	Conflicting Results	Not Strongly Associated
Anxiety/depression Ambivalence Expectation of pain Younger patient age Dysmenorrhea Fewer pregnancies	Previous vaginal delivery Older patient age More pregnancies Shorter operative time Participation in the choice of anesthesia	Gestational age Max cervical dilation Comfort with decision Provider experience	Prior pelvic exam Prior uterine aspiration Prior cesarean section Manual vs. electric vacuum aspiration

NON-PHARMACOLOGIC PAIN MANAGEMENT

Many patients are anxious about anticipated procedural pain. Supportive verbal communication, including distraction and so-called “vocal local” or “verbicaine”, can play a role in reducing anxiety and pain. Providers can acknowledge the possibility of pain without overly alarming patients. Offering elements of positive suggestion may help to allay concerns. For example:

“Most patients are worried about pain, and are often surprised that the procedure is faster and more tolerable than they expected. Patients have varying amounts of pain, but I will be giving you some numbing medicine and will show you some breathing techniques to help. I will be as gentle as possible.”

Guiding patients to take slow, deep, regular breaths can assist in relaxation, avoid hyperventilation, and also give patients an increased sense of control. Instead of pulling away and tightening, encourage patients to release or push their hips into the table.

Guided imagery can also decrease anxiety and analgesic requirements for surgical patients (Gonzales 2010). Patients may be invited to recall a favorite place, activity, or color, during the procedure. Relaxing images or mobiles above the exam table have also been used to decrease pain and anxiety during gynecologic procedures (Carwile 2014). Playing music in the room may be helpful with anxiety and satisfaction, but does not decrease pain (Wu 2012, Guerrero 2012, Cepeda 2006). A heating pad or hot water bottle may be helpful during the procedure, in recovery or at home.

CHOICE OF PAIN CONTROL METHODS

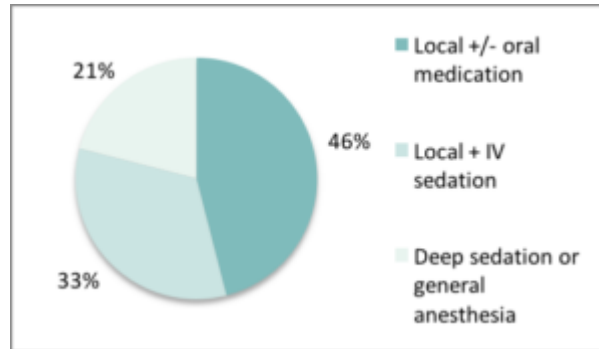
Relevant information about pain management should be reviewed as part of the informed consent process, including the range of patient experiences, available options for pain control, as well as their risks and benefits. If a patient has a strong preference for an option your facility does not offer, an appropriate referral can be given.

Premedication with NSAIDs has been shown to decrease pain during and after the procedure, and has few contraindications or side effects (Ipas 2016). Some patients choose this less sedating option in order to be more alert, have shorter recovery, or to drive themselves home

Other patients may choose a more sedating option to be more relaxed, to manage higher levels of anxiety, or to manage a later procedure. Oral opiate analgesics have shown minimal effect on pain compared to placebo and cause more side effects including nausea (Micks 2012). IV sedation may be offered in some settings for patients who request more analgesia, although some medical conditions, monitoring, or facility limitations preclude moderate or deep sedation.

PREFERRED ANESTHESIA METHODS

Preferred method of anesthesia for first-trimester surgical abortion cases performed by responding NAF clinics (n=110). For uterine aspiration, local anesthesia with supplemental oral or IV medication is the most frequently used approach (O’Connell, 2009).



CONTINUUM OF SEDATION LEVEL

Various approaches to pain management may be offered to patients, depending on the clinical situation and resources. Below is a short summary of the levels of sedation, examples of medications used, and the associated risks.

Level of Sedation	Example	Responsiveness	Airway	Spontaneous Ventilation	Cardiovascular Function
Minimal (Anxiolysis)	Oral lorazepam and/or hydrocodone	Normal response to verbal stimulation	Unaffected	Unaffected	Unaffected
Moderate “Conscious Sedation”	Fentanyl 50-100 mcg + Midazolam 1-3 mg IV	Purposeful response to verbal or tactile stimulation	No intervention required	Adequate	Usually maintained
Deep	Add propofol or higher doses of meds used for moderate sedation	Purposeful response following repeated or painful stimulation	Intervention may be required	May be inadequate	Usually maintained
General Anesthesia	Propofol or other medications	Unarousable even with painful stimuli	Intervention often required	Frequently inadequate	May be impaired

Adapted from Continuum of Depth of Sedation: Definition of GA and levels of Sedation / Anesthesia, 2014, ASA.

MONITORING GUIDELINES

- When moderate sedation is used, a person trained to monitor respiratory, cardiovascular and level of consciousness must be present, other than the provider.
- The personnel administering moderate sedation must recognize that conscious sedation may lead to deep sedation with hypoventilation, and be prepared to provide respiratory support.
 - Pulse oximetry should be used to enhance monitoring.
 - IV access should be considered.
 - The patient should be checked frequently for verbal responsiveness.
 - A licensed airway manager should care for patients with severe systemic disease
- When moderate sedation is used, monitoring must be of a degree that can be expected to detect the respiratory effects of the drugs being used.
- The practitioner administering deep sedation or general anesthesia must be certified according to applicable local, hospital, and state requirements.

CONSIDERATIONS FOR OPIOID TOLERANT PATIENTS

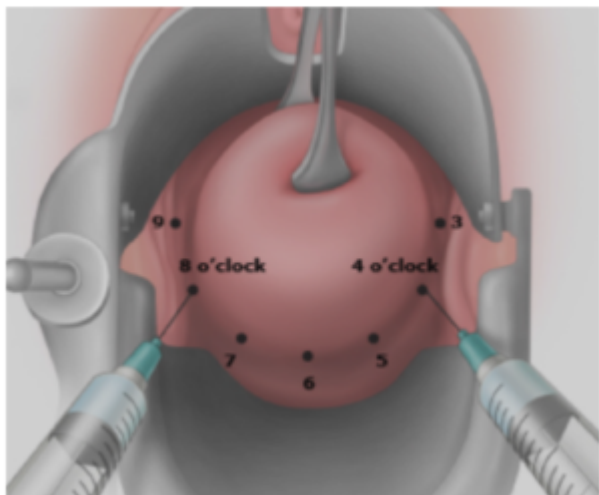
Opioid use and dependence is a growing problem in the U.S. (CDC 2013). Some patients may have a tolerance to opioid medications or may be on medically supervised opioid maintenance therapy (OMT), or opioid antagonist therapy with medications that interact with opiate pathways. OMT medications include methadone, a full agonist, and buprenorphine (e.g. Suboxone, buprenorphine-naloxone), a partial agonist (SAMHSA 2015). Antagonist therapies include Vivitrol, a depo naltrexone injection, and oral naltrexone.

For opioid tolerant patients, the goal of pain management continues to be provision of adequate analgesia during the procedure. Here are some general principles (SAMHSA 2015, Ries 2014, Huxtable 2011, and Alford 2006):

- Recognize that uterine aspiration can be painful but brief. Short acting pain medications are typically used, and higher doses of medication may be required.
- Do not worry about worsening tolerance in the setting of procedural pain.
- Patients with tolerance may worry that pain will not be adequately controlled, which can worsen their acute pain. Empathize and reassure them appropriately.
- Do not forget to utilize other ways to alleviate pain, such as NSAIDs, local anesthetic breathing, visualization techniques, and a support person in the room.
- Determine dosing by monitoring reported pain, alertness, and respiratory rate.
- Short acting, high affinity opioids like fentanyl or hydromorphone (Dilaudid) are effective and safe for repeated dosing; however, any opioid can be used.
- Those on OMT should continue their medications as prescribed.
- As buprenorphine is a partial agonist with high affinity for opioid receptors, or naltrexone, an opioid antagonist, pain control for patients on it can be difficult. Patients may need a much larger opioid dose or a temporary increase in buprenorphine, during a procedure.
- Patients on OMT can be given a short-term (1-3 days) opiate prescription if indicated, with an OMT clinic follow up within that time frame. The expected duration of their pain from uterine aspiration is the same as patients not on OMT.
- OMT and naltrexone prescribers can often provide guidance for acute pain control, and should know that their patient received other opioids. Communicate with the prescribing clinic or physician if possible, or offer a note documenting the opioids received under your care.

PROVIDING EFFECTIVE LOCAL ANESTHESIA

Below are some techniques and pitfalls of paracervical block, preparations, and injection approach.



A common approach is to inject 1-2 mL at 12 o'clock for the tenaculum, and then inject at 4 and 8 o'clock as depicted above to target paracervical innervation. Other approaches are to inject at 2 and 10 o'clock, or 3 and 9 o'clock. Image from Vidaeff 2016.

INJECTION TIPS AND TECHNIQUES

- Paracervical block is effective at reducing pain regardless of gestational age, although it can also be painful at the time of injection ([Renner 2012](#)).
- Injection locations and techniques vary by provider.
- Reported pain scores during dilation and aspiration are improved with buffered lidocaine and deep injections (1.5 to 3 cm) in a Cochrane review ([Renner 2010](#)).
- It is inconclusive whether a 3-min wait time between PCB and cervical dilation provides noninferior pain control for first trimester surgical abortion. However, a four-site PCB appeared to be superior to a two-site PCB ([Renner 2016](#)).
- Some use a cough technique to distract during injection, but data are limited.
- Local anesthetics block nerve impulses, although physical pressure on nerves due to volume injected also provides analgesic effect. Saline has slightly less effect than lidocaine ([Chanrachakul 2001](#), [Miller 1996](#)).
- Adding ketorolac to block decreased pain of dilation, but not overall pain ([Cansino 2009](#)).
- No evidence suggests one anesthetic is superior but options are reviewed below.

Generic (Trade)	Potency	Onset	Duration
Bupivacaine (Marcaine)	Strong	Moderate (up to 20 min)	Long (3-6 h)
Lidocaine (Xylocaine)	Medium	Fast (4-7 min)	Moderate (1-2 h) (~3 h with epinephrine)
Mepivacaine (Carbocaine)	Medium	Fast (4-7 min)	Moderate (3 h)
Chloroprocaine (Nesacaine)	Weaker	Fastest	Short (30 min) 25 sec half life

TIPS TO MINIMIZE SYSTEMIC ABSORPTION

The maximum lidocaine dose recommended in pregnancy is 200 mg [achieved for example, by giving 20 ml of 1% lidocaine (10 mg/ml)].

When injected (inadvertently) intravenously at moderate concentrations, patients may have peri-oral tingling, dizziness, tinnitus, metallic taste or irregular/slow pulse. At higher concentrations, they may have muscular twitching, seizure, cardiac arrhythmias, unconsciousness, and even death (Paul 2009).

- Minimize direct intravascular injection and excessive anesthetic dosing.
- Use a combination of superficial (1 cm) and deep injections (3 cm).
- Move the needle while injecting (superficial to deep) OR aspirate before injecting.
- Use a dilute concentration (using 0.5% lidocaine or diluting with saline)
- Use a vasoconstrictor mixed with the anesthetic to slow systemic absorption.

One Possible Mixture for Preparation of Anesthetic

1. Take 50 ml vial of 0.5% or 1% lidocaine and draw off 5 cc (save or discard)
2. Add 2-4 units (0.1-0.2 ml) of vasopressin
3. Add 5 ml sodium bicarbonate (8.4%) as buffer
4. About 20 ml of mixture is usually adequate

Some add atropine to above mixture for vasovagal prevention (recommended dose 2 mg / 50 ml).

UNIVERSAL PRECAUTIONS PERTAINING TO UTERINE ASPIRATION

Universal precautions are designed to prevent transmission of blood-borne pathogens when providing health care.

- Wear gloves and protective eye gear when working with body fluids (i.e. injection, procedure, handling of tissue or contaminated instruments).
- Avoid recapping contaminated needles, and place sharps immediately in a puncture-resistant container for disposal.
- If there is a blood exposure, tell your supervisor. Information is available through the National Clinicians' [Post-Exposure Prophylaxis Hotline](#), or OSHA's [Bloodborne Pathogens and Needlestick Prevention](#) site.

BASIC MEDICATION OPTIONS

Drug (Class)	Dose Range	Comment
Local Anesthesia and Additives		
Lidocaine (Xylocaine) (0.5% – 1%)	Up to 200 mg (20 mL 1% or 40 mL 0.5%)	Most common in U.S. Lower concentration as effective but more expensive
Bacteriostatic Saline	20 mL	Somewhat less effective than lidocaine
Bicarbonate Buffer	5 mL / 50 mL anesthetic	Less injection pain
Vasopressin (Vasostrict)	5-10 u / 50 mL anesthetic	Decreases bleeding and systemic absorption; can be expensive
Oral and IV Pain Medications		
Ibuprofen (Motrin; Advil)	600 – 800 mg PO	More effective at least 30 minutes before procedure
Naproxen (Naprosyn; Aleve)	220 – 500 mg PO	More effective at least 30 minutes before procedure
Hydrocodone/Acetaminophen (Norco) or Acetaminophen with Codeine (Tylenol w/ Codeine)	1-2 tablets of 5/325 mg or 300/30 mg PO	Equivalent medications can also be used
Lorazepam (Ativan)	0.5 – 1 mg SL or 1-2 mg PO	Shorter acting benzodiazepine. Antidote is flumazenil
Diazepam (Valium)	5-10 mg PO	Longer acting benzodiazepine. Antidote is flumazenil
Fentanyl (Sublimaze)	50 – 100 µg IV	Give over 30-60 seconds. Antidote is naloxone
Midazolam (Versed)	1 – 2 mg IV	Give over 2 minutes. Antidote is flumazenil
Uterotonics for Post-Aspiration Hemorrhage		
Methylergonovine (Methergine)	0.2 mg PO/IM or intracervical	Use with caution in hypertensive patients
Misoprostol (Cytotec)	800mcg SL or 800-1000mcg PR	Given a rapid time to peak concentration, SL or buccal may be preferable to PR if possible (Kerns 2013)
Carboprost (Hemabate)*	0.25 mg IM, may repeat at 15-90 minute intervals to max of 2mg	Use with caution in asthmatic patients * Not available for use outside inpatient medical facilities
Oxytocin (Pitocin)	10 u IM, or 10-40 u IV in crystalloid, or 10 u IVP	More uterine oxytocin receptors > 20 weeks
Emergency Medications		
Atropine Sulfate (Atropen)	0.2 mg (0.5 mL) IV push or 0.4 mg (1 mL) IM, each 3-5 min to max dose of 2 mg	For prolonged symptomatic bradycardia with vasovagal Some use in paracervical block to prevent vasovagal
Diphenhydramine (Benadryl)	25 – 50 mg IM/IV/PO	For allergic reaction Use PO for mild symptoms and IM/IV for anaphylaxis
Epinephrine 1:1000 (Adrenalin)	0.3 – 0.5 mg (1 mg/mL) SQ/IM Repeat doses at 5-15 min intervals as necessary	For anaphylaxis. Preferable to inject in mid- anterolateral thigh
Naloxone (Narcan)	0.1 mg – 0.2 mg (0.25-0.50 mL) IV / IM each 2-3 min Max dose 0.4 mg	Opiate antidote
Flumazenil (Romazicon)	0.2 mg (2 mL) IV each min Max dose of 1 mg	Benzodiazepine antidote

MANAGING EMERGENCIES

MAINTAIN CLIENT SAFETY • CALL FOR HELP • ASSESS CLIENT CONDITION					
Possible Signs and Symptoms					
<ul style="list-style-type: none"> Recent exposure Hives Coughing/sneezing Low pulse Flushed/agitated More severe: SOB 	<ul style="list-style-type: none"> High pulse Cool, clammy skin Low BP Perioral cyanosis Onset over minutes or hours Rare syncope 	<ul style="list-style-type: none"> Low pulse Low BP Pale, sweaty Cool, clammy skin Nausea, vomiting May lose consciousness Sudden onset 	<ul style="list-style-type: none"> Unresponsive No pulse Absent respirations 	<ul style="list-style-type: none"> Rhythmic limbs, jaw movements Pulse >60 Possible incontinence 	<ul style="list-style-type: none"> Anxious Rapid, shallow breathing Normal pulse Numbness Carpal-pedal spasm
↓	↓	↓	↓	↓	↓
ANAPHYLAXIS	HYPOVOLEMIC SHOCK	VASOVAGAL REACTION (Neurogenic Shock)	CARDIO-PULMONARY ARREST	SEIZURE	HYPERVENTILATION
<ul style="list-style-type: none"> Epinephrine 1:1000 0.2–0.5 SQ/IV in 10 mL NS, slow push Benadryl 50 mg IM Oxygen Call 911 	<ul style="list-style-type: none"> Call 911 Elevate legs Place large bore IV, infuse NS rapidly 	<ul style="list-style-type: none"> Keep supine Elevate legs Isometric muscle contractions Cool cloth/ice pack Ammonia capsule Oxygen 	<ul style="list-style-type: none"> Call 911 & for AED Start CPR (30:2) Attach AED; defibrillate if indicated 	<ul style="list-style-type: none"> Prevent injury Lateral position to protect airway Let seizure run its course Oxygen 	<ul style="list-style-type: none"> Reassure patient Slow-count breathing Place paper bag over mouth to re-breathe CO2
↓	↓	↓	↓	↓	↓
If low BP: <ul style="list-style-type: none"> Start IV LR or NS 	<ul style="list-style-type: none"> Evaluate source and manage (6Ts) Start 2nd IV line 	If persistent symptomatic bradycardia: <ul style="list-style-type: none"> Give Atropine 0.2 or 0.4mg IM / IV 	Every 2 minutes check pulse, rhythm, and switch compressors until EMS arrives	<ul style="list-style-type: none"> If continues >2min, call 911 Give Diazepam (Valium) 5 mg IV or Midazolam 	<ul style="list-style-type: none"> Assure patient is stable before leaving the clinic
		↓		↓	
		If no recovery, call 911		Repeat x1 in 5 min. if needed	

- Clinics should have written protocols for the management of medical emergencies, including bleeding, perforation, respiratory depression/arrest, anaphylaxis, and emergency transfer.
- Clinics should have hospital transfer agreements outlining the means of communication and transport and the protocol for emergent transfer of care. (NAF CPGs 2016)
- Emergency Scenarios are available for medical staff role-plays, debrief, and teaching at teachtraining.org/Resources.html.

EXERCISES: MEDICATIONS AND PAIN MANAGEMENT

EXERCISE 4.1

Purpose: To review management of side effects and complications from medications used to control pain and anxiety. How would you manage the following case scenarios of patients undergoing uterine aspiration?

1. A patient states that last year they had an allergic reaction to the local anesthetic that her dentist used.
2. A patient chooses to have IV pain management due to extreme anxiety. You administer midazolam 1 mg and fentanyl 100 mcg. As you dilate the cervix, the patient falls asleep and is not easily arousable. The oxygen saturation falls from 99% to 88%.
3. A patient who is 5 weeks by LMP has a history of alcohol and heroin abuse, and states that they “*shot up*” yesterday. The patient wants all the pain medication possible for the aspiration procedure. Venous access is limited, but you finally succeed in inserting an IV and administer midazolam 1 mg and fentanyl 100 mcg. You insert the speculum, and the patient complains “*I can feel everything*” and “*I need more meds*”.
 - a. How would you treat this pain? What do you need to take into consideration for patients with opioid tolerance?
 - b. How would this change if they patient were on buprenorphine (Suboxone)?

Teaching Points

EXERCISE 4.2

Purpose: To become familiar with other medications used with uterine aspiration.

Please answer the following questions.

1. In which of the following situations is administration of Rh-D immunoglobulin (Rhogam) suggested?
 - a. Patient has positive anti-D antibody titre.
 - b. Rh-negative patient received RhoGam 4 weeks ago during evaluation for threatened abortion.
 - c. Rh-negative patient 4 days post-abortion who did not receive RhoGam at the uterine aspiration visit.

2. While completing an early uterine aspiration procedure using local cervical anesthesia only, the patient complains of nausea and "*feeling faint*". The patient is pale and sweating. The blood pressure is 90/50 and a pulse of 48.
 - a. What is your differential diagnosis?
 - b. How might you prevent this reaction?
 - c. How would you manage this patient?

Teaching Points

5. UTERINE ASPIRATION PROCEDURE

This section contains information on first trimester uterine aspiration with manual and electric vacuum, used for both abortion and early pregnancy loss (EPL) management. You will have the opportunity to train in the use of vacuum equipment, steps in the uterine aspiration procedure, and tissue evaluation. Although most early uterine aspiration procedures are technically straightforward, some present challenges. Management of complex cases and complications will also be discussed.

CHAPTER LEARNING OBJECTIVES

Following chapter completion and hands-on experience, you should be able to:

- List the steps of the uterine aspiration procedure and tips for cervical dilation
- Correctly use equipment for manual and electric uterine aspiration
- Consistently use the 'no touch technique' while providing uterine aspiration, and describe its importance
- Evaluate products of conception for presence of appropriate gestational tissue
- Assess and manage challenges and complications related to uterine aspiration

READINGS / RESOURCES:

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (Wiley-Blackwell, 2009)
 - Chapter 10: First Trimester Aspiration Abortion
 - Chapter 13: The Challenging Abortion
 - Chapter 15: Surgical Complications: Prevention and Management
- Procedure simulation resources: Papaya Workshops
 - [TEACH, Innovating Education, RHAP](#)
- Managing complications
 - [TEACH Complication Simulations](#)
 - [MedEdPORTAL Simulation for Managing Hemorrhage](#)

SUMMARY POINTS

SKILL

- Performing uterine aspiration requires the development of hand-eye coordination and an awareness of internal uterine landmarks.
- Correctly assessing position and angle of the uterus and cervical canal will be critical to the safety of dilation. With experience, you will develop appreciation for the variability of cervical length and curvature, as well as the amount of pressure you need to exert.
- Become skilled at differentiating products of conception (POC; including gestational sac, membranes, villi, and fetal parts) from decidua (mucous membrane lining the uterus, which is modified during pregnancy and shed during menses or aspiration).

SAFETY

- The risk of abortion complications is minimal, with < 0.5% of patients experiencing a major complication requiring hospitalization ([Upadhyay 2015](#), [White 2015](#)).
- Abortion-related mortality in the U.S. is more than 14 times lower than continuing a pregnancy to delivery ([Zane 2015](#), [Raymond 2012](#)).
- If you are having trouble dilating the cervical canal, there are various strategies to try, but it is important to know when to stop. Rescheduling may improve success.
- Routine post-abortion tissue examination by a pathology lab confers no incremental clinical benefit, although it is required in some institutions ([Paul 2002](#)).
- Both sharp and excessive curettage increase procedure time, bleeding, pain, and scarring risk (Asherman's), and should be avoided ([Gilman 2014](#), [Tunçalp 2010](#)).
- Early abortion safety, efficacy and acceptability are found to be equivalent between physicians and well-trained advanced practice clinicians ([Bernard 2015](#), [Weitz 2013](#)). The similarity of safety and efficacy is true for both experienced and newly trained providers ([Jejeebhoy 2011](#), [Warriner 2006](#)).

ROLE



- Considering risk factors for a challenging procedure ahead of time allows providers to customize care and minimize complications.
- It is optimal to work in concert with an assistant who can provide support for both you and the patient during uterine aspiration. Your leadership and "normalization" of the experience will ensure a respectful, supportive environment for all.

NO-TOUCH TECHNIQUE

Preventing infection after uterine aspiration is an important goal. Measures to accomplish this include properly sterilizing instruments, administering prophylactic antibiotics as indicated, minimizing bacterial entry into the sterile uterine cavity, and meticulously using the “no touch” technique to assure that the portions of instruments entering the uterine cavity remain sterile (Paul 2009). The provider:

- Maintains sterility of the surgical tray: non-sterile instruments should be separately available, and contaminated instruments should be placed separately on tray.
- Avoids contamination by gathering needed materials before placing speculum.
- Holds only the center of dilators, not the tips that will enter the uterus.
- Attaches the sterile cannula to the vacuum source without touching the cannula tip.
- Avoids vaginal contamination of uterine instruments.
- Change instruments that will enter the uterus if inadvertently contaminated.

Even with antiseptic cleansing, it is impossible to “sterilize” the vagina. In fact, randomized studies showed that preoperative antiseptic vaginal cleansing had no effect on post-abortual infection rates (Varli 2005, Lundh 1983). Even using sterile gloves, sterility is compromised when touching the client’s perineum and vagina to insert the speculum. Some providers routinely use non-sterile gloves for uterine aspiration, which is acceptable if the no-touch technique is scrupulously maintained

	<p>Typical tray set-up Instruments shown: Sterile on left, non-sterile on right (except needle)</p> <ul style="list-style-type: none"> • Appropriate sizes of dilators • Cannula (in package vs. on sterile field) • Ring forceps with cotton • Tenaculum • Speculum • Gauze • Anesthetic syringe (not sterile) • MVA Plus (not sterile)
	<p>Manual Vacuum Aspirator Plus®</p> <ul style="list-style-type: none"> • Cap • Cap release tabs • Valve buttons • Clasp • Plunger O-ring • Collar stop Retaining Clip • Collar stop • Cylinder base • Plunger arms • Plunger handle

QUICK GUIDE TO COMMUNICATION DURING THE PROCEDURE

The use of gentle, neutral language and avoidance of words associated with pain has been shown in some but not all studies to decrease pain perception during procedures such as administration of local anesthesia (Dalton 2014, Ott 2012, Varelmann 2010). This has not specifically been studied in uterine aspiration. Many providers prefer to use language describing what they are doing next rather than what the patient may feel. Others describe symptoms the patient may experience but choose their words carefully, with particular attention to avoiding descriptions of pain or sexual references. For example, “You may feel a cramp,” as opposed to “You are going to feel a poke/prick/stick”. Below are some tips for language during the procedure (see Chapter 2 for additional suggestions).

Approach to Communication	Instead of
Introduction sitting at patient’s level	Introduction looking down at patient
<i>Your pregnancy is 8 weeks along.</i>	<i>Your baby is 8 weeks old.</i>
<i>Place your feet in the foot holders.</i>	<i>Place your feet in the stirrups.</i>
<i>There is room for you to move down further on the exam table.</i>	<i>Move your bottom down the bed until you feel like you’re going to fall off.</i>
<i>Allow your knees to fall to the sides.</i>	<i>Open or spread your legs.</i>
<i>Your cervix looks healthy and normal.</i>	<i>Your cervix / uterus looks/feels good.</i>
<i>You may feel some cool wet cotton to swab away your natural cervical mucous.</i>	<i>I am cleaning your cervix (implying the cervix is dirty).</i>
<i>If...then statements such as If you want the procedure to go as quickly as possible, then hold as still as you can.</i>	<i>You have to hold still.</i>
<i>This is the numbing medicine. You may feel a cramp, or spreading numbness.</i>	<i>You are going to feel a poke/prick/stick with the injection.</i>
<i>We’re over halfway through; doing great.</i>	<i>It will be a few more minutes.</i>
<i>I will place / introduce the IUD or implant.</i>	<i>I will insert the IUD or implant.</i>

STEPS FOR VACUUM ASPIRATION

1. Review patient history and confirm gestational age and all completed consents before entering exam room.
2. Introduce yourself and ask the patient's name to confirm identity.
3. Establish rapport, elicit and answer patient's questions:
 - a. *"What questions do you have for me?"*
 - b. Provide reassurance and explain process to the extent that the patient desires.
4. Give IV medications if using.
5. Assess patient's pain level throughout procedure.
6. Don gloves and protective eyewear; perform bimanual to confirm uterine position and size.
7. Prepare equipment tray and all procedure items (cannula, block, etc.); adjust table and light.
8. Insert the speculum, evaluate, and collect samples as needed for infection screening / testing.
9. Apply antiseptic solution to cervix, as needed.
10. Administer paracervical block.
11. Place tenaculum with substantial cervical purchase; close slowly. Exert gradual traction to straighten the canal.
12. Dilate cervix to the size of cannula you will be using [gestational age in weeks (+/- 1-2 mm)]
 - a. Gently and gradually explore canal, holding the dilator loosely and allowing it to rotate within the canal; the canal should have a smooth, mucosal feel.
 - b. Although it may be snug; the internal os will oft "give way" to gentle, steady pressure.
 - c. If unable to pass through the internal os, try the following:
 - Gently apply traction on the tenaculum with slightly greater force to straighten the canal.
 - Change angle of dilator.
 - Try flexible plastic sound or os finder.
 - Change the tenaculum location (to posterior lip for a retroflexed uterus).
 - If acutely flexed cervix, try widening the speculum blades.
 - Use transabdominal US guidance.
 - Repeat pelvic exam.
 - Consider shorter, wide speculum.
 - Provide misoprostol (sublingual/vaginal); reattempt dilation in 1.5 – 3 hrs.
13. Insert the cannula through the cervix while exerting gentle but firm traction with the tenaculum, and advance the cannula to the fundus. Connect the aspirator to the cannula.
14. Use manual or electric vacuum to empty the uterus until signs that it is empty (detail below).
15. After confirming products of conception (POC) are complete, place IUD or implant if requested.
16. Remove tenaculum, assure minimal bleeding, and remove speculum.
17. Check for adequacy of POC, if not already done.
18. Inform patient of complete procedure and recovery process.

USING MVA AND EVA EQUIPMENT



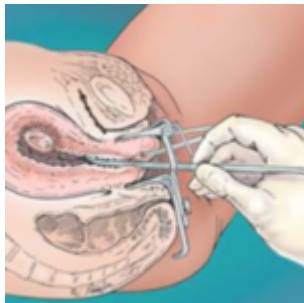
Prepare the aspirator

- Begin with valve buttons open and plunger pushed fully into the barrel.
- Close valve by pushing the buttons down and forward until locked in place.



Create the vacuum

- Pull the plunger back until its arms snap outward over the rim at end of the barrel.
- Make sure the plunger arms are positioned over wide edges of the barrel rim.



Gently dilate the cervix

- Use dilators of increasing size to accommodate cannula size chosen based on gestational weeks.
- Dilator:
 - Denniston – dilate to cannula size (e.g. size 7 for 7 mm cannula)
 - Pratt – dilate to cannula size x 3 (e.g. 21 French for 7mm cannula)



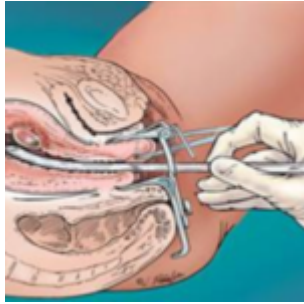
Choose a cannula

- Flexible: longer with two openings at tip
- Rigid: larger single opening at tip
- No significant difference in safety or efficacy (Kulier 2001)
- Larger: faster aspiration, intact tissue
- Smaller: less dilation and resistance

NAF Provider's survey (O'Connell 2009):

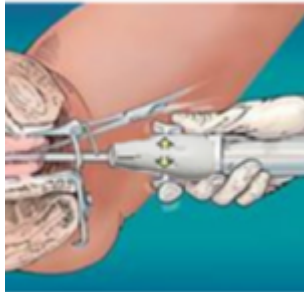
- 54% used size (in mm) = weeks gestation
- 37% used 1-2 mm < weeks gestation
- 9% used 1-3 mm > weeks gestatio

USING MVA AND EVA EQUIPMENT



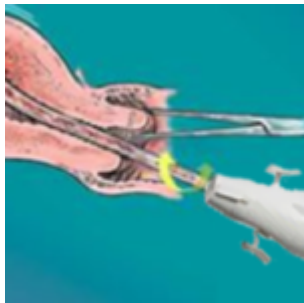
Insert the cannula

- Apply traction to tenaculum to straighten uterus. Then holding cannula with fingertips, gently insert through cervix with rotating motion.
- Attach aspirator to cannula.
- Do not grasp aspirator by plunger arms.



Release the valve buttons

- When the pinch valve is released, the vacuum is transferred through the cannula into the uterus.
- Blood, tissue, and bubbles will flow through the cannula into the aspirator



Evacuate the uterus

- Rotate the cannula and move it gently from fundus to the internal os, applying a back and forth motion as clinically indicated until:
 - Grittiness is felt through cannula
 - Uterus contracts and grips cannula
 - There is increased cramping, and / or
 - No more blood passes through cannula



Choice of Vacuum for Aspiration

- Availability / preference determine use
- MVA is FDA approved to 12 weeks
- Some use > 1 MVA to facilitate emptying, or switch to EVA > 9 weeks
- Minimal differences in pain, anxiety, bleeding, or acceptability (Dean 2003)
- EVA sound disturbs some patients; silent, in-wall suction is available.

EVA use:

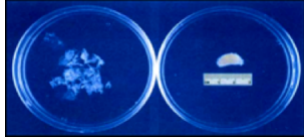
- Attach cannula and close thumb valve
- Place cannula into uterus
- Turn on and check suction gauge
- To modify: turn dial or adjust valve
- Release suction (open thumb valve) when passing through cervical canal.



Inspect the tissue

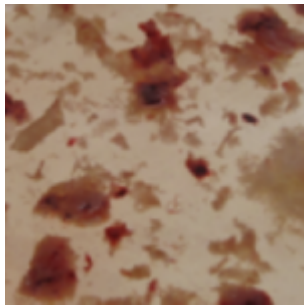
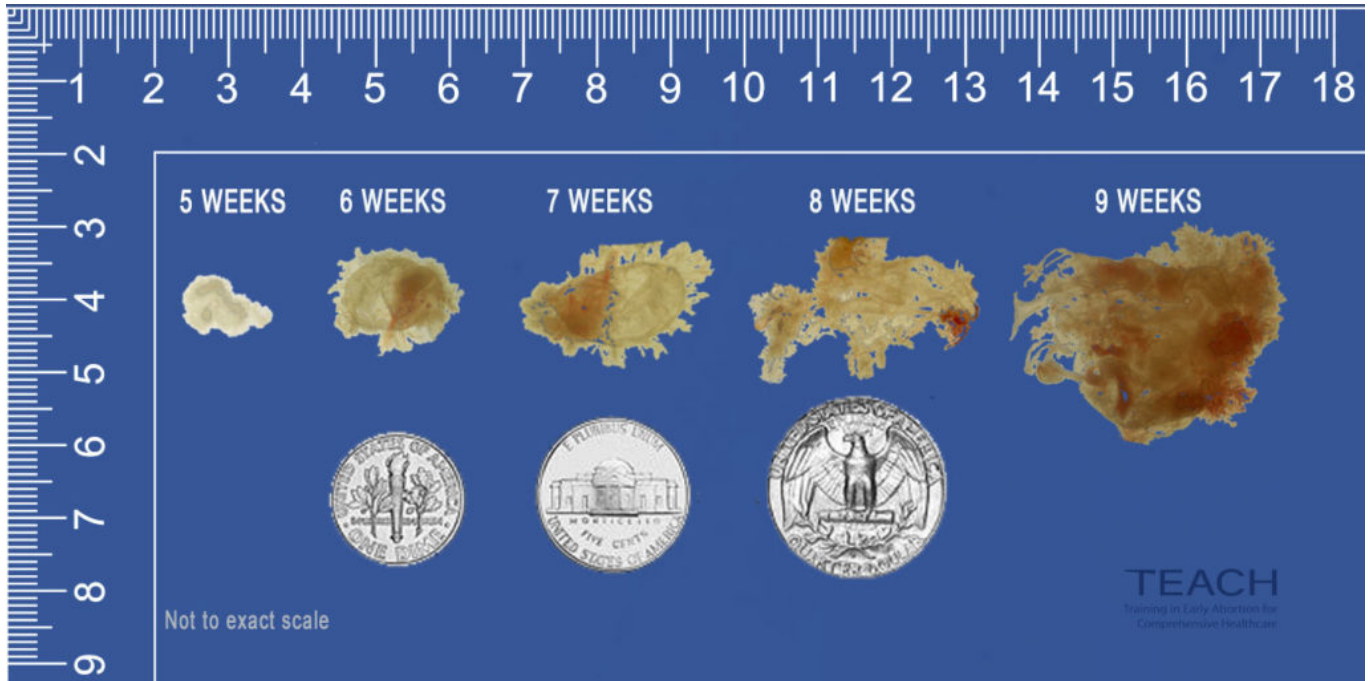
- Rinse and strain the tissue
- Place tissue in a clear container
- Backlight is recommended to inspect tissue if gross visual inspection is non-diagnostic.

USING MVA AND EVA EQUIPMENT



Gestational sac at 6 weeks

- Shredded (on left) vs. intact
- To minimize shredding, consider using MVA (< pressure than EVA); slightly larger cannula.

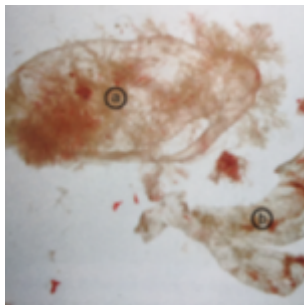


Membranes and Villi (POC)

Frond-like villi
Clumps held by membrane
Transparent like plastic wrap
Luminescent; light refractory
Turns white if vinegar added
More stretchy
Floats more in liquid media
Size: see coin sizes above

Decidua (not POC)

No fronds
No villi or thin membrane
Opaque like wax paper
Less light refractory
Minimal color change
More breakable
Sinks more in liquid media
Quantity variable



Decidua capsularis

Caution not to confuse
a) gestational sac (8 week) with
b) decidua capsularis, a portion of the decidua which grows proportionally to gestational sac but is thicker and tougher (Image: Edwards, J).

Fetal part development

Parts may be seen earlier.
≥ 10W look for 4 extremities, spine, calvarium and gestational sac. ≥12W must find all fetal parts + placenta

Adapted from Manual Vacuum Aspiration, a presentation by Physicians and ARHP, 2000; 2012.

MANAGING COMPLICATIONS

Immediate Complications	Clinical Presentation	Management Options	Occurrence Rate*
Vasovagal Episode	<p>Presentation may include:</p> <ul style="list-style-type: none"> Pale, clammy, dizzy, nauseated or with emesis Pulse < 60 Rare syncope During or after procedure Usually resolves quickly and spontaneously <p>Etiology:</p> <ul style="list-style-type: none"> Parasympathetic nerve stimulation and painful stimuli 	<p>Pause procedure:</p> <ul style="list-style-type: none"> Apply cool compresses Trendelenburg position or elevate the legs above the chest Sniffing ammonium may help Isometric extremity contractions <p>For persistent symptomatic bradycardia:</p> <ul style="list-style-type: none"> Atropine 0.2 mg IV or 0.4 mg IM, May repeat in 3-5 minutes (max dose of 2 mg) 	
Excessive Bleeding / Hemorrhage	<p>EBL > 150 cc = excessive to 10 wks EBL ≥ 500 cc = hemorrhage</p> <p>Remember 4T's of etiology: (ALSO 2014)</p> <ol style="list-style-type: none"> Tissue (not completely evacuated) Tone (inadequate uterine tone) Trauma (perforation or cervical lac) Thrombin (rare underlying bleeding disorder) <p>Hemorrhage risk groups: (Kerns 2013)</p> <ol style="list-style-type: none"> Low risk: no prior c/s, Moderate risk: ≥ 2 c/s, prior c/s and previa, bleeding disorder, history of obstetric hemorrhage not needing transfusion, increasing maternal age, GA>20 weeks, fibroids, obesity High risk: accreta/concern for accreta, history of obstetric hemorrhage needing transfusion, +/- others from moderate category 	<p>6T's (Goodman 2015)</p> <p>Tissue: Assure uterus is empty</p> <ul style="list-style-type: none"> Estimate EBL Reaspire (with US guidance; EVA for rapid evacuation); check POC <p>Tone: Uterotonics</p> <ul style="list-style-type: none"> Uterine massage Medications: Methergine 0.2 mg IM/IC, Misoprostol 800 mcg SL/BU/PR, or Vasopressin 4-8 units (diluted in 5-10 cc NS) IC <p>Trauma: Assess source</p> <ul style="list-style-type: none"> Cannula test** Clamp bleeding site at cervix with ring forceps <p>Thrombin</p> <ul style="list-style-type: none"> Review bleeding history Additional tests as indicated (coags, repeat CBC, clot test***) <p>Treatment</p> <ul style="list-style-type: none"> IV fluid bolus For uterine / cervical injury, inflate Foley catheter to tamponade <p>Transfer</p> <ul style="list-style-type: none"> Vitals every 5 minutes Initiate transfer 	<p>0.07 – 0.4 %</p> <p>Upadhyay 2015 Kerns 2013 Weitz 2013 Yonke 2013 Jejeebhoy 2011 Bennett 2009 Goldberg 2004 Goldman 2004 Hakim-Elahi 1990</p>
Perforation	<p>Instruments pass deeper than expected by EGA and pelvic exam Patient may feel sudden sharp pain; may be painless Risk factors:</p> <ul style="list-style-type: none"> Inadequate dilation Increased gestational age Uterine flexion Previous cesarean section Operator inexperience Uterine anomaly 	<p>Stop procedure:</p> <ul style="list-style-type: none"> Turn off suction Assess patient: VS, pain, bleeding, abdominal exam Check contents of aspirate for omentum or bowel, and for POC <p>If stable:</p> <ul style="list-style-type: none"> Evaluate with US Experienced providers have safely explored uterus and completed procedure under US guidance Observe for 1.5-2 hours Consider uterotonics to contract uterus and control bleeding Consider antibiotics <p>If unstable or perf with suction, transfer</p>	<p>0.02 – 0.07%</p> <p>Upadhyay 2015 Weitz 2013 Yonke 2013 Jejeebhoy 2011 Goldberg 2004 Goldman 2004 Westfall 1998 Hakim-Elahi 1990</p>

Delayed Complications	Clinical Presentation	Management Options	Occurrence Rate*
Incomplete Abortion (Residual nonviable fetal tissue)	At time of aspiration: <ul style="list-style-type: none"> Inadequate POC or Days to weeks after: <ul style="list-style-type: none"> Pelvic pain Abnormal bleeding Pregnancy symptoms Enlarged or boggy uterus US shows persistent IUP or debris [latter is non-specific; may be normal (Russo 2012; Paul 2009, pg. 228)]	Follow serial hCGs if any doubt that aspiration was complete Offer misoprostol or reaspiration to empty uterus Reaspiration preferred if: <ul style="list-style-type: none"> Signs of infection Hemorrhage Severe pain Significant anemia	0.2 – 4.4% Upadhyay 2015 Weitz 2013 Yonke 2013 Jejeebhoy 2011 Bennett 2009 Warriner 2006 Goldberg 2004 Goldman 2004 MacIsaac 2000 Westfall 1998
Continuing Pregnancy	Presentation: <ul style="list-style-type: none"> Ongoing pregnancy symptoms Enlarging uterus Risk factors: <ul style="list-style-type: none"> Early gestational age Uterine anomalies/fibroids Missed multiple gestation Operator inexperience	If inadequate POCs suspected at time of procedure, consider: <ul style="list-style-type: none"> US Serial hCGs Ectopic precautions as needed Counsel patient; reaspirate as appropriate	0.4 – 2.3% Upadhyay 2015 Kerns 2013 Weitz 2013 Yonke 2013 Bennett 2009 Goldman 2004 MacIsaac 2000 Westfall 1998
Hematometra (Accumulation of blood in uterus following procedure)	Immediate: <ul style="list-style-type: none"> Minutes to hours post-ab Severe lower abdominal or pelvic pain Rectal pressure Minimal to no post-procedural bleeding +/- hypotension, vasovagal US: large amount uterine clot Uterine exam: enlarged, firm Delayed: <ul style="list-style-type: none"> Days to weeks post-ab Pelvic pressure or cramping +/- low grade fever 	Prompt uterine aspiration of blood offers immediate relief Uterotonic medications post aspiration: <ul style="list-style-type: none"> Methergine 0.2 mg IM / IC Misoprostol 800 mcg PR or buccal 	0.1 – 2.2 % Weitz 2013 Yonke 2013 Bennett 2009 Goldberg 2004 Goldman 2004
Postabortal endometritis (Pelvic inflammatory disease)	Presentation: <ul style="list-style-type: none"> Lower abdominal / pelvic pain Fever, malaise Tenderness Purulent discharge Elevated WBC 	Diagnose: <ul style="list-style-type: none"> US for retained POC / clot May need reaspiration Wet mount Test for GC/CT Treat: <ul style="list-style-type: none"> Antibiotics (CDC PID regimen) 	0.09-2.6% Upadhyay 2015 Weitz 2013 Yonke 2013 Bennett 2009 Goldberg 2004 Goldman 2004 Paul 2002 Westfall 1998
Missed Ectopic Pregnancy	Suspect if inadequate POC at time of aspiration Possible late signs/symptoms: <ul style="list-style-type: none"> Pelvic pain or shoulder pain Syncope or shock 	Transport immediately to hospital if: <ul style="list-style-type: none"> Ectopic is suspected; for dx / tx Concern for rupture Clinically unstable Methotrexate vs. surgical management	0.0 – 0.3% (Scant data) Bennett 2009

*Summary occurrence rates from Taylor, 2010: Standardizing early aspiration abortion complication definitions and tracking.

** Cannula test: Watch blood return as you slowly withdraw cannula from fundus to cervix, to identify bleeding zone.

***Cost test: fill plain glass tube with whole blood; leave for 10 minutes. Complete clotting at 10 minutes rules out DIC at that time

EXERCISES: ASPIRATION ABORTION PROCEDURE

EXERCISE 5.1

Purpose: To practice management of challenging situations that can arise at the time of aspiration abortion procedures.

1. You are performing an abortion for an anxious 20-year-old G1P0 patient at six weeks gestation. You complete the cervical block and have the tenaculum in place. As you attempt to introduce the smallest dilator, you are unable to advance the dilator through the internal os. After readjusting the speculum and the tenaculum, you again find that there is severe resistance as you attempt to advance the dilator into the cervical canal; it feels dry, gritty, and tight, and does not have the “normal” feel of the dilator tip advancing through the cervical canal.
 - a. What is the differential diagnosis?
 - b. What would you do next?
2. You have just completed an aspiration abortion for a 19-year-old patient at six weeks gestation. They had reported intermittent episodes of vaginal bleeding on three occasions during the past week, but did not have any severe cramping or clotting. Their pre-procedure ultrasound was performed one week ago, with a 5 mm gestational sac identified, but no yolk sac or embryonic pole. Their pregnancy test was positive. Dilation was not difficult and you were able to use a 6 mm flexible cannula. The tissue specimen is very scant and you are not certain whether you see sac or villi.
 - a. What is the differential diagnosis?
 - b. What would you do next?
3. You are performing an abortion on a nulliparous 16-year-old patient at seven weeks gestation. You notice that their cervix is very small and it is hard to choose a site for the tenaculum. As you put traction on the tenaculum and try to insert the dilator, the tenaculum pulls off, tearing the cervix. There is minimal bleeding, so you reapply the tenaculum at a slightly different site, although it is difficult because the cervix is so small. This time, the cervix tears after inserting the third dilator, and there is substantial bleeding.
 - a. What should you do now?
4. You are inserting the cannula for a procedure on a patient at 9 weeks gestation with a retroflexed uterus. Although the dilation was easy, you feel the cannula slide in easily but at a different angle and much further than you sounded with one of the dilators. You don’t feel any “stopping point.” The patient feels something sharp.
 - a. What is the differential diagnosis?
 - b. What should you do now?
 - c. How might you have anticipated and prevented this problem?

5. A G3P2 patient at 8w5d presents for termination, with a history of one previous cesarean and a post-partum hemorrhage not requiring transfusion. The aspirator quickly fills with blood when suction applied. You empty it, recharge, and it again fills with blood. You have seen some tissue come through. You ask your assistant to prepare another MVA but it promptly fills with blood when attached to the cannula. Given the patient's risk factors, what additional preparations would you consider beyond normal precautions? (Review in [Managing Immediate Complications Table](#)).
- What do you suspect?
 - What can you do now?

Teaching Points

EXERCISE 5.2

Purpose: To practice managing challenges that may occur after uterine aspiration.

- The nurse consults with you about a possible problem phone call regarding a patient who had an abortion at the clinic five days ago. The patient complains of severe cramping and rectal pressure, has had minimal bleeding, and has a mild fever.
 - What is the differential diagnosis?
 - Which exam and ultrasound findings would support your diagnosis?
 - What are your management recommendations?
 - If these symptoms developed immediately after an abortion, what would you do?
- A 21-year-old patient comes to your office for follow-up after an 8-week abortion two weeks ago at another facility, and still has some symptoms of pregnancy including breast tenderness and abdominal bloating. Medications include birth control pills. The patient has had intercourse regularly for the past six days. The patient is afebrile, with normal vital signs. Pelvic exam is normal except for an 8-week size uterus. A high sensitivity urine pregnancy test is positive.
 - What is the differential diagnosis?
 - How can you rule in or out any of your diagnoses?
 - How might your approach differ if the ultrasound showed moderate amount of heterogeneous contents?
 - If the patient is not pregnant, how can you explain their positive urine pregnancy test and breast tenderness?

Teaching Points

6. CONTRACEPTION AND AFTERCARE

This chapter will help you to provide comprehensive contraceptive care to your patients, and routine aftercare following uterine aspiration for abortion or early pregnancy loss.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be able to:

- Facilitate informed, patient-centered choice in contraceptive care by establishing rapport, eliciting your patient's preferences, and engaging them in a patient-centered decision making process focused on their preferences
- Describe options, indications, contraindications, side effects and common myths to specific contraceptive methods
- Provide post-procedure counseling, including instructions about home care, warning signs for complications, and emergency contact information
- Appropriately prescribe post-procedure medications

READINGS / RESOURCES

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (2009)
 - Chapter 14: Contraception and surgical abortion aftercare
- Useful materials for providers and patients:
 - U.S. Medical Eligibility Criteria ([US MEC](#)) for Contraceptive Use
 - U.S. Selective Practice Recommendations ([US SPR](#)) for Contraceptive Use
 - Bedsider: <http://bedsider.org>, <http://providers.bedsider.org>
 - Beyond the Pill: <http://beyondthepill.ucsf.edu>
 - Reproductive Health Access Project: www.reproductiveaccess.org
 - For international use: [World Health Organization Medical Eligibility Criteria](#)
- Related Chapter Content :
 - Chapter 5: [Post-procedure complications](#)
 - Chapter 7: [Medication abortion follow-up visit](#)
 - Chapter 8: [Early pregnancy loss follow-up visit](#)

SUMMARY POINTS

SKILL

- Facilitate informed, patient-centered choice in contraceptive care by establishing rapport, eliciting your patient's preferences and values, and involving them in decision support.
- Provide patients with instructions for home care, medications, contraception, warning signs, and emergency contact information help minimize patient stress, phone calls, and need for a follow-up appointment following routine aspiration.

SAFETY

- Utilize the Medical Eligibility Criteria for Contraceptive Use ([USMEC](#) or [WHO MEC](#) for international learners) to determine contraceptive safety for patients with certain medical conditions or characteristics (such as post partum).
- Understand the risks and side effects associated with both contraception and pregnancy to accurately inform patients.

ROLE

- Empower each patient to find the contraceptive method that works best for them, considering the aspects of contraception that are important to them (i.e. regular bleeding pattern, privacy, or very effective against pregnancy, etc).
- Ensure that you offer or refer for highly effective methods as part of routine contraceptive care for all interested and appropriate candidates, including nulliparous patients and adolescents.
- Offer contraception in anticipation or on the day of uterine aspiration, although respect if patients prefer to wait.
- Consider offering all patients, regardless of contraceptive choice, condoms to reduce STI risk and emergency contraception.

CONTRACEPTIVE COUNSELING

Shared Decision Making (SDM) for Improved Contraceptive Counseling

Contraceptive services have gained national attention as part of the core of preventative services that should be available to all patients as part of health care reform. Most patients spend just a few years trying to get pregnant but over 20 years trying to prevent pregnancy. Patients at risk for pregnancy should be screened for their pregnancy intentions as a routine part of high-quality primary care, and offered contraceptive care or preconception counseling as needed ([Bellanca 2013](#)).

Contraceptive counseling has great potential as a strategy to empower patients who do not desire pregnancy to choose a method they can use correctly and consistently over time. The quality of interpersonal care, measured using both patient report and observation of provider behaviors, influences contraceptive use ([Dehlendorf 2016](#)). Patients who are more satisfied with their family planning experiences are more likely to use contraception. Given a history of reproductive coercion among marginalized populations and implicit biases toward long-acting methods among lower income patients, we encourage patient-centered decision-making that is focused on patient's preferences ([Dehlendorf 2016, 2014](#)). Below is a simple approach to contraceptive counseling adapted from this model. * Starred items below are explicitly linked to improved contraceptive use, continuation, and adherence.

1. Establish rapport, accessibility, and trust *
2. Elicit and clarify a patient's priorities, preferences, and personal situation *
3. Provide evidence-based information including method safety, side effects, and bleeding changes for contraceptive methods that best align with patients' preferences
4. Encourage and enable the patient to ask questions
5. Facilitate the selection of a contraceptive choice that reflects and satisfies patient preferences.

Additional Best Practices in Contraceptive Counseling

([Dehlendorf 2014](#), [CDC QFP 2014](#), [Jaccard 2013](#))

- Use active learning strategies (such as open-ended questions and teach backs)
- Simplify the choice process, using visual aids (see example below)
- If the patient has a strong interest in one method, ask permission to provide information on others
- Consider methods in order of patient priorities (e.g. effectiveness, bleeding changes, frequency, privacy, or modality of administration)
- Anticipate and address barriers to accurate and consistent use for their chosen method
- Address (mis)perceptions of low personal risk of pregnancy
- Address method switching and form a contingency plan in case of dissatisfaction
- Address quick start options where appropriate (see easy-to-follow [Algorithm](#))
- Address dual use issues and negotiation of condom use to prevent STIs / HIV
- Ensure advance provision of emergency contraception if at risk for pregnancy
- Consider screening for reproductive coercion and offer harm reduction strategies
- Foster awareness of one's own biases and work to consciously overcome them.

HOW WELL DOES BIRTH CONTROL WORK?

Effectiveness	Method	Duration	Notes
Really, really well ★★★★★	The Implant (Nexplanon)	3 years	Works, hassle-free, for up to...
	IUD (Skyla)	3 years	
	IUD (Mirena)	5 years	
	IUD (ParaGard)	12 years	No hormones
	Sterilization, for men and women	Forever	
Okay ★★★☆☆	The Pill	Every. Single. Day.	
	The Patch	Every week	
	The Ring	Every month	
	The Shot (Depo-Provera)	Every 3 months	
	Not so well ★☆☆☆☆	Withdrawal	
Diaphragm			
Fertility Awareness			
Condoms, for men and women			
			Needed for STI protection Use with any other method

What is your chance of getting pregnant?

- Less than 1 in 100 women
- 6-9 in 100 women, depending on method
- 12-24 in 100 women, depending on method
- FYI, without birth control, over 90 in 100 young women get pregnant in a year.

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Visual aids to assist with contraceptive counseling and emergency contraception below; from bedsider.org. Another decision tool based on patient priorities is available [here](#) (Cardea 2016)

OOPS! EMERGENCY CONTRACEPTION: BIRTH CONTROL THAT WORKS AFTER SEX









Types of emergency contraception	How well does it work?	How soon do I have to use it?	How do I use it?	Where can I get it?
ParaGard IUD	Almost 100% effective 1st	Within 5 days	It's placed in the uterus by a doctor or nurse Keeps working as super effective birth control.	From a doctor, nurse, or at a clinic Say it's for EC so you are scheduled quickly.
Ella	Less effective if over 195 pounds. Try an IUD. 2nd	ASAP Works better the sooner you take it, up to 5 days.	Take the pill as soon as you get it Remember to use it every time you have unprotected sex.	From a doctor, nurse, or at a clinic Get an extra pack for future emergencies.
Plan B One-Step or a generic	Less effective if over 165 pounds. Try ella or an IUD. 3rd	ASAP Works better the sooner you take it, up to 3 days.	Take the pill as soon as you get it Remember to use it every time you have unprotected sex.	At a pharmacy, no prescription needed Get an extra pack for future emergencies.

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For more information, check out not-2-late.org

Your Birth Control Choices

Method	How well does it work?	How to Use	Pros	Cons
The Implant (Nexplanon™) 	> 99%	A health care provider places it under the skin of the upper arm It must be removed by a health care provider	Long lasting (up to 3 years) No pill to take daily Often decreases cramps Can be used while breastfeeding You can become pregnant right after it is removed	Can cause irregular bleeding After 1 year, you may have no period at all Does not protect against human immunodeficiency virus (HIV) or other sexually transmitted infections (STIs)
Progestin IUD (Liletta®, Mirena®, Skyla®) 	> 99%	Must be placed in uterus by a health care provider Usually removed by a health care provider	Mirena® may be left in place up to 7 years Skyla® and Liletta® may be left in place up to 3 years No pill to take daily May improve period cramps and bleeding Can be used while breastfeeding You can become pregnant right after it is removed	May cause lighter periods, spotting, or no period at all Rarely, uterus is injured during placement Does not protect against HIV or other STIs
Copper IUD (ParaGard®) 	> 99%	Must be placed in uterus by a health care provider Usually removed by a health care provider	May be left in place for up to 12 years No pill to take daily Can be used while breastfeeding You can become pregnant right after it is removed	May cause more cramps and heavier periods May cause spotting between periods Rarely, uterus is injured during placement Does not protect against HIV or other STIs
The Shot Depo-Provera® 	94-99%	Get shot every 3 months	Each shot works for 12 weeks Private Usually decreases periods Helps prevent cancer of the uterus No pill to take daily Can be used while breastfeeding	May cause spotting, no period, weight gain, depression, hair or skin changes, change in sex drive May cause delay in getting pregnant after you stop the shots Side effects may last up to 6 months after you stop the shots Does not protect against HIV or other STIs
The Pill 	91-99%	Must take the pill daily	Can make periods more regular and less painful Can improve PMS symptoms Can improve acne Helps prevent cancer of the ovaries You can become pregnant right after stopping the pills	May cause nausea, weight gain, headaches, change in sex drive – some of these can be relieved by changing to a new brand May cause spotting the first 1-2 months Does not protect against HIV or other STIs
Progestin-Only Pills 	91-99%	Must take the pill daily	Can be used while breastfeeding You can become pregnant right after stopping the pills	Often causes spotting, which may last for many months May cause depression, hair or skin changes, change in sex drive Does not protect against HIV or other STIs
The Patch Ortho Evra® 	91-99%	Apply a new patch once a week for three weeks No patch in week 4	Can make periods more regular and less painful No pill to take daily You can become pregnant right after stopping patch	Can irritate skin under the patch May cause spotting the first 1-2 months Does not protect against HIV or other STIs
The Ring NuvaRing® 	91-99%	Insert a small ring into the vagina Change ring each month	One size fits all Private Does not require spermicide Can make periods more regular and less painful No pill to take daily You can become pregnant right after stopping the ring	Can increase vaginal discharge May cause spotting the first 1-2 months of use Does not protect against HIV or other STIs

EVIDENCE-BASED CONTRACEPTIVE GUIDANCE

The rapidly growing body of evidence surrounding contraception is tremendously helpful to our patients. This overview is meant to provide brief updated information, links to more in depth resources and videos, and a jumping off point for further literature review.

Simplified Screening (Class A Evidence; [CDC SPR 2013](#))

Most methods can be safely initiated with few additional requirements, including:

- Medical history for contraindications ([CDC \[MEC\]](#))
- Required exam components for specific methods:
 - Blood pressure: combined hormonal methods
 - Weight / BMI: levonorgestrel > ulipristal (UPA) emergency contraceptive pills
 - Pelvic exam: IUD and cervical cap
 - STI screening (on day of insertion): IUD (**only** if not already screened according to CDC Guidelines; [Suftrin 2015](#))
- Not required:
 - Heart, lung, breast or well-person exam
 - Pap test, hemoglobin or “routine” lab tests
 - Weight / BMI: DMPA, CHCs – may help monitor / counsel re: weight changes perceived to be associated with method over time)

Quick Start ([CDC QFP 2014](#))

- Evidence supports method initiation on the day of the patient's visit or if unable, providing a bridge method, to reduce the chance of an unintended pregnancy.
- Two visit protocols hinder patient's ability to get a LARC ([ACOG 2015](#))
- [Quick Start Algorithm](#) available and easy -to-follow
- Post uterine aspiration, all methods can be started on day of procedure
- Post medication abortion or miscarriage:
 - Implant can be placed on day of mifepristone or follow-up ([Sonalkar 2015](#))
 - Pills, patch, and ring can be started after bleeding from misoprostol
 - DMPA and IUD can be given at follow-up visit (preferably within 5 days)
- Dispensing 12 months of a method, such as contraceptive pills is safe, effective, and improves continuation ([Foster, 2006](#)). Rx: “method name x 365 days”, not 12 months.

Primer on long acting reversible contraceptives (LARCs)

- IUD and implant are safe, highly effective, and private, have high continuation rates, and are appropriate for most patients, including those contraindicated for estrogen.
- Over 20-fold more effective than short acting methods, regardless of age ([Winner 2012](#))
- 3 year continuation ~ 70% among LARC users vs. ~ 30% among non-LARC users ([Diedrich 2015](#)), regardless of age ([Rosenstock 2012](#))
- Population-level increased LARC use a reduced teen birth & abortion ([Peipert 2012](#))
- Postpartum LARC linked to healthy birth spacing, 2 – 4 times other methods ([Thiel 2013](#))
- Removal should be assured when a patient desires.

LARC types in the U.S. (click type for insertion video / information)

- Copper IUD: [ParaGard](#) (also most effective EC; non-hormonal)
- Progestin IUDs: [Mirena](#), [Liletta](#), [Skyla](#) (progestin-only)
- Implant: [Nexplanon](#) (progestin-only)

Evidence-based IUD eligibility (MEC)

- No restrictions for nulliparous or age < 25 years old (MEC 2)
- No association of IUD with increased risk of infertility ([Hubacher 2001](#))
- No restriction for past history of PID, STI, ectopic pregnancy, non-monogamy
- No restriction for abnormal Pap, only cervical cancer
- No restriction for patients with HIV or AIDS (stable on ARVs)— (MEC 2)
- LNG-IUS can be used to treat menorrhagia and dysmenorrhea
- Contraindications: pregnancy, active cervicitis, active PID, uterine cavity distortion.

IUD Insertion Tips

- Insert at any time in cycle as long as reasonably sure the patient is not pregnant ([U.S. SPR 2013](#))
- Routine antibiotic prophylaxis is not standard of care
- IUD insertion pain: lidocaine block helps; not routine miso ([Pergialiotis 2014](#)); ketorolac helps after insertion ([Ngo 2012](#))
- After failed insertion, misoprostol improves subsequent insertion ([Bahamondes 2015](#))
- Little evidence for routine IUD string checks: a barrier to many ([Davies 2014](#))

Progesterone only methods (implant, LNG-IUDs, DMPA, POP and LNG EC):

- Safe for patients with contraindications to estrogen (e.g. migraines with aura)
- Generally decreased dysmenorrhea (particularly Mirena / Liletta)
- Decreased risk of endometrial and ovarian cancer
- Backup method 7 days if >5 days after cycle begins, aspiration, or delivery
- For patients with metrorrhagia / menorrhagia on method, can add back estrogen during first few months, as appropriate.

Contraceptives that contain estrogen (Ring, Patch, COC) (US MEC):

- Decreased dysmenorrhea, lessened PMS & menstrual migraines, improved acne
- Decreased risk of endometrial and ovarian cancer, ovarian cysts, PID, benign breast tumors, osteoporosis
- Rare adverse health outcomes, including venous thromboembolism, heart attack, stroke, for some risk categories (MEC).

Extended contraception to reduce / eliminate withdrawal bleeding

- Safe, acceptable, and as efficacious as monthly cyclic regimens (Nelson 2007, Edelman 2005). Fewer scheduled bleeds; less estrogen-withdrawal symptoms.
- Various monophasic OCP formulations or vaginal ring can be used (not patch).
- Unscheduled bleeding decreases over time with these regimens.

Emergency contraception (EC):

- Effectiveness of EC: Cu-T IUD > Ulipristal (UPA) EC > LNG EC ([Turok 2014](#)). CuT EC is nearly 100% effective, including with overweight and obese patients; provides ongoing contraception ([Wu 2013](#), [Cleland 2012](#)).
- Patients offered CuT vs. LNG EC: pregnancy half as likely in 1 year ([Turok 2014](#))
- Offer CuT or UPA EC to those at increased risk of EC pill failure: overweight, obese and patients with repeat episodes unprotected intercourse ([Glasier 2011](#))
- In primary care setting, routine counseling about CuT for EC seekers resulted in 11% same-day uptake; 80% still using CuT 12 months later ([Schwarz 2014](#))
- EC will not disrupt an implanted pregnancy, thus is NOT an abortifacient
- LNG EC is available at pharmacies without a prescription for all ages

Medical Eligibility for Initiating Contraception: Absolute and Relative Contraindications

Risk Level	
1	Method can be used without restriction
2	Advantages generally outweigh theoretical or proven risks
3	Method not usually recommended unless other, more appropriate methods are not available or not acceptable
4	Method not to be used

These contraceptive methods do not protect against sexually transmitted infections (STIs). Condoms should be used to protect against STIs.

For more information, see

www.cdc.gov/mmwr/preview/mmwrhtml/rr59e0528a1.htm?s_cid=rr59e0528a1_e
www.cdc.gov/mmwr/preview/mmwrhtml/mm6026a3.htm?s_cid=mm6026a3_w
www.cdc.gov/mmwr/preview/mmwrhtml/rr6205a1.htm?s_cid=rr6205a1_w
pediatrics.aappublications.org/content/early/2014/09/24/peds.2014-2299.full.pdf

Condition	Qualifier for condition	Estrogen/ progestin: pill, patch, ring	Progestin- only: pill	Progestin- only: injection	Progestin- only: implant	Progestin IUD	Copper IUD
Age	< 18	1	1	2	1	1	1
	18-40	1	1	1	1	1	1
	40-45	2	1	1	1	1	1
	> 45	2	1	2	1	1	1
Anemia	Thalassemia	1	1	1	1	1	2
	Sickle cell disease	2	1	1	1	1	2
	Iron-deficiency anemia	1	1	1	1	1	2
Bariatric surgery	Stomach restrictive procedures, including lap band	1	1	1	1	1	1
	Malabsorptive procedures, including gastric bypass	Pill: 3 Patch or ring: 1	3	1	1	1	1
Breast cancer	Family history of cancer	1	1	1	1	1	1
	Current	4	4	4	4	4	1
	In past, no evidence of disease for > 5 years	3	3	3	3	3	1
Breast problems, benign	Undiagnosed mass	2	2	2	2	2	1
	Benign breast disease	1	1	1	1	1	1
Cervical cancer and pre-cancerous changes	Cervical intraepithelial neoplasia	2	1	2	2	2	1
	Cancer, awaiting treatment	2	1	2	2	4	4
Cervical ectropion		1	1	1	1	1	1
Depression		1	1	1	1	1	1
Diabetes mellitus (DM)	Gestational DM in past	1	1	1	1	1	1
	DM without vascular disease	2	2	2	2	2	1
	DM with end-organ damage or > 20 years duration	3	2	3	2	2	1
Drug interactions	NRTI antiretrovirals	1	1	1	1	2 if well/3 if ill	2 if well/3 if ill
	NNRTI antiretrovirals	2	2	1	2	2 if well/3 if ill	2 if well/3 if ill
	Protease inhibitors	3	3	1	2	2 if well/3 if ill	2 if well/3 if ill
	Anticonvulsants: phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine	3 Must select a pill with ≥ 30 mcg of estrogen to maximize efficacy	3	1	2	1	1
	Lamotrigine alone (Lamotrigine/valproate combo does not interact with hormones)	3	1	1	1	1	1
	Rifampin/rifabutin	3	3	1	2	1	1
	ALL OTHER ANTIBIOTICS & ANTIFUNGALS	1	1	1	1	1	1
Endometrial cancer		1	1	1	1	4	4
Endometriosis		1	1	1	1	1	2
Gallbladder disease	Asymptomatic gallstones or s/p cholecystectomy	2	2	2	2	2	1
	Symptomatic gallstones, without cholecystectomy	3	2	2	2	2	1
	Pregnancy-related cholestasis in past	2	1	1	1	1	1
	Hormone-related cholestasis in past	3	2	2	2	2	1
Headaches	Non-migranous	1	1	1	1	1	1
Headaches: migraines	Without aura, age < 35	2	1	2	2	2	1
	Without aura, age > 35	3	1	2	2	2	1
	With aura, any age	4	2	2	2	2	1
HIV infection	High risk or HIV +	1	1	1	1	2	2
	AIDS (without drug interactions)	1	1	1	1	2 if well/3 if ill	2 if well/3 if ill



Condition	Qualifier for condition	Estrogen/ progestin: pill, patch, ring	Progestin- only: pill	Progestin- only: injection	Progestin- only: implant	Progestin IUD	Copper IUD
Hypertension	During prior pregnancy only – now resolved	2	1	1	1	1	1
	Systolic < 159 & diastolic < 99	3	1	2	1	1	1
	Systolic ≥ 160, diastolic ≥ 100, and/or with vascular disease	4	2	3	2	2	1
Inflammatory bowel disease	Ulcerative colitis, Crohn's disease	2	2	2	1	1	1
Ischemic heart disease	Past, current, or multiple risk factors	4	2	3	2	2	1
Liver Disease	Viral hepatitis-carrier	1	1	1	1	1	1
	Viral hepatitis-active	4	1	1	1	1	1
	Viral hepatitis-carrier	1	1	1	1	1	1
	Viral hepatitis-active	4	1	1	1	1	1
	Cirrhosis-mild	1	1	1	1	1	1
	Cirrhosis-severe	4	3	3	3	3	1
	Tumors-focal nodular hyperplasia	2	2	2	2	2	1
	Hepatocellular adenoma	4	3	3	3	3	1
	Tumors-malignant	4	3	3	3	3	1
Obesity	BMI > 30 kg/meter squared	2	1	1	1	1	1
Ovarian cancer		1	1	1	1	3	3
Ovarian cysts	& benign tumors	1	1	1	1	1	1
Pelvic inflammatory disease	Past, with subsequent pregnancy	1	1	1	1	1	1
	Past, without subsequent pregnancy	1	1	1	1	2	2
	Current	1	1	1	1	4	4
Postpartum, not breastfeeding	< 3 weeks postpartum	4	1	1	1	See Postpartum IUDs	
	3-6 weeks, increased risk DVT	3	1	1	1		
	3-6 weeks, normal risk DVT	2	1	1	1		
	> 6 weeks postpartum	1	1	1	1		
Postpartum, & breastfeeding	< 3 weeks postpartum	4	2	2	2	See Postpartum IUDs	
	3-4 weeks postpartum	3	2	2	2		
	4-6 weeks, increased risk DVT	3	1	1	1		
	4-6 weeks, normal risk DVT	2	1	1	1		
	> 6 weeks postpartum	2	1	1	1		
Postpartum IUDs (breastfeeding or not breastfeeding)	< 10 minutes post-placenta delivery					2	1
	10 minutes post-placenta delivery to 4 weeks					2	2
	> 4 weeks					1	1
Post-abortion	First trimester	1	1	1	1	1	1
	Second trimester	1	1	1	1	2	2
	Immediately after septic abortion	1	1	1	1	4	4
Rheumatoid arthritis	On immunosuppressive therapy	2	1	2	1	2	2
	Not on immunosuppressive therapy	2	1	2	1	1	1
Sexually Transmitted Infections (STI)	Vaginitis / Increased risk of STI	1	1	1	1	2	2
	Very high risk of STI	1	1	1	1	3	3
	Current GC/Chlamydia/Purulent cervicitis	1	1	1	1	4	4
Smoking	Age < 35	2	1	1	1	1	1
	Age > 35, < 15 cigarettes/day	3	1	1	1	1	1
	Age > 35, > 15 cigarettes/day	4	1	1	1	1	1
Seizure disorder	Without drug interactions	1	1	1	1	1	1
Stroke	Past or current	4	2	3	2	2	1
Surgery	Minor	1	1	1	1	1	1
	Major, without prolonged immobilization	2	1	1	1	1	1
	Major, with prolonged immobilization	4	2	2	2	2	1
Systemic lupus erythematosus	Antiphospholipid Ab +	4	3	3	3	3	1
	Severe thrombocytopenia	2	2	3	2	2	3
	Immunosuppressive treatment	2	2	2	2	2	2
	None of the above	2	2	2	2	2	1
Thyroid disorders	Simple goiter, hyperthyroidism, hypothyroidism	1	1	1	1	1	1
Uterine fibroids	IUDs ok unless fibroids block insertion	1	1	1	1	1	1
Valvular heart disease	Uncomplicated	2	1	1	1	1	1
	Complicated	4	1	1	1	1	1
Varicose veins		1	1	1	1	1	1
Venous thrombosis	Family history (first-degree relatives)	2	1	1	1	1	1
	Superficial thrombophlebitis	2	1	1	1	1	1
	Past DVT, high risk of DVT, or known thrombophilia	4	2	2	2	2	1
	Current DVT	4	2	2	2	2	2

ROUTINE POST-ABORTION CARE

Care of patients following uterine aspiration is usually straightforward and can occur in an exam room where the procedure was done or a recovery room. Care may vary slightly with the gestational age of the pregnancy, the type of anesthesia, and any complicating factors. Post-aspiration care includes discharge education, observation and support related to analgesia administered, and surveillance for immediate and delayed complications. A critical component of post-procedure care is initiation of the contraceptive chosen by the patient.

RECOVERY AND MONITORING

Provider or staff should assess the following parameters prior to discharge:

- Adequate pain control
- Stable, controlled vaginal bleeding
- Normal, stable vital signs
- Normal oxygen saturation if IV sedation was used
- Ability to ambulate independently

The following discharge medications are given or reviewed for home use:

- Prophylactic antibiotics
- NSAIDs
- Preferred contraceptive method, including condoms and emergency contraception

Most patients require only 20-30 minutes of recovery time, including those receiving local anesthesia, NSAIDs, oral opioids or anxiolytics, or short-acting IV sedation. With any sedating medications, a patient should not drive and should be discharged to the care of a person who will escort them home.

Discharge education should include anticipatory guidance deciphering normal symptoms from warning signs for complications and instructions should they occur (see below). Contraceptive methods can be placed, dispensed or prescribed on the procedure day.

While some patients may have specific indications for a follow-up visit, data do not support routine visits after uterine aspiration ([Grossman 2004](#)). Most patients can be given aftercare instructions and a phone number to call with concerns, in lieu of either a routine follow-up visit, but specific indications for one include:

- Suspected incomplete abortion, ongoing pregnancy or ectopic pregnancy
- Additional contraceptive reinforcement
- Further counseling or concerns

WHAT TO EXPECT AFTER AN ABORTION or MISCARRIAGE

Adapted from RHAP & RHEDI MVA AFTER-CARE INSTRUCTIONS

Following an aspiration abortion, you will likely feel fine when you go home. Any nausea you feel should go away within the next day.

WHEN CAN YOU RETURN TO YOUR NORMAL ACTIVITIES?

Starting right away, you can resume most of your normal activities. You can eat as you would normally, and shower as soon as you'd like. Listen to your body when it comes to heavier exercise. You can resume sexual activity whenever you are ready. Because you can get pregnant right away, it is important that you start your chosen method of birth control as discussed.

Be sure to fill any prescriptions you may have been given for antibiotics, birth control or other medicine and take them as instructed.

WHAT TO EXPECT

Vaginal Bleeding: You can expect to have bleeding for up to 2 weeks. Some patients have bleeding that starts and stops, some patients have no bleeding for a few days followed by bleeding like a period, and others have only spotting.

Cramping: Some patients have cramps off and on during the week. You can use a heating pad or pain medication like Ibuprofen, Naproxen, or Acetaminophen.

Sadness or feeling very emotional: Most patients feel very relieved when the abortion is over. Some patients also feel sad, feel like crying, or are moody after an abortion. Feeling emotional at this time is normal. If you think your emotions are not what they should be, please contact the clinic and/or return for follow-up.

When will menses resume? You can expect a period in 4-8 weeks. It is not the same for all patients or with all contraceptive methods.

Call if any of the following warning signs occur:

- Bleeding that soaks through more than 2 maxi pads per hour for more than 2 hours.
- Cramps that are getting stronger and are not helped by pain medication.
- Temperature higher than 101 degrees.

To reach the clinic: Here is a 24-hour contact number: _____. If you have any questions, think something is wrong, or think you are having an emergency, please call this number; if you do not reach someone right away, you will be called back within 10-15 minutes. We know that this may be a tough time for you, so if you forget something or are worried, please do not hesitate to call.

PREGNANCY PREVENTION

You can get pregnant before your period returns, so it is important to start your chosen method of birth control today if possible. For most forms of birth control, you will need to use a back up method such as a condom for the next week. If you have sex without protection during this time, you can use Emergency Contraception (EC) to decrease the chance of another pregnancy. The clinic staff can give you EC or a prescription for EC before you leave today, or you can always return for this if needed.

ADDITIONAL SUPPORT

Most patients feel better in the month following an abortion, and studies show both mood and quality of life improve. If you are in need of additional support, consider contacting one of the following national hotlines, which help answer questions and address emotional wellbeing following abortion: www.exhaleprovoice.org or 866-4EXHALE, www.yourbackline.org 888-493-0092, or www.connectandbreathe.org, 866.647.1764.

EXERCISES: CONTRACEPTION & AFTERCARE

EXERCISE 6.1

Purpose: To role-play contraceptive counseling and understand recent evidence based contraceptive developments, precautions, and use.

1. A 17-year old G0P0 patient comes to the clinic that is sexually active and currently using withdrawal and condoms. Can you role play how you might initiate the conversation, learn about their priorities, and simplify the choice process for them? Consider using either Your Birth Control Choices or How Well Does Birth Control Work chart as a visual aid.
2. A patient presents to the clinic seeking to switch to a new method of contraception. They are currently on DMPA, which has been causing weight gain, and want something non-hormonal. A friend mentioned having pain with an IUD, so your patient is hesitant to consider that option. Role-play a healthcare encounter using a patient-centered model. (Adapted from [Dehlendorf](#)).
 - What did you like about it or find challenging?
 - How was it different or similar to patient encounters you've had previously?
3. What would you discuss with the following patients regarding to their desire for contraception?
 - a. A 36-year-old smoker with moderate obesity who wants the patch.
 - b. A 19-year-old who intends to use abstinence.
 - c. A 29-year-old with migraine headaches with aura who wants the pill.
 - d. A 20-year-old nulliparous patient with a history of Chlamydia at age 15 and who wants an IUD.
 - e. A 28-year-old patient who is overweight, has vaginitis, and wants emergency contraception (for unprotected intercourse 3 and 5 days ago), as well as ongoing contraception.
 - f. A 25-year-old with SLE who is interested in the ring.
 - g. A 31-year-old who takes anti-seizure medications and wants the pill.
 - h. A 27-year-old who wants a combined hormonal method but doesn't want a monthly period.

Teaching Points

EXERCISE 6.2

Purpose: To review routine follow-up after uterine aspiration, please answer the following questions.

1. A patient has had nausea and vomiting throughout pregnancy. How long will it take for them to feel better after the abortion?
2. Providers typically advise patients to call the office if they have certain “warning signs” following uterine aspiration. What “warning signs” would you include and why?
3. After an aspiration, how long would you advise your patient to wait before resuming exercise, heavy lifting, and vaginal intercourse? What is the rationale for your recommendations?

Teaching Points

7. MEDICATION ABORTION

Medication abortion (medical abortion, or MAB) provides a safe, effective alternative to aspiration abortion. It can be offered in diverse settings without special equipment. Since the process allows for significant patient autonomy, appropriate counseling and follow-up are essential.

CHAPTER LEARNING OBJECTIVES

At the end of this chapter you should be better able to:

- Evaluate patients prior to medication abortion, including:
 - Eligibility and preparedness for medication abortion
 - Pertinent medical history and physical exam
 - Laboratory evaluation and sonogram as needed
- Describe differences between various regimens
- Counsel patients effectively throughout the process:
 - Address the range of what to expect during medication abortion
 - Provide resources and coping skills for managing expected side effects
 - Explain the difference between expected side effects and complications
 - Review the indications for intervention with uterine aspiration
- Assess for success of medication abortion
- Assess and manage common complications

READING / RESOURCES

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (Wiley-Blackwell, 2009)
 - Chapter 9: Medical abortion in early pregnancy
- Medical management of first-trimester abortion. ([SFP Clinical Guidelines 2014](#))
- Early Options: A Provider's Guide to Medical Abortion. ([NAF Online 2016](#))
- Helpful handouts for providers and patients:
 - <http://www.reproductiveaccess.org>
 - <http://rhedi.org/patients.php>
- The mifepristone manufacturer has a helpful website and an on-call network.
 - <http://www.earlyoptionpill.com>.

SUMMARY POINTS

SKILL

- Medication abortion (MAB) is technically simple. Most of what you learn in this chapter involves assessment, thorough counseling and evaluation of success.
- Mifepristone 200 mg followed by misoprostol 800 mcg (buccal or vaginal) or 400 to 800 mcg (sublingual) is effective for gestational ages up to 70 days ([FDA label 2016](#), [NAF CPGs 2016](#); [SFP Clinical Guidelines 2014](#)).
- Combined mifepristone/misoprostol regimens discussed here are more effective than misoprostol alone or methotrexate/misoprostol ([NAF CPGs 2016](#)).
- Medication abortion accounted for 23% of all nonhospital abortions and 36% of abortions before nine weeks gestation in 2011. Of U.S. abortion providers, 17% offer only medication abortion ([Jones 2014](#)), which improves access.

SAFETY

- Medication abortion is safe, effective and over 95% are successful without need for further intervention ([Reeves 2016](#)). Delayed bleeding is the most common complication (0.4-2.6%), and may require treatment or aspiration several weeks after the abortion ([NAF Online 2016](#)). This can usually be done in the outpatient setting.
- Most of the medication abortion process occurs outside the office. You can:
 - Provide patients with a number to contact you for questions or concerns
 - Give your patients a list of “warning signs” that warrant a call or visit
 - Provide aspiration if needed, or refer to a back-up group that can.
- For ectopic pregnancies, mifepristone-based regimens are ineffective and contraindicated for management, but methotrexate regimens may be considered.

ROLE

- Your confidence in providing medication abortion will grow quickly as you:
 - Gain experience monitoring side effects and assessing success
 - Listen to your patients’ questions and success stories
 - Discuss your questions with more experienced colleagues
- Early medication abortion is relatively easy to integrate into clinical services and may be an excellent starting place prior to offering uterine aspiration, allowing you to play an important role in expanding access for patients.

COMPARISON OF MIFEPRISTONE REGIMENS

Adapted from [FDA Package Label 2016](#), [NAF CPG 2016](#), and [Reproductive Health Access Project](#)

Factor	Evidence-Based Regimens Based on evidence up to 2016		
	Vaginal Miso	Buccal Miso	Sublingual Miso
Gestational Age Limit	≤ 70 days		
Mifepristone Dose (Day 1)	200 mg orally		
Misoprostol Dose & Route	800 mcg vaginal	800 mcg buccal	400 to 800 mcg sublingual
Timing of Misoprostol Administration	0-48 hours after mifepristone	24-48 hours after mifepristone	24-48 hours after mifepristone
Follow-Up Assessment	Day 2 – 14 (NAF CPG suggests Day 7 – 14)		
Success Rate (not requiring aspiration)	95-98%	95-99% (up to 63d) 91-93% (64-70d)	95% (up to 63d) 92% (64-70d)
Core References	Creinin 2007 , Creinin 2004 , Schaff 1999 , 2002 Ashok 1998	Danco 2016 , Gatter 2015 , Sanhueza Smith 2015 , Winikoff 2012 , Boersma 2011 , Middleton 2005	Bracken 2014 , Chai 2013 , Tang 2003

1. Updated FDA regimen as of March 2016.
2. Primary studies demonstrating efficacy from 64-70 days used buccal misoprostol regimens, but vaginal and buccal routes are similar in efficacy. ([NAF Online 2016](#)).
3. Limited data demonstrates the same efficacy of a lower dose of sublingual misoprostol with fewer side effects, 400 vs. 800 mcg 24-48 hours after mifepristone ([Bracken 2014](#)).
4. A repeat dose of misoprostol may be required.

The FDA approved mifepristone with misoprostol for medication abortion in 2000, using a specific regimen based on evidence collected through 1998: mifepristone 600 mg followed 48 hours later by misoprostol 400 mcg orally, with a gestational age limit of 49 days. Since then, ongoing studies have delineated improved evidence-based regimens with optimized efficacy, convenience, and side effects. The updated 2016 FDA labeling for mifepristone reflects the newer data using 200 mg of mifepristone followed by buccal misoprostol as noted above.

Internationally, particularly in countries with restrictive abortion laws, misoprostol has been used alone for early abortion. Most studies show an efficacy range between 75% and 90% without a need for surgical intervention in pregnancies up to 63 days gestation. The regimens used include 3 doses of 800 mcg of vaginal or buccal misoprostol 3 to 12 hours apart ([Von Hertzen 2007](#), [Gynuity 2013](#)). More information about regimens is available at [Gynuity](#).

Methotrexate 50 mg/m² is occasionally used when the diagnosis of EPL versus ectopic is indeterminate. Unlike mifepristone, methotrexate is an effective treatment for early ectopic pregnancy. Efficacy is determined with serial hCG testing, clinical exams and progression of signs and symptoms ([Seeber 2006](#)).

MIFEPRISTONE/MISOPROSTOL ABORTION: STEP BY STEP

FIRST OFFICE VISIT – DAY 1

Determine Patient Eligibility:

1. Confirm intrauterine pregnancy and determine gestational age: If using ultrasound a pre-medication sonogram should be obtained, or if using clinical evaluation, LMP plus bimanual exam may be sufficient.
2. Rule out contraindications from medical history:
 - IUD in place (must be removed prior to administration of the medications)
 - Allergy to prostaglandins or mifepristone
 - Chronic adrenal failure or long-term systemic corticosteroid therapy
 - Known or suspected ectopic pregnancy
 - Hemorrhagic disorders or concurrent anticoagulant therapy
 - Inherited porphyria

Counseling and Informed Consent:

3. Address pregnancy options, early abortion options (medication vs. aspiration), and patient's concerns (see [Chapter 2](#)).
4. Confirm confidential phone number and transportation access for follow-up.
5. Discuss the safety of medication abortion and review risks (see [Table](#)):
 - Need for aspiration or additional misoprostol doses (up to 5% < 63 days and 9% at 64-70 days). Briefly review the safety and risks of aspiration in case indicated later.
 - Heavy or prolonged bleeding (up to 3%; uterine aspiration may be required)
 - Endometritis (<1%) and the very rare risk of atypical infection
 - Mifepristone alone has not been associated with teratogenic effects, although it may cause abortion in 60-80% of cases
 - Once misoprostol taken, abortion must be completed due to potential misoprostol teratogenicity (associated with increased congenital deformities, M?bius syndrome)
6. Review and sign required consents and agreements:
 - Manufacturer's Patient Agreement and Medication Guide: <http://earlyoptionpill.com>
 - Evidence-based agreement or consent
7. Compare the FDA-approved regimen with evidence-based alternatives
8. Review use of medications:
 - Mifepristone:
 - Stops the pregnancy from growing
 - One 200 mg tablet is administered by mouth
 - Misoprostol:
 - Stimulates the uterus to contract and empty
 - Help the patient choose the optimal route for home administration:
 - Vaginal: place four 200 mcg tablets as high as possible in the vagina
 - Sublingual: place 2-4 200 mcg tablets under the tongue for 30 minutes. Swallow any remaining fragments after 30 minutes

- Buccal: place four 200 mcg tablets between gum and cheek for 30 minutes. Swallow any remaining fragments after 30 minutes
 - Rho(D)-IG: 50 mcg dose IM within 72 hours of mifepristone if Rh negative
 - NSAIDs and opiates: prescribed for pain control. See Chapter 4 for specifics.
 - Hydrocodone/Acetaminophen 5mg/325mg q4-6h or equivalent
 - Ibuprofen 600-800 mg q6-8h or equivalent
 - Antiemetics: may be offered to improve patient comfort and increase the likelihood that medications will be absorbed
 - Prophylactic antibiotics: may be considered¹
9. Provide anticipatory guidance for the abortion process and medication side effects:
- Cramping/pain occurs in >90% of patients, varies in intensity, peaks after misoprostol dose, and is typically improved by NSAIDs and/or opioids.
 - Nausea, vomiting, diarrhea, low-grade fever, chills and myalgias are common side effects of misoprostol, and usually resolve within 6 hours of use
 - If pills are vomited (or fall out) <30 min after misoprostol, consider a repeat dose
 - Vaginal bleeding is usually heaviest within 4-6 hours after misoprostol, often heavier than normal menses and accompanied by the passage of clots
 - Average bleeding duration is 9 days (range 1-45 days); clinically significant drop in hemoglobin is rare
 - A heavy first menses is common following medication abortion
 - Out-of-cycle bleeding following the first menses may indicate retained POC or other material, and should be evaluated (depending on post-abortion contraceptive method and other signs/symptoms)
 - Suggest the patient has a calm environment and a support person available.
10. Review plans for initiating post-abortion contraception if desired: Advise patient that it is possible to get pregnant again right away
- Implant: placement at time of mifepristone enhances patient satisfaction and does not appreciably increase MAB failure rates ([Raymond 2016](#))
 - IUD: place at follow-up; may have slightly increased risk of expulsion ([Sääv 2012](#))
 - Sterilization: sign consents, refer and offer an acceptable bridge method
 - Injection: provide at follow-up visit or sooner
 - Hormonal contraceptives: initiate within 5 days of misoprostol
 - Barrier methods: initiate immediately
 - Provide emergency contraception (dispense or prescribe) if desired for future need

Diagnostic Tests:

11. Rh status (from lab, donor card, or patient chart)
12. Hemoglobin or hematocrit (consider safety of MAB when baseline hemoglobin <10)
13. Chlamydia/gonorrhea screen (as indicated; see Chapter 4 Diagnostic Tests)
14. If using serial hCG protocol to assess for success, draw baseline serum hCG
 - (see hCG follow-up below)

1. Although some providers routinely give antibiotic prophylaxis prior to MAB, several organizations say the evidence is insufficient to support universal prophylactic antibiotic use during MAB ([Ipas 2016](#), [NAF 2016](#), [SFP 2014](#), [WHO 2012](#), ACOG 2009). In contrast, there is compelling evidence to support universal antibiotic prophylaxis prior to aspiration abortion.

Additional Home Instructions

15. Discuss how and when to reach provider on call, especially if the patient has:
 - No bleeding within 24 hours of misoprostol (second dose may be indicated)
 - Soaked two or more maxi-pads for two or more consecutive hours
 - Unmanageable pain despite taking analgesics prescribed
 - Sustained fever >100.4° F or onset of fever >24 hours after misoprostol
 - Abdominal pain, weakness, “feeling sick”, nausea, vomiting or diarrhea more than 24 hours after taking misoprostol
 - Plans to go to a hospital/ emergency department (facilitating the patient’s visit may reduce the likelihood of unnecessary aspiration)

FOLLOW-UP – UP TO DAY 14

Medication abortion success must be assessed by ultrasonography, by serial hCG testing, or by clinical means in the office, or by telephone (NAF CPG 2016). If the patient fails to follow up as planned, the clinic must document multiple attempts to reach the patient.

1. When ultrasound is used, success is determined by demonstrating the absence of the previously identified pregnancy (gestational sac or embryo, depending the US findings prior to MAB). Residual echogenic material and endometrial thickening are normal findings, and require no intervention unless accompanied by pain or excessive bleeding (i.e. treat the patient and not the ultrasound).
2. When the serial hCG protocol is used, a decrease from baseline hCG of 60% in 6-10 days of initiating treatment correlates with a successful MAB (NAF CPG 2016).
3. When telephone follow-up has been used, it has been shown to be non-inferior to standard office follow up, although ongoing research is underway (Oppegaard 2015).
4. Review patient’s course since medications, including timing and extent of bleeding and cramping, and any ongoing symptoms.
5. Review interpretation of diagnostic results with patient
6. Review previously-initiated contraceptive method, or initiate contraception
7. Review how to contact clinic in the event of late-onset bleeding (heavy or persistent) or other concerns warranting evaluation and treatment.

Proposed Criteria for Aspiration after Medication Abortion

Emergent

- Excessive active bleeding with orthostatic hypotension or significant drop in hemoglobin/hematocrit

Non-emergent

- Continuing pregnancy (may consider second misoprostol dose prior to aspiration)
- Symptomatic problematic bleeding / cramping unresponsive to medical treatment
- Patient preference

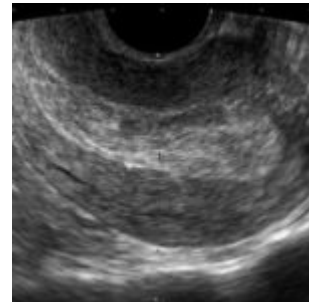
ULTRASOUND WITH MEDICATION ABORTION

The use of ultrasound is not a requirement for the provision of medication abortion (NAF, SFP, ACOG, ARHP, AAFP, FDA, Ipas, WHO), and recent trials demonstrate the safety of eliminating routine ultrasound from pre- and post-medication abortion care.

Ultrasound As-Needed Indications to Inform Clinical Decision-Making (RHEDI)	
Pre-Abortion	Post-Abortion
<ul style="list-style-type: none"> • EGA >9 weeks by LMP • Size/date discrepancy • Provider uncertainty with exam • Uncertain LMP (irregular menses, or no menses after delivery, abortion, contraceptive initiation) • Adnexal mass or pain • History of previous ectopic pregnancy or current symptoms or signs suggestive of ectopic pregnancy 	<ul style="list-style-type: none"> • History not consistent with successful medication abortion (no or scant bleeding or cramping) • Patient still feels pregnant • If used, serum hCG not declining appropriately (i.e., <50% decrease from baseline 48 hours after mifepristone or <80% after 1 week) • Provider uncertainty with history

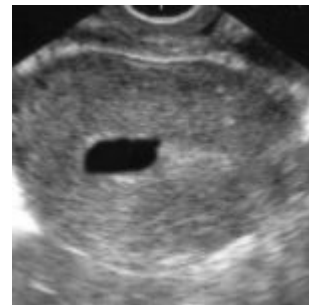
SUCCESSFUL ABORTION

The absence of the pregnancy (gestational sac or embryo depending the US findings prior to MAB) and the presence of intrauterine debris are typical after successful medication abortion. The size of the endometrial stripe has no clinical significance in assessment of success of a medication abortion, and incorrect interpretation can lead to unnecessary intervention (SFP 2014).



PERSISTENT GESTATIONAL SAC AFTER MEDICATION ABORTION

This transvaginal ultrasound shows the presence of an empty gestational sac. A persistent gestational sac, embryo, or fetus indicates an incomplete abortion. Management options include waiting for spontaneous completion, administering a repeat dose of misoprostol, or performing an aspiration procedure.



Images courtesy of Fjerstad.

MANAGING COMPLICATIONS OF MEDICATION ABORTION

Complication	Clinical Presentation	Management Options	Occurrence Rate
Problematic bleeding and/or cramping	<ul style="list-style-type: none"> • Prolonged cramping, pain and/or bleeding • Retained gestational sac or tissue may be seen on ultrasound; inappropriate decline in hCG 	<ul style="list-style-type: none"> • Expectant management • Repeat misoprostol • Uterine aspiration 	2-9% (varies by study & GA)
Continuing Pregnancy	<ul style="list-style-type: none"> • May have scant bleeding after medications, persistent pregnancy symptoms • Ongoing viable intrauterine pregnancy (growing gestational sac or cardiac activity on US; rapidly rising hCG) 	<ul style="list-style-type: none"> • Uterine aspiration • Repeat misoprostol (800 mcg vaginally, 36% had complete expulsion and 29% no longer had cardiac activity at follow-up)¹ 	<1% ≤63 d ² 3% 64-70 d ²
Endometritis	<ul style="list-style-type: none"> • Typical endometritis: fever (>24 hours after misoprostol), pelvic/abdominal pain, vaginal discharge with odor, uterine/adnexal tenderness • Atypical endometritis: <ul style="list-style-type: none"> ◦ Very rare: Incidence 0.58 per 100,000 in the US ◦ Severe, often fatal ◦ Etiology: <i>Clostridium sordelii</i>– or <i>Clostridium perfringens</i>-mediated toxic shock syndrome ◦ Occurs 2-7 days after MAB ◦ Symptoms: nausea, abdominal bloating, diarrhea, pain, malaise ◦ Signs: usually afebrile, tachycardic, hypotensive, leukocytosis & increased HCT 	<ul style="list-style-type: none"> • Follow CDC guidelines for antibiotic therapy • Uterine aspiration if retained tissue present • Immediate hospitalization and aggressive treatment for atypical infection 	0.9% ² < 10 case reports by CDC ³
Ectopic Pregnancy	<ul style="list-style-type: none"> • May be asymptomatic or present with minimal bleeding or inappropriate decline in hCG after misoprostol. • May present with pelvic/abdominal pain, history of bleeding or spotting during the pregnancy, shoulder pain, tachycardia/hypotension. 	<ul style="list-style-type: none"> • Treat or refer as appropriate 	0.6% (in study of GA < 6 weeks) ²
Excessive Bleeding	<ul style="list-style-type: none"> • Heavy or prolonged vaginal bleeding, Hgb drop >2, orthostatic hypotension • True hemorrhage is life-threatening emergency; rare but can occur • May result from retained pregnancy tissue and may present 2-5 weeks after mifepristone 	<ul style="list-style-type: none"> • Uterine aspiration • FeSo4 	0.4-2.6% ⁴
		<ul style="list-style-type: none"> • Blood transfusion • FeSo4 	<0.05-0.2% ^{2,4}

1. Reeves 2008

2. SFP 2014 Clinical Guidelines

3. Meites 2010

4. NAF online 2016

EXERCISES: MEDICATION ABORTION

EXERCISE 7.1

Purpose: To practice responses to questions that may arise during medication abortion counseling.

What would you tell patients who ask the following questions?

1. I live 4 hours away. Can I still get the abortion pill?
2. What are my chances of needing an aspiration abortion?
3. How will I know if I'm bleeding too much?
4. Will I see "the baby" when it comes out?

Teaching Points

EXERCISE 7.2

Purpose: To practice responses to follow-up questions or concerns that may arise by telephone.

How would you respond to the following questions?

1. I took the misoprostol 2 hours ago. Now my temperature is 100.5° and I feel like I have the flu. Should I be concerned?
2. I took the misoprostol 30 hours ago and passed the pregnancy 24 hours ago, but now my temperature is 101.5.
3. I used the medication vaginally, but I think one of those pills just fell into the toilet (or vomited if using buccal, sublingual, or oral misoprostol). What should I do?
4. I took the mifepristone in clinic yesterday and started to bleed like a period this morning. I have not taken the misoprostol yet. What should I do?

Teaching Points

EXERCISE 7.3

Purpose: To practice follow-up and management of complications after medication abortion.

How would you manage the following situations?

1. A 29 year-old G3P1011 patient requests medication abortion and is 6 weeks by LMP. Examination reveals a barely enlarged uterus, and serum hCG level is 782 IU/L. They take mifepristone 200 mg, followed 24 hours later by an appropriate dose of buccal, vaginal, or sublingual misoprostol. They have moderate bleeding and cramping during the next several hours. When the patient returns on Day 4, examination is essentially unchanged, and serum hCG level is 5530 IU/L.
2. A 25 year-old G2P1011 patient who received mifepristone 200 mg 7 days ago and took misoprostol 800 mcg 6 days ago, returns to clinic today for a follow-up visit. They report moderate bleeding and cramping a few hours after taking misoprostol, and have had no complaints since then. On a follow-up ultrasound, there is a moderate amount of heterogeneous debris in the endometrial cavity.
 - a. What management would you suggest for uterine debris?
 - b. How would you manage this patient differently if they were symptomatic with ongoing moderate vaginal bleeding and/or cramping?
3. A 19 year-old G4P0 patient who received mifepristone 4 days ago and took misoprostol 3 days ago returns today because of very heavy vaginal bleeding. They state they have soaked 5 maxi-pads in the last 3 hours.
 - a. What should you assess first?
 - b. What diagnostic work-up would you initiate?
 - c. What management options would you offer this patient?
 - d. What are indications for a uterine aspiration after medication abortion?

Teaching Points

8. MANAGEMENT OF EARLY PREGNANCY LOSS

This chapter will assist you in learning skills to support your patients through a common and often emotionally and physically difficult experience – the spontaneous loss of a pregnancy (miscarriage). Management of early pregnancy loss now commonly occurs in the primary care setting, with expectant, medication, or aspiration management. These options are recognized as being both safe and effective, while also providing more choices for patients.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be able to:

- Evaluate, diagnose, and counsel patients presenting with signs or symptoms of early pregnancy loss
- Evaluate for ectopic pregnancy vs. early pregnancy loss, including changes in hCG levels
- Answer questions about short and long term implications of early pregnancy loss including emotional effects and implications for fertility
- Present expectant, medication and aspiration management options
- Provide appropriate follow-up, including contraceptive counseling

READINGS / RESOURCES

- Websites:
 - www.earlypregnancylossresources.org
 - <http://provideaccess.org/resources-and-initiatives/pregnancy-loss/>
 - <https://depts.washington.edu/obgyn/education/miscarriagemanagement/welcome.html>
- Prine LW, MacNaughton H. Office management of early pregnancy loss. Am Fam Physician. 2011 Jul 1;84(1):75-82.
- Related Chapter Content
 - [Chapter 3: Evaluation Before Uterine Aspiration](#)

SUMMARY POINTS

SKILL

- Open-ended questions and active listening are useful for counseling a patient with suspected pregnancy loss, to help them cope with inherent uncertainties, and to elicit their priorities and preferences for management.

SAFETY

- EPL can be managed safely and effectively with expectant care, medications, or uterine aspiration.
- Expectant management has an unpredictable time course, with more bleeding and need for further interventions than aspiration, but no increased risk for infection.
- Medication management with misoprostol is safe, effective, and avoids some risks associated with uterine aspiration, but may take longer and have more side effects.
- Office based uterine aspiration is safe, efficient, cost-effective and more convenient than hospital based procedures in most situations.
- In areas where abortion access is limited, patients may present with bleeding who have attempted self-induction, although data on this are lacking ([Grossman 2010](#)).

ROLE

- Strong patient preferences for management are common, making a shared decision-making approach useful and patient-centered.
- Our role as primary care providers is to give patients as many treatment options as possible, and to minimize loss of continuity and inconvenience accessing care.
- EPL management can be a great first step to bringing other reproductive health services to the primary care setting, such as medication and aspiration abortion.

EARLY PREGNANCY LOSS (EPL)

Early pregnancy loss, often referred to as miscarriage or spontaneous abortion, includes all intrauterine non-viable pregnancies in the first trimester. EPL is common, occurring among 10-20% of clinically recognized pregnancies (ACOG 2015, Prine 2011, Blohm 2008). Nearly half of all EPLs are the result of random genetic errors (and the most common risk factors are advanced maternal age and prior early pregnancy loss) while other factors such as environment, exposures, and immunologic factors are also implicated (ACOG 2015, Prine 2011). Most of the time with individual patients, it's not possible to determine the cause of the pregnancy loss.

Patients with EPL often present with vaginal bleeding and/or abdominal cramping. Alternatively, a non-viable pregnancy can be an incidental finding detected by ultrasound or absence of fetal heart tones at a follow up appointment. EPL can be classified based on ultrasound findings or clinical exam, as outlined in the table below.

Terminology	Clinical definition	Ultrasound findings
Missed Abortion	A non-viable intrauterine pregnancy, either <i>anembryonic</i> or <i>embryonic demise</i> , often discovered by ultrasound. The patient may be asymptomatic or have a history of bleeding. The cervix is closed.	Anembryonic gestation or embryonic demise (see below)
Anembryonic Gestation	Growth of a gestational sac without an associated embryo or yolk sac. Formerly called "blighted ovum"	Enlarged gestational sac without embryo (See criteria in Chapter 3)
Embryonic or Fetal Demise	Loss of viability of a developing embryo or fetus	Embryonic or fetal pole with no cardiac activity ≥ 7 mm (see criteria in Chapter 3)
Threatened Abortion	The cervix is closed with uterine bleeding but without passage of gestational tissue. Pregnancy viable at time of presentation and patient may or may not miscarry.	Findings appropriate for stage of pregnancy, may or may not show subchorionic hemorrhage
Inevitable Abortion	The cervix is dilated with bleeding and uterine cramping, and passage of tissue is expected.	Findings may be appropriate for stage of pregnancy, with or without fetal cardiac activity.
Incomplete Abortion	The cervix is dilated and some, but not all, of the pregnancy tissue is expelled.	Heterogeneous or echogenic material, usually in the lower uterine cavity or in cervical canal
Complete Abortion	The pregnancy tissue has expelled completely	No pregnancy (sac/embryo or fetus) in intrauterine cavity, with possible endometrial thickening

Adapted from Prine, 2011.

In the past, EPL was primarily managed in the operating room with dilation and curettage. Now management of EPL commonly occurs in the outpatient setting, which is recognized as being safe, efficient, and cost-effective, while also providing more choices for patients. While some Emergency Departments (EDs) have worked to build capability to manage EPL, the goal of most has been to evaluate for possible ectopic pregnancy, manage patients with hemodynamic instability, and defer management of stable definitive or potential EPL to the outpatient setting (ACEP 2012). Patients and providers in Catholic institutions may face additional barriers to managing EPL, particularly for inevitable abortion where there is still an embryonic or fetal heartbeat (Freedman 2008).

EPL DIAGNOSTIC AND CLINICAL CONSIDERATIONS

There is no one classical presentation of EPL; it commonly occurs without symptoms or with one or more of the following:

- Vaginal bleeding (the most common sign)
- Abdominal cramping, pelvic or back pain
- Passing of tissue from the vagina
- Loss of pregnancy related symptoms (breast tenderness, nausea)
- Constitutional symptoms such as fever or malaise

Though vaginal bleeding is the most common sign, it does not always signify EPL:

- 30% of normal pregnancies have vaginal bleeding.
- 50% ongoing pregnancy rate with isolated bleeding and closed cervix.
- 85% ongoing pregnancy rate with confirmation of fetal cardiac activity.

Evaluation should include a physical examination, ultrasound (US), and/or quantitative hCGs. Serial hCGs are most helpful when US is inconclusive (i.e. pregnancy of unknown location), and are unnecessary if US confirms an intrauterine EPL.

Physical exam helps assess the patient's status and offer diagnostic clues, and should include:

- Vital signs (including orthostatics if symptomatic or with heavy bleeding)
- Abdominal examination (to rule out peritonitis or other causes for symptoms)
- Pelvic examination (for bleeding, cervical dilatation, tenderness)

Tissue examination (for clot vs. pregnancy tissue)

Diagnosis of EPL is confirmed by one of the following:

1. US confirmation of anembryonic gestation or embryonic/fetal demise in the intrauterine cavity ([Ch 3](#))
2. Absence of previously seen IUP on US
3. Tissue exam confirming membranes and villi expelled or removed from uterus.

Diagnosis of EPL is also suggested by clinical history suggesting EPL with rapidly declining hCGs and no IUP on US.

In all patients presenting with first trimester bleeding, ectopic pregnancy should be considered. Ectopic pregnancies often present with vaginal spotting, frequently occurring at 6-8 weeks gestation. Due to the implantation of an ectopic pregnancy at sites ill-equipped to support the nourishment of a growing pregnancy, levels of hCG can be insufficient to support the corpus luteum, eventually causing sloughing of the endometrial lining. In the interim, levels of hCG can rise or can fall. In addition to vaginal bleeding, other signs and symptoms of ectopic pregnancy include abdominal pain and/or rebound tenderness, referred shoulder pain, and syncope.

Remember two critical aspects of the evaluation in a patient with signs or symptoms of EPL:

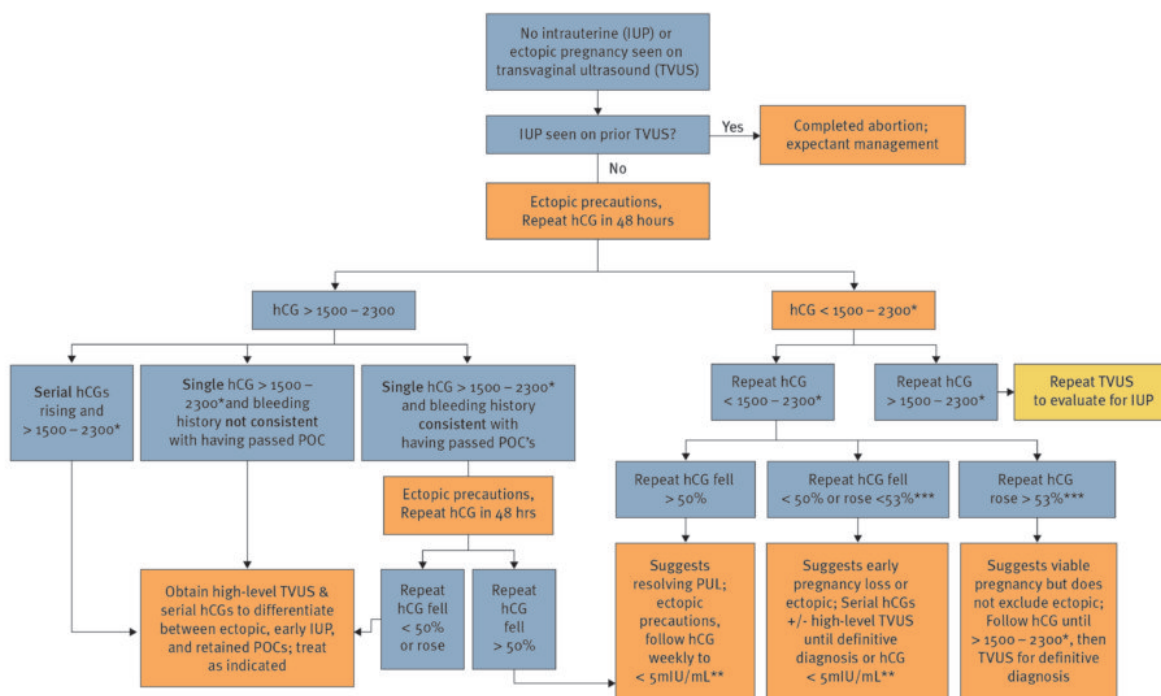
- Ensure hemodynamic stability, and manage or refer as appropriate
- Evaluate for ectopic pregnancy, and treat or refer as appropriate

The commonly used algorithm below uses a minimum expected hCG increase of 53% over 2 days

to characterize a viable IUP, and a decline of 35-50% over 2 days to characterize a completed EPL (Butts 2013, Prine 2011, Barnhart 2009). Studies have shown that the change in hCG level for patients experiencing an IUP, ectopic pregnancy, or EPL is quite nuanced. For patients with a viable IUP, while the traditional expected increase in hCG is to double every 48 hours, the change in hCG level over 2 days can increase as little as 35% (99.9% sensitive) (Butts 2013). While using a threshold of a 53% increase is 99% sensitive for detecting viable IUPs, consider using a lower threshold in patients with desired pregnancies to avoid misclassification of an early IUP as an ectopic or EPL.

For patients with an initial pregnancy of unknown location (PUL), the ability to predict an ectopic pregnancy is increased if a third hCG level is obtained on day 4 or 7 if the first two levels (day 0 and day 2) are suggestive of an IUP or EPL (Zee 2014). Due to overlap in levels between these diagnoses (as seen in the Chapter 3 Figure, hCG levels must always be correlated with the full clinical picture.

Evaluation of first trimester bleeding with no intrauterine pregnancy on transvaginal ultrasound



June 2016 / www.reproductiveaccess.org



*The hCG level at which a singleton IUP should be seen on TVUS is the discriminatory zone, and varies between 1500 – 2000 mIU depending on the machine and the sonographer.

**The hCG needs to be followed to <5mIU/mL only if ectopic has not been reliably excluded.

***In a viable intrauterine pregnancy there is a 99% chance that the hCG will rise by at least 53% in 48 hours. In ectopic pregnancy, there is a 21% chance that it will rise by 53% in 48 hours. Use 35% instead of 53% minimum increase for desired pregnancies.

COMPARING MANAGEMENT OPTIONS FOR EPL

A small proportion of patients who present with EPL will need urgent intervention – including those with hemorrhage, hemodynamic instability or evidence of infection. But clinically stable patients can choose among the following management options to achieve completion of their EPL, or switch from one to another during the process:

- Expectant management (wait and watch)
- Medical management with misoprostol +/- mifepristone
- Aspiration in an outpatient or operating room setting.

Choosing from among these options is a preference-sensitive decision, as each of these options are safe and relatively effective, and patients report greater satisfaction when they are treated according to their own preference. As providers, we can provide patient-centered EPL care by supporting our patients in choosing the treatment method that is most in line with their own values and priorities for management.

It is helpful to understand that studies show a wide range of success rates for expectant and medical management, partly due to variability in defining endpoints (based on ultrasound versus clinical scenario) and inconsistencies in when aspiration is offered to participants enrolled in expectant care. And success rates may depend on the type of EPL. Studies suggest that expectant management has higher success rates with incomplete abortion, perhaps because the process of expulsion has already begun, compared to other types of EPL. Providers should counsel patients about their chance of success with each method of management depending upon the type of pregnancy loss (see [Comparison Table](#)) and the amount of time the patient is willing to wait until completion.

EXPECTANT MANAGEMENT

Clinically stable patients may choose to wait for the natural completion of EPL. “Watchful waiting” may avoid medical and surgical intervention and attendant side effects or complications, although subsequent aspirations are higher (See [Table](#) below; [Nanda 2012](#)).

Allowed to proceed on its own, an EPL can take days to weeks to complete, but a patient can be managed expectantly for 6 weeks if they remain stable and amenable. Many clinicians provide phone access between visits and reassess their patients every 1-2 weeks, both to monitor progression of the EPL as well as to check in with the patient to see if they would like to continue current management or prefer to switch to another management option for faster resolution.

There is a trend toward increased bleeding with expectant vs. aspiration management, so patients with severe anemia or risk factors for bleeding may be best managed with aspiration ([Nanda 2012](#)).

MANAGEMENT WITH MEDICATIONS

Medication management offers patients a more predictable time to completion, avoidance of uterine aspiration, and an outpatient option available through their primary care provider.

Misoprostol Alone

Misoprostol is effective and safe in treating EPL. Some studies show higher levels of bleeding and more follow-up with misoprostol compared to aspiration ([Davis 2007](#), [Zhang 2005](#)), so patients with severe anemia or risk factors for bleeding may be best managed with aspiration. Overall though, there are cost savings from medication management over the other two options due to less follow-up than expectant care, and fewer overall costs than aspiration. See Steps Table below for additional contraindications.

Misoprostol Dosing for Miscarriage Management (ACOG 2015 , Gynuity)	
Incomplete miscarriage	600 mcg orally (PO) or 400 mcg sublingually (SL)
All other types of EPL	800 mcg vaginally (PV) with optional repeat dose 24-48 hours later if no initial response

Mifepristone and Misoprostol

Evidence for combined use of mifepristone and misoprostol to treat EPL is limited but promising. Small, randomized trials show increased success with the addition of mifepristone but large scale prospective trials are needed (reviewed in [Dzuba 2015](#)). Although the regimen may cost more, fewer follow-up visits may be needed. Dosing and timing is similar to medication abortion.

Methotrexate

Methotrexate 50 mg/m² has the advantage of being effective in treating early ectopic in situations wherein the diagnosis of EPL vs. ectopic is indeterminate. Efficacy is determined with serial hCG testing, clinical exams and progression of signs and symptoms ([Seeber 2006](#)).

UTERINE ASPIRATION FOR MISCARRIAGE MANAGEMENT

Uterine aspiration offers the most definitive management of EPL and highest success rates. Patients may choose aspiration for rapid resolution, support through the entire process, or to avoid side effects of medication management. As with aspiration abortion, MVA for EPL can be performed safely for patients in most outpatient primary care settings and the ED. Costs and bleeding-related complications are greater in the operating room vs. office settings ([Dalton 2006](#)). Following pregnancy loss, antibiotics are indicated only if infection is suspected ([Prieto 2012](#)). See Chapter 5 for [MVA Steps](#).

COUNSELING TIPS FOR EARLY PREGNANCY LOSS

Primary care and Emergency Department providers may be the first to evaluate patients with vaginal bleeding and abdominal cramping in early pregnancy. As the diagnosis often cannot be made definitively during the first visit, counseling presents a unique challenge, requiring heightened sensitivity to a patient's emotional needs.

- If definitive results are not available, reassure that not all vaginal bleeding signifies a pregnancy loss, while avoiding guarantees that *“everything will be all right.”*
- Keep the patient informed throughout the diagnostic process about your suspicions and next steps, and provide results once EPL is diagnosed, giving the patient time to process.
- Discuss if the pregnancy is desired to help guide EPL management. Many but not all patients with an undesired pregnancy may feel better knowing the pregnancy is non-viable.
- Explicitly address feelings of guilt, reassuring that there is no evidence that a patient caused this pregnancy loss (e.g., from coitus, heavy lifting, stress, etc.).
- Describe that pregnancy loss is common, occurring among 10-20% of clinically recognized pregnancies, and help to normalize the patient's emotions.
- Advise patients that no interventions are proven to prevent first trimester loss.
- Research shows patients have strong preferences for choosing treatment for EPL, and have greater satisfaction when treated according to their preference (Wallace 2010, Dalton 2006). Since each option is safe and relatively effective in most clinical situations, the choice of management should be in line with a patient's preferences for treatment. (See [EPL Options Counseling](#) below)
- Underestimating the discomfort associated with any management option has been negatively associated with satisfaction (Dalton 2006).
- Assure that you or a colleague will be available through the process, answer questions as they arise, and encourage a support person to be at the visit.
- Counsel patients who are particularly bereaved regarding anniversary phenomena, as well as preparing themselves to discuss the loss with family and friends.
- Provide additional counseling resources as needed. Studies show some patients experience depressive symptoms following EPL, while others do not. Evidence is insufficient to demonstrate that counseling is effective post-miscarriage (Murphy 2012).
- Inquire and counsel about future fertility, providing immediate contraception or preconception care as needed. Inform and counsel about recurrent miscarriage risks (approximately baseline risk after one; 30% risk after two and increasing thereafter). Address any treatable risk factors, as appropriate, in a non-judgmental way; this is possibly best saved for follow-up.

COMPARISON OF MANAGEMENT OPTIONS FOR EPL

	Advantages	Disadvantages	Estimated Rates of Success
Expectant Management	<ul style="list-style-type: none"> • Non-invasive; body expels non-viable pregnancy • Perceived as natural by patients • Avoids anesthesia and surgery risks if successful 	<ul style="list-style-type: none"> • Process is unpredictable; can last days to weeks • Can have prolonged or heavy bleeding and cramping • Despite waiting, may still require uterine aspiration or other intervention 	<p>Incomplete EPL:</p> <ul style="list-style-type: none"> • Day 7: 50% • Day 14: 70-85% • Day 46: 90% <p>Other types of EPL:</p> <ul style="list-style-type: none"> • Day 7: 23-30% • Day 14: 35-60% • Day 46: 65-75% <p><i>(Nanda 2012, Casikar 2010, Luise 2002)</i></p>
Medical Management (With misoprostol)	<ul style="list-style-type: none"> • Non-invasive • Safe • Highly effective • Avoids medication, anesthesia and surgery risks if successful • Highly cost-effective 	<ul style="list-style-type: none"> • May cause heavier or stronger cramping than aspiration • May cause short-term gastrointestinal & other side effects • May still need uterine aspiration 	<p>Incomplete EPL:</p> <ul style="list-style-type: none"> • Single Dose 96% <p>Other types of EPL:</p> <ul style="list-style-type: none"> • Single Dose 71% • Second Dose 84% • Higher efficacy when no embryo/fetus or cardiac motion detected on US <p><i>(Ngoc 2013, Neilson 2013, Zhang 2005)</i></p>
Office-based Aspiration	<ul style="list-style-type: none"> • Predictable • Offers fastest resolution • Less bleeding than expectant or medication • Low probability of further treatment need (<5%) • Pain control with local plus oral or IV meds • Compared to OR: <ul style="list-style-type: none"> ◦ Cost & resource savings ◦ Improved patient access, ◦ continuity and privacy ◦ Less patient & staff time 	<ul style="list-style-type: none"> • Rare risks of invasive procedure • Less pain control options in some settings compared to an in-hospital procedure 	<ul style="list-style-type: none"> • 98-100% <p><i>(Nanda 2012)</i></p>
Operating Room Aspiration	<p>Can be asleep Predictable Less time / bleeding than expectant or medication Low probably of further treatment need (<5%)</p>	<p>More cost, time, exams than office-based procedures Risks associated with invasive procedure; general anesthesia May be more bleeding complications with general anesthesia vs. office procedure</p>	<ul style="list-style-type: none"> • 98-100% <p><i>(Nanda 2012)</i></p>

EPL OPTIONS COUNSELING

Options counseling for EPL can begin by reviewing all management options, including advantages, disadvantages, and outcomes, as discussed in the Comparison Table above. Consider a shared decision making approach to counseling – after providing the relevant medical information, elicit the patient's priorities for treatment through discussion, or use of the checklist below. Then together you can agree on a management decision that honors the patient's preferences and values for care.

Once the patient has chosen a management method, formulate a treatment and follow-up plan. For expectant or medication management, providers can follow a protocol such as outlined in the [Step-by-Step Approach](#) below, and for aspiration management, please see Chapter 6: [What to Expect after an Abortion or Miscarriage](#) for additional guidance.

Patient Treatment Priorities for Miscarriage

Having a miscarriage is extremely difficult for most patients. This worksheet is intended to help you and your provider choose a treatment that will make you the most comfortable.

Please circle any of the priorities below that you consider important in managing your miscarriage.

Personal Priorities

- Treatment by your own provider
- Recommendation of treatment from friend or family member
- Provider recommendation of treatment
- Lowest risk of need for other steps
- Family responsibilities/needs
- Most natural process

Time and Cost Priorities

- Shortest time before miscarriage is complete
- Shortest time in the clinic or hospital
- Fastest return to fertility or normalcy
- Fewest number of clinic visits
- Lowest cost of treatment to you

Medications and Procedure-related Factors


- Lowest risk of complications
- Avoid invasive procedure
- Avoid going to sleep in case of a surgical procedure
- Avoid medications with side effects
- Want to be asleep in case of a surgical procedure
- Avoid seeing the pregnancy tissue

Symptoms of Pain and Bleeding

- Least amount of pain possible
- Experience symptoms of bleeding and cramping in private
- Least amount of bleeding

Past Abortion or Miscarriage (if applicable)

- Different treatment from previous
- Similar treatment to previous

Developed by  managing early pregnancy loss
a project from Innovating Education in Reproductive Health
www.earlypregnancylossresources.org

STEP BY STEP APPROACH TO EXPECTANT MANAGEMENT OR MANAGEMENT WITH MISOPROSTOL

First Visit

<p>1. Rule out contraindications</p> <ul style="list-style-type: none"> Suspected ectopic pregnancy Hemodynamic instability, pelvic infection Caution: anemia, bleeding disorder or taking anticoagulants If medication management: Allergy to medications used An IUD in place (remove) 	<p>2. Ultrasound if indications:</p> <ul style="list-style-type: none"> No definitive intrauterine EPL confirmed by previous US Bleeding since last US See Chapter 3 for US findings suspicious vs. diagnostic of EPL 	<p>3. Other diagnostic testing</p> <ul style="list-style-type: none"> Pregnancy test /serum hCG if needed (See algorithm) Rh Hgb / Hct (if home mgmt, heavy/persistent bleeding or if anemia suspected) STD risk assessment / testing per CDC Guidelines
<p>4. Counseling and informed consent</p> <ul style="list-style-type: none"> Consider patient access to emergency services & follow-up Evaluate patient's treatment priorities and discuss the risks, benefits, and alternatives Discuss expected symptoms and reasons to call for expectant and misoprostol management Assess the patient's social support, coping strategies, and emotional state, and offer support as appropriate <p>If >9 week embryo, discuss possible recognizable fetal tissue</p>	<p>5. Management / Medications</p> <ul style="list-style-type: none"> Offer NSAID and a mild opioid Administer Rh IG if Rh negative (50mcg for EPL <13 weeks) <p>If patient elects medication mgmt:</p> <ul style="list-style-type: none"> Misoprostol (see Table above) Incomplete AB 600 mcg PO or 400 mcg SL Other types of EPL 8000 mcg PV Dispense 1-2 doses with instructions to take 2nd dose if no bleeding by follow up. <p>If patient elects aspiration:</p> <ul style="list-style-type: none"> See Chapter 5 for additional guidance & follow-up. 	<p>6. Establish follow-up and instructions</p> <ul style="list-style-type: none"> Answer all questions, and provide 24-hour contact information for patient Review plans for the follow-up visit at 7-14 days Make a contraceptive plan if appropriate

Follow up visit(s) as needed

<p>Assess for completion of miscarriage</p>	<p>Findings consistent with completed miscarriage</p>		
<ul style="list-style-type: none"> History +/- physical Serial HCG levels (in all patients without a prior confirmed IUP) Serial hCG or US (in cases where Hx and physical are not consistent with a completed EPL) 	<p>History Cramping, bleeding with or without clots or tissue (POC) with:</p> <ul style="list-style-type: none"> Diminishing bleeding No ongoing pregnancy symptoms <p>Physical exam if diagnosis remains unclear</p> <ul style="list-style-type: none"> Uterus firm and smaller size consistent with aborted pregnancy VS +/- orthostatics as clinically appropriate 	<p>Serial hCG Decline >50% in 2 days suggests completed EPL</p>	<p>Ultrasound</p> <ul style="list-style-type: none"> Absence of previously identified gestational sac Note: A thickened endometrial stripe and heterogeneous intrauterine material are typical after successful management, does not indicate failure, and without ongoing bleeding should not indicate the need for aspiration
<p>If miscarriage not completed</p>	<p>If miscarriage is completed</p>		
<ul style="list-style-type: none"> Clinically stable patients may continue expectant management, consider 2nd dose of misoprostol and a 2nd follow-up, or opt for aspiration. Many providers dispense a 2nd misoprostol dose, to be taken after phone follow-up if no bleeding has occurred Uterine aspiration is recommended if there are signs of clinical instability or infection 	<ul style="list-style-type: none"> Confirm contraceptive plans and offer emergency contraception if pregnancy is not desired Patient can try to get pregnant when emotionally ready. Discuss future fertility plans and address concerns, as appropriate Offer support and referral for additional counseling if needed 		

EXERCISES: MANAGEMENT OF EARLY PREGNANCY LOSS

EXERCISE 8.1

Purpose: To practice management of challenging situations in early pregnancy loss, and consider care continuity with one patient. Note: gender specific language is used for this case.

1. A 25-year old woman you have been seeing for 5 years presents for an urgent visit. Past history includes irregular periods, which you have managed with OCPs. She reports not having had a period for 7 weeks, and now is having abdominal cramping and moderately heavy bleeding, up to a pad every hour. Her urine hCG is positive.
 - a. How would you proceed with her evaluation?

 - b. How would you counsel her while waiting for results?

 - c. If an ultrasound reveals an intrauterine pregnancy with the presence of fetal cardiac activity, how would you discuss the result?

2. The same woman comes in one year later. She had a normal delivery following the previous threatened abortion, and never restarted her OCPs. She recently began a new relationship, and has been using condoms intermittently. She began having vaginal bleeding about 5 days ago, and it is now decreasing. Her last menstrual period was 8 weeks ago. Her urine pregnancy test is positive. She brings in tissue and you see gestational sac and chorionic villi.
 - a. How would you proceed with evaluation?

 - b. How would you approach her initially with these results? How would you answer her if she asks, *“Was this miscarriage my fault?”*

 - c. What information would you provide about how this event will affect her ability to carry subsequent pregnancies to term?

 - d. What other evaluation or management would you initiate? When can she attempt to conceive again?

Teaching Points

3. The same patient presents to you three years later, at age 29. She is now in a long-term relationship, and has been attempting to become pregnant. It has been 5 weeks since her LMP, urine hCG is positive, and she has been spotting for 6 days, without passage of tissue or pain. She is tearful and distraught, as this pregnancy is desired.
 - a. Is ultrasound needed in this case? How would you assess her without ultrasound?
 - b. On examination, you find a closed cervical os, no gestational tissue, and a nontender uterus consistent with 5-week gestation in size without adnexal tenderness or enlargement. You are able to obtain a transvaginal ultrasound, which shows an intrauterine fluid collection measuring <4mm with no yolk sac present. How do you interpret these results? What are the next steps in her evaluation?
 - c. An hCG level drawn at her initial evaluation is 1000. The repeat hCG level drawn two days later is 1300. How do you interpret these results? What are your next steps?
 - d. If the EPL is confirmed and completed, what kind of support may be of use to her?

Teaching Points

9. BECOMING A PROVIDER

This chapter is designed to aid clinicians who desire to gain advanced training and become an abortion provider in their post-training practice. It offers an overview of advanced training and practice opportunities, interviewing strategies, next steps, and mechanisms for ongoing support.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be better able to:

- Discuss advanced training opportunities to build and maintain your skills
- Learn about relevant post-training practice and fellowship opportunities
- Consider opportunities for networking and finding support
- Consider ways to gain experience in reproductive health advocacy
- Reflect on personal considerations relevant to becoming an abortion provider

READINGS / RESOURCES

- Paul et al (eds). *Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care* (Wiley-Blackwell, 2009)
 - Appendix: Resources for Abortion Providers
- Related Chapter Content:
 - [Chapter 10: Becoming a Trainer](#)
 - [Chapter 11: Office Practice Integration](#)

SUMMARY POINTS

SKILL

- Continue building your knowledge about all aspects of reproductive health care—including clinical care, new evidence, and patient advocacy.
- Attain clinical experience during professional training, when your credentialing and malpractice are generally covered by interagency agreements.
- Take advantage of additional abortion training and mentorship opportunities to increase your success with future provision.

SAFETY

- Build relationships and consult often with other reproductive health providers.
- Know when to refer for medical conditions that preclude outpatient care.
- Make arrangements for hospital back up that you may occasionally need.

ROLE

- Value your impact as a provider of pregnancy options counseling, evidence-based contraceptive information, services or timely referrals, and handling of follow-up issues to the patients you serve.
- Use established local and national networks to build a collaborative community, find answers to medical and administrative questions, and learn best practices.
- Overcome commonly reported barriers, including lack of authority to implement services, liability coverage, and staff resistance, by building relationships with key stakeholders and involving staff early in the process.
- Be patient and persistent as the process of integrating care may take time.

BUILDING AND MAINTAINING YOUR SKILLS

For those who intend to go beyond your initial training, there are many options to consider in becoming a reproductive health provider. Consider opportunities to develop and maintain your skills, knowledge, and leadership, both during and after training. Contacts can be identified through the help of your mentors or existing national networks.

BUILDING A STRONG KNOWLEDGE BASE

To develop expertise and keep up with current evidence, consider:

- Signing up with a national listserv (such as [STFM Access Listserv](#)) to participate in ongoing discussions — membership requires referral by a current participant for security reasons.
- Completing supplementary readings suggested in each Workbook Chapter
- Staying abreast of medical journals such as [Contraception](#), [Green Journal](#), [Journal Watch Women's Health](#) or [International Journal of Gynecology and Obstetrics](#).
- Attending one of these annual reproductive health conferences:
 - [North American Forum on Family Planning](#)
 - [National Abortion Federation](#)
 - [Society of Teachers in Family Medicine \(Group on Abortion events\)](#)
 - [Abortion Care Network](#)

GAINING AND MAINTAINING CLINICAL COMPETENCY

Studies show that both training availability and procedural volume are correlated with future abortion provision, regardless of previous intention to provide ([Turk 2014](#), [Goodman 2013](#), [Steinauer 2008](#)).

The easiest time to gain procedural experience and advanced training is during professional pre-service training (i.e. residency or nursing program), when both credentialing and malpractice can be covered under interagency agreements between your training program and a high-volume clinical site. The procedure number to achieve confidence will vary between individuals, by comfort level, and exposure to more complex cases. Each skill can be delineated into clear steps with observable competencies for learners and for trainers-in-training ([Cappiello 2016](#)). Your reproductive health faculty can help you estimate what it will take to achieve competency in the services you hope to provide.

It is also of importance to consider where you will have a receptive environment before investing heavily in training, as the skill is lost if not immediately applied in an ongoing way.

Important aspects of clinical competence include patient comfort and rapport, procedural completeness, speed, and timely ability to identify problems ([Levi 2012](#)). Advanced skills include complication management, diagnostic and intra-operative ultrasound, and procedures with advancing gestational age.

Due to the limited training opportunities, skill maintenance and re-training have been significant challenges in most regions of the country. The competition may be greater in urban coastal areas where there are more providers. Clinics in provider shortage areas may be more willing to help with credentialing and malpractice, but back-up and security issues may be more challenging. In either case, persistence is usually essential. For more information on training outside of your program's standard curriculum or after graduation, see Organizational Resources: [Training and Employment](#) Section below.

MENTORING AND BECOMING A MENTOR

Tap every opportunity for receiving mentorship and serving as a mentor during and after your training. As you near completion of your professional training, connect with the larger community of reproductive health providers.

- Ask faculty to put you in contact with providers where you are going, and to serve as a reference.
- Use the chapter questions to stimulate ideas for practice opportunities and interview strategies.
- Mentor a student or trainee by helping fill in gaps in training at their school or program, or develop a project related to reproductive health.

LEADERSHIP, ADVOCACY, AND POLICY

Using opportunities for early leadership and advocacy during training can allow you to develop these skills with guidance from faculty mentors. Educational and advocacy organizations have created advanced curricula and structured electives to help programs integrate these opportunities into training (see TEACH [Advanced Training Curriculum](#) and [Organizational Resources Table](#)).

LEADERSHIP

Consider collaborating with faculty or reproductive health organizations to tap into other teaching, research, or advocacy projects during training. For example:

- Work with faculty to help lead didactic, experiential or hands-on sessions for incoming trainees, such as values clarification or papaya workshops.
- Speak at a meeting of Medical or Nursing Students for Choice.
- Work with faculty to expand reproductive health services in your clinics. Successful projects have included protocols for EC access, management of EPL in outpatient settings, and clinic integration of medication abortion.
- Help document successes and obstacles encountered integrating these services.
- Collaborate on a research project, conference presentation, or article publication via the network of educators in reproductive health.
- Consider completing Physicians for Reproductive Health's [Leadership Training Academy](#).

ADVOCACY AND POLICY

Access to evidence-based reproductive health care has been under increasing threat due to state and federal legislative restrictions, and religious mergers. Laws that increase disparities in abortion access have included public and private insurance prohibitions, required waiting periods, mandated counseling, and targeted regulation of abortion provider (TRAP) laws, to name a few. At the time of this writing, only five states allow advanced practice clinicians to perform aspiration abortions (Vermont, New Hampshire, Montana, Oregon, and most recently California); one state (Mississippi) restricts abortion provision to obstetricians and gynecologists ([Guttmacher, 2016](#)). These regulations are not applied to provision of comparable medical services, such as uterine aspiration for miscarriage management.

As a clinician, your opinions and expertise are highly respected by both the public and legislators. You have the potential to influence policy and legislation on a local and national level. Clinicians innately have the skills for being effective and powerful advocates, including a wealth of patient stories, technical and scientific knowledge, access to and understanding of research, and experience advocating on behalf of patients ([Earnest 2010](#)). An easy introduction to legislative advocacy can be undertaken by joining a lobby day coordinated by a reproductive rights organization, since the scheduling and talking points are usually provided by the organization. To make an impact on institutional policies, consider joining a clinic or hospital committee on practice, training or quality.

Working within your state or national chapter of your professional organization, such as the American Academy of Family Physicians and American Academy of Nursing, is another way to improve education and influence policy and legislation. For example, you can join the curriculum advisory for your specialty or the ACGME Residency Review Committee to ensure adequate inclusion of sexual and reproductive health in the curricula. Or you can advocate within your organization to develop the scope of practice for clinicians to include abortion provision ([Weitz 2009](#)) or for transparency in medical education in faith-based restrictions that may interfere with training (AMA and adopted [AMA Policy 2014](#)). Many organizations have chapters for trainees or early career clinicians, encourage involvement by younger clinicians, and provide funding for meeting attendance.

For organizations that provide materials, support, and training for clinician advocates, see Organizational Resources Table: [Advocacy Section](#). A concise overview of advocacy opportunities can be found through Physicians for Reproductive Health, which offers:

- [Advocacy Elective](#): One-on-one training opportunity for residents and students
- [Advocacy Module](#): an advocacy Powerpoint toolkit for practical knowledge and next steps.

FINDING PRACTICE OPPORTUNITIES

In what setting do you visualize your future participation in reproductive health services? There are many job opportunities available to you that can include reproductive health care provision.

You may join a setting where reproductive health services are already integrated or are the main focus of the practice. If services are not yet integrated, you can have the excitement and challenge of pioneering them at a site. It may be possible to offer some services initially, and expand with time. Below are a few ways to begin thinking about the integration of reproductive health into your future work.

STRATEGIES FOR INTERVIEWING

When considering post-graduate employment opportunities, these questions may help you interview and evaluate whether reproductive health service provision will be possible in different practice settings.

- What is the scope of practice specifically regarding reproductive health care? For example, does the site already provide prenatal and obstetric services? What are the patient demographics? What is the mix of reproductive-aged patients?
- What is the range of contraceptive services accessible to patients, and are there patient challenges gaining access to long-acting reversible contraceptives? What are the barriers, e.g. insurance limitations or outdated restrictions?
- What is the political climate in the area? Consider talking to other regional reproductive health providers before approaching a new job site directly.

- How are prenatal care, early pregnancy loss, and /or genetically indicated abortion referrals managed? These questions can help better understand their feelings about reproductive health and their referral systems. Ask how they respond to patients who ask for abortion services.
- If appropriate, consider letting them know that you have special training in abortion care, advocacy, and administrative set-up; and that you would be willing to spearhead the effort to bring a broader array of these services to the practice or training program. If they seem interested, follow up with these questions:
 - Do they encourage staff training? Or training for nurses or clinicians?
 - What arrangements do they have for hospital or OB / GYN back up?
 - Do they already provide 24-hour call?
 - Is there a way you can build in abortion provision from the start? Ideally this can be figured out before you go to your home institution so that the new skill can be applied without a gap, as gaps often mean a retraining will be needed.
- Talk about the importance of continuity of care to your patients, or the importance of including these topics for trainees. Share a success story from your training—a patient who was able to be seen by her own continuity provider and how comfortable felt receiving her reproductive health services in a familiar setting.
- We know that the decision to provide reproductive health services may be one of many issues you discuss in the interview. You can use these strategies to identify how the practice responds to patients' reproductive health needs generally and to undesired pregnancies specifically.

ADDRESSING BARRIERS TO PRACTICE INTEGRATION

Following training, graduates in a variety of fields have experienced barriers to practice. While trained family medicine graduates considered comprehensive reproductive services as important to include in their ideal practice, many faced barriers such as lack of authority or time to implement services, practice restrictions, malpractice coverage, staff resistance, and strength of competing practice interests (Goodman 2013). Post-training practice restrictions, both formally and informally imposed by employers, were associated with decreased odds of provision among obstetrician-gynecologists (Freedman 2010). Advanced practice clinicians have the potential to expand abortion access but have also faced barriers in obtaining training and legal barriers in providing services (Samora 2007).

Consider gradually building on the types of reproductive health care you offer in your setting. For example, begin expanding contraceptive services and abortion referrals, followed by integrating miscarriage management. Cultivate relationships with key stakeholders, involve staff early in the process, and find support from mentors and reproductive health organizations. Be patient and persistent, as the process will take some time. Keep returning to your core beliefs about the importance of expanding care for your patients.

JOINING EXISTING CLINICAL SERVICES

Consider becoming a contract clinician for a high volume abortion provider. This can be done as your primary work or to supplement another position. It is a great way to maintain your skills, add variety to your job responsibilities, and become more involved in the reproductive health community. Perhaps you can work as a contract clinician in your own community or fly into other parts of the country that lack providers. Speak with your mentors and contacts about the regional needs where you are going, and level of experience suggested to apply. National programs, including [Creating a Clinician Corps \(C3\)](#), can match trained clinicians with clinics currently in need of abortion providers. Your willingness to travel to areas of need may assist to get your foot in the door. Your mentors may be willing to provide you phone backup to allow you to feel more comfortable as a new provider.

JOINING FACULTY

One way to build on your skills is to work at a professional training program that needs or already offers reproductive health services. Working alongside more experienced clinicians is a great way for early learners to solidify their experience and confidence. Gaining insight into the steps that your training program took to integrate reproductive health care services can help you be prepared to consider replicating the model in a different setting in the future. [Reproductive Health Education in Family Medicine \(RHEDI\)](#) can connect you with many family medicine residencies around the country. Interested advanced practice clinicians should contact the Primary Care Initiative at [UCSF's ANSIRH Program](#).

BECOMING A TRAINER

Consider becoming a trainer in your own training program or at another site. This is a great way to advance your own skills while becoming a resource person to others. It will also ensure that you are keeping abreast of the latest research and advances. More detailed information on becoming a trainer is available in [Chapter 11](#).

EXPANDING CONTRACEPTIVE METHODS IN YOUR PRACTICE

Consider whether your practice environment ensures that patients have easy access to the full range of contraceptive options, including the most effective ones (IUDs and implants). Insertions and removals are core skills to acquire during training. For privileges to insert and remove the contraceptive implant, it is necessary to take a training class offered directly by the [pharmaceutical company](#). Integrating long acting methods into your practice can usually be done with minimal effort, equipment, and a bit of research on product ordering and reimbursement. Working to minimize barriers to access, by improving logistics or implementing same-day services, are other areas for productive improvement. For more tools, see <http://beyondthepill.ucsf.edu> and <http://larcprogram.ucsf.edu>

IMPROVING REFERRALS IN YOUR PRACTICE SETTING

Taking an active role in improving referrals at your practice may be an excellent first step in expanding access to abortion care ([Zurek 2015](#)), and especially important as targeted legislation restricting abortion access has resulted in facility closures and greater complexity in obtaining services. Competent referrals (see [Chapter 2](#)) can help counter misperceptions or deliberate misinformation about legality and safety of abortion, and can assist with complex social or medical circumstances faced when accessing care. Improving care coordination is especially important in settings with limited access where patients face greater stigma.

INTEGRATING MANAGEMENT OF EARLY PREGNANCY LOSS (EPL)

Expanded options for managing EPL – including expectant, medication, and aspiration management – can be integrated into one's outpatient clinic setting or into Emergency Department services. The counseling, consent, and follow-up for different management options are addressed in [Chapter 8](#). Misoprostol can be pre-ordered and available on-site for patients who desire medication management. Manual vacuum aspiration requires further training of clinic staff in order to ensure a safe environment (see [Getting Started Section](#) of Office Practice Chapter for planning steps).

Because EPL does not involve a viable pregnancy, its management is not considered an abortion for funding or malpractice purposes, and can be treated like any other minor surgical procedure that you routinely provide. Integrating EPL management might be a stepping-stone towards integrating abortion care in your practice, as the skills and equipment are similar, but the path may be more readily approachable.

PERSONAL SECURITY

As you develop your skills and begin your job search, reflect on how public you want to be as an abortion provider. This decision will be influenced by your local environment and family situation. Your stance may evolve as your career, personal relationships, and political environment change. Regardless of how public you decide to be, it is important to consider personal security precautions. It may be safer to begin with tighter security and become more lax in the future, than the reverse. Taking some basic precautions may also help reduce the stress of living and working in an environment where you could be targeted.

You can start by considering your online security, with privacy settings on social media, avoidance of personal photographs connected to your name, and avoidance of your name on public records (such as home purchases). To avoid having your private information accessible, opt-out information is usually hidden within the “privacy statement” or in website FAQs. Most sites require that you send in a written letter with some proof of your identity and statement that your safety is at risk. There is no cost for doing this. More information and a [sample letter](#) are available for you [here](#).

Talk to providers in your area about their own personal security precautions. It is helpful to get mentorship from a provider with security knowledge and personal experience before you get started rather than to remedy problems after they occur. National Abortion Federation members can be provided with personal security assessments, in addition to clinic security support. Physicians for Reproductive Health has launched the [Partnership for Physician Safety](#) which aims to supply abortion providers with the information and resources needed to be more secure at home, at work, and in their communities. See the supplementary tool [Personal Security Tips](#) for more specific advice on personal security. And see [Chapter 11 Office Practice Integration](#) for detailed information on clinic security.

BEYOND TRAINING

There is a proud, egalitarian, and cooperative history of women’s health care that informs the training process around abortion. This movement and the integration of comprehensive reproductive health training into the core curriculum of many professional training programs have vastly changed the delivery of reproductive health care in this country. As we proceed with efforts to improve training and access to abortion services, there are many inspiring examples of collaboration within and across disciplines, not only between specialties, but also between clinicians, staff, scientists and activists. Extensive clinical research and expanding evidence has enhanced effective training and practice in reproductive health. We hope this workbook has given you the knowledge and enthusiasm to join with us as providers and to further expand access to these essential healthcare services.

ORGANIZATIONAL RESOURCES *

Listsers
<p>STFM Access Listserv</p> <p>A private discussion group to discuss clinical, educational and administrative issues in offering comprehensive reproductive health care services. For membership, email techmanager@rhedi.org.</p>
Advocacy
<p>Advocates for Youth</p> <p>Helps young people make informed and responsible decisions about their reproductive and sexual health</p>
<p>Catholics For A Free Choice</p> <p>Information and advocacy for patients, providers, and activists on abortion and reproductive health care issues within a catholic framework.</p>
<p>Center for Reproductive Rights (CRR)</p> <p>Uses the law to advance reproductive freedom as a fundamental human right</p>
<p>URGE: Unite for Reproductive & Gender Equity</p> <p>Mobilizes and supports the diverse upcoming generation of leaders in reproductive justice.</p>
<p>Feminist Majority Foundation</p> <p>Works to advance women's equality and empower women and girls in all sectors of society.</p>
<p>NARAL-ProChoice America</p> <p>Provides information and political action around issues of abortion and reproductive health care issues.</p>
<p>The Native American Women's Health Education Resource Center (NAWHERC)</p> <p>Documents reproductive justice issues and uses activism to promote the voices of Native women.</p>
<p>National Asian Pacific American Women's Forum</p> <p>Works on a broad range of issues that affect Asian Pacific American women, including reproductive justice.</p>
<p>National Latina Institute for Reproductive Health</p> <p>Ensure the fundamental human right to reproductive health for Latinas, their families and their communities through education, advocacy and coalition building.</p>
<p>National Network of Abortion Funds</p> <p>Network of independent organizations that provide financial assistance to women to pay for abortions.</p>
<p>National Partnership for Women & Families</p> <p>Promotes fairness in the workplace, reproductive health and rights, access to quality, affordable health care and policies that help parents meet the dual demands of work and family.</p>
<p>National Women's Law Center</p> <p>Champions policies and laws that help women and girls achieve their potential throughout their lives. Assists patients with insurance coverage for contraception (coverher.org)</p>
<p>Religious Coalition For Reproductive Choice</p> <p>National organization of pro-choice clergy and churches. Can provide spiritual counseling</p>
<p>Sea Change</p> <p>Dedicated to transforming the culture of stigma around abortion and other stigmatized reproductive experiences.</p>
<p>Sister Song</p> <p>Builds networks to improve institutional policies and systems that impact the reproductive lives of marginalized communities, and trains the next generation of activists.</p>

Medical and Professional Organizations
<p>Association of Reproductive Health Professionals (ARHP)</p> <p>National organization for health care professionals across disciplines and specialties for training and network building. This site provides clinical and patient resources on reproductive health topics.</p>
<p>Clinicians for Choice</p> <p>Membership organization for clinicians that is sponsored by NAF. Members are provided with opportunities for networking, mentorship, coalition building, advocacy, and training.</p>
<p>TEACH CREATE Program (Continuing Reproductive Education for Advanced Training Efficacy)</p> <p>Partners with residency programs to provide a structured advanced training curriculum for advanced trainees that addresses the barriers between training and future reproductive health provision.</p>
<p>Planned Parenthood Federation of America (PPFA)</p> <p>A national umbrella organization for all local Planned Parenthood affiliates. The website has position papers, fact sheets, and FAQs about abortion.</p>
<p>Physicians for Reproductive Health (Physicians)</p> <p>Supports and trains physicians in providing reproductive health advocacy and improving medical education. Their website contains information about their training programs and educational videos.</p>
<p>Provide</p> <p>Seeks to ensure access to abortion by increasing services and raising awareness. Their website contains curriculum on making referrals, management of early pregnancy loss, and resources for nurses.</p>
<p>Reproductive Health Access Project (RHAP)</p> <p>Works directly with primary care providers to integrate abortion, contraception and miscarriage management, and links residents with mentors. See their site for helpful handouts and training tools.</p>
<p>RHEDI: Center for Reproductive Health Education in Family Medicine</p> <p>Provides funding and expertise to integrate comprehensive abortion and family planning training in family medicine residency programs. Their site has clinical resources for integrating services and fact sheets.</p>
<p>Ryan Residency Training Program</p> <p>Provides resources to institute a dedicated, opt-out family planning rotation for OBGYN residencies.</p>
Training and Employment
<p>Medical Students for Choice (MSFC)</p> <p>National organization for medical students. Their Training to Competence Externship provides residents with financial and logistical support for receiving abortion training.</p>
<p>Nursing Students for Choice (NSFC)</p> <p>National organization for nursing students. Their site contains education resources and information about their Clinical Externship Program.</p>
<p>Fellowship in Family Planning</p> <p>Fellowship based at UCSF with sites for graduates of family medicine and obstetrics and gynecology residency programs throughout the U.S. Fellows are provided with specialized training in research, teaching, and clinical skills in contraception and abortion over two years.</p>
<p>Reproductive Health Care & Advocacy, GAPS, and Miscarriage Management Fellowships</p> <p>These fellowships provide family physicians with further training in reproductive health care and advocacy. Fellows are provided with clinical, teaching and leadership skills over one year.</p>
<p>Reproductive Health Fellowship in Women's Health</p> <p>A one-year fellowship providing further training for family physicians in contraception and abortion.</p>
<p>TEACH Leadership Fellowship</p> <p>This one-year fellowship provides family physicians with further training in reproductive health care, advocacy, and leadership. Fellows are provided with clinical, research, advocacy and leadership skills.</p>
<p>The Leadership Training Academy (LTA) of Physicians for Reproductive Health Physicians</p> <p>This program provides physicians with training in advocacy, leadership and communication skills to become effective advocates. The training consists of webinars and 3 in-person meetings over 8 months.</p>
<p>Maternal Child Health and Obstetrics Fellowships</p> <p>Some of these fellowships provide family physicians with further training in full spectrum reproductive health care. Ask specifically about inclusion of abortion training.</p>
<p>Creating a Clinician Corps (C3)</p> <p>Matches clinicians with clinics and health centers with an immediate need for abortion providers.</p>

* See Chapter 12 Organizational Resources for a) Hotlines, b) Legal, c) Research, and d) Sexuality Education.

EXERCISES: BECOMING A PROVIDER

EXERCISE 9.1

1. In which setting(s) do you visualize your future participation in reproductive health or abortion care? Do you imagine joining a team that already offers services? Or do you picture starting services in a new site? Do you see yourself adding reproductive health services in a setting where access is currently limited? Do you see yourself as a trainer or joining a professional training or residency program as faculty?
2. How will you connect with other providers in your region?
3. How do you frame this discussion with potential employers? How would you ascertain if your potential employer is open to offering abortion services?
4. If an employer thought Title X clinics couldn't provide abortions, what would you say to them?

Teaching Points

EXERCISE 9.2-Employment negotiations

1. Preparation is key to successful interviewing and negotiations with a future employer. Examine your practice priorities and rank them by their relative importance. What strategies can you use to ensure that your priorities are met?
2. Creating a list of questions prior to your interview will help you prepare. What information would you want to obtain? How will you address parts of the interview process that will be more challenging for you?

Teaching Points

EXERCISE 9.3- Managing stigma: the decision to disclose

(Adapted from The Providers Share Workshop, Hassinger, 2012)

For most people talking about their work hardly registers as a decision. For abortion providers, doing so always involves assessments (sometimes unconscious) of risks and benefits, for oneself as well as family members. Below is an exercise to help:

- Deepen awareness of ways disclosure is negotiated in your life
- Evaluate the risks and benefits of the decision to disclose or not, and
- Increase control over disclosure decisions.

Exercise instructions –

See table below, and select a relationship in which issues of disclosure arise. Explore the risks and benefits of disclosure (to you or the relationship). If you have time, make a possible disclosure plan, and role-play.

Relation-ship	Time or Age	Contextual Details/ Consideration	Disclosure		Non-Disclosure		Decision*
			Potential Risks	Potential Benefits	Potential Risks	Potential Benefits	
EXAMPLE Adult Extended Family	Now	My in-laws do not know about my abortion work. They are religiously conservative and anti-choice. I have 2 young children. We are close and rely on their assistance with childcare.	Loss of relationship would be a loss to kids, and loss of family support. Could undermine my work. Risks consequences in their community.	Possibility they accept. Relief from worry about silence, “accidental outing”. Extended family could celebrate my successes.	Uncontrolled accidental outing, Persistent strain on relations. Not sure I can disclose to kids –moves to a family secret.	Preservation of innocent relationships and tenuous peace in family. Continued reliance on them for childcare.	

*D = I mostly discuss openly, but sometimes choose not to. ND = I never discuss; the risks are too great.

Teaching Points

10. BECOMING A TRAINER

This full chapter can be found [online](#) only or as a separate download from our [website](#).

This chapter is designed to help you train clinicians to competence in early abortion care and miscarriage management. It presents techniques for efficiency in training as well as integration of training into the clinical setting.

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be able to:

- Maintain balance between patient-centered care, safety, clinic flow, and training
- Ask trainees for self-assessment and give effective feedback to trainees
- Assess competence in abortion provision
- Respond appropriately to difficult training situations
- Integrate training seamlessly into a busy clinical setting

READINGS / RESOURCES

- Competency Checklist: [Chapter 12 Training Evaluation](#)
- Clinic flow strategies for training clinics and debrief questions

11. OFFICE PRACTICE INTEGRATION

This full chapter can be found [online](#) only or as an separate download from our [website](#).

This chapter is designed to aid primary care clinicians interested in integrating early pregnancy loss (EPL) and abortion care into their own practice. In recognizing the range of our audience – different states, training backgrounds, and political environments – we have aimed to provide a breadth of tools that may be useful to you as you proceed. Additional tools and/or handouts are downloadable (with links in blue) throughout this chapter and also available online at <http://www.teachtraining.org/Workbook.html>

CHAPTER LEARNING OBJECTIVES

Following completion of this chapter, you should be better able to:

- Discuss important initial steps for introducing services into a practice
- Find allies and build buy-in among staff and key-stakeholders
- Learn pertinent aspects of medical documentation and quality assurance
- Know how to find current legal and reporting restrictions for your state
- Know malpractice and financial opportunities and restrictions for your setting
- Understand security precautions important for abortion provision
- Understand where you can find ongoing support locally, regionally, and nationally

READINGS / RESOURCES

- Paul et al (eds). Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care (Wiley-Blackwell, 2009)
 - Chapter 23: Ensuring quality care in abortion services
 - Appendix: Resources for Abortion Providers

12. TRAINING EVALUATION

This full chapter can be found [online](#) only or as an separate download from our [website](#).

Evaluation and feedback are among the most important tools in effective learning. The ACGME and the [American Board of Medical Specialties \(ABMS\)](#) provide [information](#) about the validity and feasibility of a variety of evaluation methods that may be used to assess performance and skills.

The following instruments, developed for use with this Training Workbook, are based on ACGME-recommended methods. They include specialty competencies for primary care clinicians providing early abortion care, regardless of setting. They include essential knowledge, behaviors, and skills that primary care clinicians should be able to demonstrate upon application for practice in abortion care and the prevention of unintended pregnancy. These instruments are designed to assist in the evaluation of participants, faculty, staff, and the overall rotation. All forms may be used or adapted for the professional training program or high-volume training setting. These and various alternative evaluation forms can be downloaded separately at either <http://teachtraining.org> or www.rhedi.org.

CHAPTER LEARNING OBJECTIVES:

- Skills and Experience Inventory : To assess experience prior to the rotation
- Trainee Agreement and Consent Form: To consent to training
- Procedure Log: To record all trainee procedural experience.
- Training Program Evaluation: For trainees to review the overall training program
- Daily Evaluation Card: Designed for faculty to evaluate trainees on a daily basis
- Observed Performance Assessment: For faculty to evaluate trainees
- Core Competencies for First Trimester Aspiration Abortion by Primary Care Clinicians: Entry-level specialty competencies for providing early abortion care, regardless of setting

In addition, this section includes:

- Clinician Feedback Form for Clinic Staff: For training site staff to review the trainee's performance, with regards to patient care and professionalism
- Clinic Services Satisfaction Survey: A patient satisfaction survey to use in training sites

For Advanced Skills evaluation, this section includes:

- Early Pregnancy Ultrasound Skills Evaluation: A competency evaluation for early pregnancy ultrasound
- New Trainer Skills Evaluation: A competency evaluation for new trainers

TEACHING POINTS

The teaching points presented here are designed for an in-depth reference and review of Chapters 1 – 9 Exercises by learners. For maximal learning, we recommend reviewing or discussing the Exercises in depth prior to consulting these.

Chapter 1 – Orientation

Chapter 2 – Counseling and Informed Consent

Chapter 3 – Evaluation before Uterine Aspiration

Chapter 4 – Medications and Pain Control

Chapter 5 – Uterine Aspiration Procedure

Chapter 6 – Contraception and Aftercare

Chapter 7 – Early Medication Abortion

Chapter 8 – Management of Early Pregnancy Loss

Chapter 9 – Becoming a Provider

1. TEACHING POINTS: ORIENTATION

The values clarification exercise can be challenging, satisfying, and thought provoking. Consider the origin of your beliefs. How could your feelings affect the interactions you have with a patient? How could recognizing these feelings prior to the interaction have a positive impact upon patient care? How do you anticipate your feelings could change with this training experience?

Consider the following key points:

- There are no right or wrong answers.
- Patients have the right to make decisions for themselves and to receive legally available medical services supporting these decisions.
- As the healthcare provider, you serve patients best by providing active listening and accurate information. Strong negative reactions to patient behavior may harm the provider-patient relationship.
- Each of us is shaped by our personal life experiences, which in turn may affect our judgments. It is important for health care providers to identify and understand those influences. Self-exploration and understanding help us to promote a non-judgmental climate for patient interaction and care.
- We cannot know what the best decision for each patient is without walking in their shoes. Imagine what is going on in their life to explain their decisions and behavior.
- Family planning and contraceptive recommendations by health care providers have been found to vary by patient race/ethnicity and socioeconomic status and may contribute to healthcare disparities, suggesting that providers should be particularly aware of subconscious bias (Dehlendorf 2010).
- Family planning decisions are well served by a shared decision making approach that takes into account the best scientific evidence, as well as the patient's values.

EXERCISE 1.1: General Feelings about Pregnancy Options

Purpose: This exercise is designed to illustrate the range of beliefs about the acceptability of pregnancy options and to help you clarify your personal views about your patients choosing abortion, adoption, or parenthood.

1. **In general, how do you feel about your patients choosing abortion, adoption, or parenting in each of these situations? Are you challenged to accept a patient's decision in the following circumstances?**
 - There are no right or wrong answers to this exercise.
 - If you feel ambivalence about one of these scenarios, consider what patient situation would change your view.
2. **Were you surprised by any of your reactions? How have your life experiences contributed to these feelings?**

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EXERCISE 1.2: Gestational Age and Abortion

Purpose: This exercise is designed to help you clarify whether your beliefs are influenced by the gestational age of a pregnancy.

1. **At what gestational age do you start feeling uncomfortable about your patient choosing to have an abortion? Check all that apply.**
 - Consider what happens between the gestational age that feels all right and the one that doesn't.
 - Does your response have to do with your understanding of fetal development, concerns about fetal pain, physical risk to the patient, what it feels like doing the procedure as a provider, or other perceived ethical concerns?
 - When (if ever) you first saw a gestational sac or fetal parts, how did you feel about it? Were there any factors that influenced how you felt?
2. **Do you feel different about the gestational age if you are making a referral vs. performing an abortion? If so, why?**
 - If you are struggling with the idea of making referrals, consider if the situation differs from other medical circumstances where we value accurate, evidence-based information and patient autonomy.
 - Are there ways to respect the moral autonomy of the patient, without undermining your own?
 - What if no other alternative abortion services were accessible? What kind of patient hardship would motivate you to offer services?
 - Each provider is different and needs to find their own comfort level.

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EXERCISE 1.3: *Your Feelings about Patient's Reasons*

Purpose: This exercise will help you clarify your feelings about some potentially challenging situations than may arise in abortion care.

1. **How would you feel about referring or providing an abortion for a patient who:**
 - a. is ambivalent about having an abortion but whose partner wants them to terminate the pregnancy.
 - While this decision is important for both partners, it is the pregnant patient who has the legal right to make the final choice. In addition, they are the one bearing the risks of pregnancy and ultimate responsibility for the child.
 - b. **wishes to obtain an abortion because they are carrying a female fetus**
 - Sex selection brings up complicated ethical and cultural issues. It might be helpful to ask if there are medical or cultural reasons that support their preference (i.e. sex-linked genetic conditions or family pressure to have a male child). Discussing these with the patient may help you better understand their position and decide your comfort level or need to refer.

c. has had many previous abortions

- Over half (54%) of patients obtaining abortions used a contraceptive method during the month they became pregnant ([Jones 2002](#)).
- Patients have multiple abortions for many reasons. Discussion may help you better understand their personal barriers to avoiding unintended pregnancy.
- Comprehensive contraceptive counseling, including long-acting methods and emergency contraception, may help them find a method that meets their reproductive goals

d. indicates that they do not want any birth control method to use in the future

- Patients often wish to avoid sex after abortion. Help the patient assess their situation and whether abstinence is a likely reality. You may tell them you have heard this perspective from patients you have seen back later with unintended pregnancy. Proactive planning is an important form of self-care; however, it is also important to avoid pressuring a patient into choosing a method they don't want, as many patients will not desire more information about contraception on the day of abortion ([Mattulich 2014](#)). Discuss birth control options, and what has or has not worked in the past. At a minimum, give condoms and emergency contraception, and recommend they return if their situation changes or offer a scheduled follow-up visit to discuss it further.

2. What factors influenced your choices? How might you handle your discomfort when caring for patients under these circumstances?

- Recognizing personal discomfort with a situation is an important step towards providing unbiased care. Remember there may be more to the situation than the patient communicates directly.
- Sometimes talking with colleagues may be helpful. Sometimes referral will be the best option for your patient. Consider how best to provide appropriate support for them.

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EXERCISE 2: Feelings about Providing Abortions

Purpose: This exercise will help you clarify your feeling about abortion provision.

1. As you embark on this experience, consider how you might disclose this training to others. Do you think there are any parallels between the stigma that patients and providers experience?

- As you explore your level of involvement with options counseling and abortion care, consider the implications this may have on disclosure to family, friends, or acquaintances.
- A “prevalence paradox” is a phenomenon that can affect patients and providers alike ([Kumar 2009](#)). The less something is talked about, the more stigmatized and rare it seems when in fact it is very common. In other words, silence creates a vicious cycle that often distorts the true nature of things. Research supports that having a safe space to discuss the stigma around abortion may alleviate the burdens on staff and providers ([Harris 2012](#)).
- Utilize faculty support during this rotation to discuss whether you experience a sense of burden or stigma.

2. **Consider the following quotation on the role of “conscience” in abortion provision, and not just the historical focus on the refusal to participate. What are your thoughts on how this view affects stigma?**

“[Providers] continue to offer abortion care because deeply held, core ethical beliefs compel them to do so. They see women’s reproductive autonomy as the linchpin of full personhood and self-determination, or they believe that women themselves best understand the life contexts in which childbearing decisions are made.. among other reasons” (Harris, “Recognizing Conscience in Abortion Provision,” NEJM 2012).

It is important to recognize the “conscience” in abortion provision, and not just in the refusal to participate. The goal of this exercise is to teach learners how provision can address stigma, and impact clinical practice, law, and bioethics.

Some learners find it helpful to read or hear about other providers and their path to abortion care. For examples, see [Physicians](#).

Consider how your role as a healthcare provider places you in the position of not just having an opinion on comprehensive reproductive health care, but being in a position to provide it.

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EXERCISE 3: Abortion access (Optional)

Purpose: The negative public health impact of restrictive abortion laws is well documented. The following exercise is designed to help you think through the consequences of limited access. How might your decision to offer options counseling, referrals, or services influence the accessibility of abortion where you may practice?

1. **What is your reaction to the following account?**

It is estimated that for every 99 U.S. patients receiving abortion, 1 presents for care beyond the capabilities of a particular clinic to receive one. Many factors delay patients seeking care. Here two patient’s explanations of what caused a delay in access to care from the ANSIRH [Turnaway Study](#):

“Still trying to get Medicaid and arrangements to stay for the procedure since it was out of town. Trying to get insurance.” 23-year old Hispanic patient from New Mexico, at 22 weeks

“I didn’t find out until I was 22 weeks and getting the funding. I was determined but there was so much preventing me from getting up there.” 24-year old white patient from Minnesota, at 24 weeks

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2. TEACHING POINTS: COUNSELING AND INFORMED CONSENT

EXERCISE 2.1: Pregnancy Options Counseling

Purpose: The following exercise is designed to review pregnancy options counseling. Consider using role-play in the following scenarios.

- 1. One of your patients presents with an unexpected positive pregnancy test during clinic or in the ED. How would you approach this?**
 - Explain that a pregnancy test was part of the routine work-up if not clear.
 - Your role is to listen, support, and ask questions that will help a patient come to a decision about this pregnancy, although not necessarily at this visit.
 - Some providers ask patients what result they hope for before the test. Once giving the result, wait for them to respond following with:
 - *“How do you feel about this result?”*
 - *“What would it be like for you to continue a pregnancy at this time?”*
 - *“What do you know about your options?”*
 - A patient may have strong feelings one-way or the other, and may not need full options counseling.
 - If they need more time, consider having them imagine their life now and a few years from now, and how they will feel about their decision in each circumstance; or refer them to the online [Pregnancy Options Workbook](#).
- 2. When you ask a patient what questions they have, they want to know if an abortion will affect their ability to have children in the future. How would you respond?**
 - Uncomplicated vacuum aspiration and medication abortion has been shown to have no effect on a patient’s future reproductive health.
 - There is no measurable increased risk of infertility, spontaneous abortion, or pre-term delivery.
 - Available data suggest that multiple abortions pose little or no increased risk compared to a single procedure.
 - You might say *“There is a lot of misinformation out there about this issue, but abortion is extremely safe and will not affect your ability to get pregnant in the future if and when you want to”*.

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3. **A patient is leaning toward adoption, but is trying to decide, and wants to know more about the process and options. How would you respond?**
- The following concepts about adoption can be useful to discuss:
 - Giving birth and raising a child are two different things. You might be ready for one but not for the other.
 - A birth mother can think of adoption as a way to select parents for the baby, as opposed to giving the baby to adoptive parents.
 - Birth mothers commonly feel sadness about relinquishing a child, even though it might be the best decision for them.
 - Introduce differences between open and closed adoptions, and give referrals as appropriate. Please see the [Chapter 1: Adoption Facts](#) Section.
4. **Consider the following responses to a common patient statement, in terms of what it allows or disallows in further conversation. Which response do you think is most helpful? What other questions/phrases might you find helpful? (Adapted from Perrucci 2012, Exercise 3.3)**

A patient says, “I feel sad.”

Response 1: “Is that making you feel less sure about your decision?”

What it allows: Checking to see if the patient is sure about their decision.

What it disallows: Asking this question right after the patient says they are feeling sad, guilty or grief stricken can imply that you are uncomfortable with the patient’s emotions or that somehow their feelings are not okay to have. Instead precede this statement with validation and normalization.

Response 2: “Would you like me to give you a referral for a talk line?”

What it allows: Assessing the patient’s need for post-abortion resources.

What it disallows: It closes down the space in the here and now to talk about the patient’s feelings. When you lead with this response, you are communicating that you would prefer they talk about their emotions with someone else.

Response 3: “What kinds of things have you done in the past to help cope with sadness?”

What it allows: This is a good question to assess coping skills.

What it disallows: This question could communicate that you are uncomfortable talking about emotions and more comfortable planning for coping post-abortion. It is better to first communicate that there is nothing wrong with feeling sad about having an abortion. Sadness is a healthy and normal response. Keep in mind that it is equally true that not feeling sadness is normal and healthy.

Response 4: “Can you say more about that?”

What it allows: The question seeks to understand the patient’s feelings.

What it disallows: Nothing. You are seeking understanding and have communicated your interest in learning more about the patient’s experience.

What other questions/phrases might be helpful?

“A lot of patients feel that way.”

“It is ok to cry here. I am right here with you.”

“Is there anything that is making this particularly difficult?”

5. **While you are explaining the protocol for a medication abortion to a patient, they mention that their boyfriend “absolutely cannot find out about this”. What concerns does this raise and how can you explore this further?**
- Use open-ended questions to explore the relationship dynamics, as there may be reproductive coercion occurring.
 - *“Tell me a little more about your relationship, and how your partner might feel about the pregnancy.”*
 - *“Is your partner pressuring you to make a decision about this pregnancy, or about the birth control you used?”*
 - Validate and normalize the patient’s feelings about the situation and remind the patient that you will support their decision no matter what.
 - *“This is your decision. It can be hard when the people around you do not support your decision but this is your decision.”*
 - You can explore options for birth control that their partner would not know about or be able to control.
 - If not done already, you should screen for intimate partner violence and make a safety plan.
 - Offer to refer the patient for further counseling around these issues if needed.

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EXERCISE 2.2: Counseling around clinical care

Purpose: Discuss what you might do or what you might say to the patient in each of the following situations when you come into the procedure room.

1. **As you enter the exam room you hear the patient’s partner criticizing them for “acting stupid” and telling them angrily to “just shut up.” The partner is looking at the wall and ignores your efforts to introduce yourself.**
 - It is essential to talk to the patient without the partner present.
 - Explain that you routinely do an exam with the patient alone and have the partner go out to the waiting room.
 - Ask the patient about the tension you observed and how they are feeling about the decision.
 - A domestic violence screen is appropriate, and you should know the reporting laws for your state.
2. **When you come into the exam room and ask the patient how she is feeling, she starts crying uncontrollably. She has her head turned away from you and does not make eye contact.**

Crying is normal, but check in with the patient about how they are feeling. *“Many patients cry at the time of abortion. Is there any way I can help you now?”* Consider asking, *“Can you tell me what those tears mean?”*

Is the patient fearful? Unresolved? Feeling pressured into the decision? You may add something like, *“I can’t proceed unless I understand where you are coming from, and that you want this procedure. If you aren’t sure, we can postpone until you are feeling more certain. Do you need some more time?”*

3. **Before you begin an exam or procedure, the patient asks, “Is this going to hurt?”**
Reassure the patient that this is a frequent question and that that procedure is very quick, safe and common.

- *“Each patient experiences it differently, but most tolerate this procedure pretty well.”*
 - *“This is a very quick, safe and common procedure.”*
 - *“Some patients have little pain. Some feel cramping, pressure, or pain, but that part only lasts a few minutes.”*
 - *“There are some things you can do to help with the cramping. Keeping your breath slow and controlled will help, as will relaxing your muscles.”*
 - *“I’m going to help you be as comfortable as possible, and we can talk to you during the procedure if you’d like.”*
 - *“You are in control of your body and can tell me what you are feeling.”*
 - It’s helpful to give a role to the patient’s partner, to hold their hand, help with breathing, and provide reassurance.
4. **The patient is a 14-year-old rape survivor who is 7 weeks pregnant. Every time you attempt to insert the speculum, they raise their hips off the table.**
- Offer, *“This is not your fault. It’s very common for patients in your situation to be uncomfortable with this exam”.*
 - Offer the patient choices so they can think about what is best for them, and be more empowered after a very disempowering experience.
 - Offer to practice a Kegel during the exam to relax perineal muscles or push their hips downward into the table.
 - Suggest that they are in control of their own body, giving suggestions about how to hold still to make the procedure safer.
 - If still unable to relax, consider more medication or conscious sedation.
 - Consider the possibility that they need a referral for deep sedation.
 - Be aware of mandated reporting laws in your state. Most states require reporting for any minor (<18 years old) who reports sexual abuse or if the partner is significantly older than the minor. For example, if this scenario was a 14-year old female with a 21-year old male partner, you are usually required to report this case, even if the sex was consensual. For state laws: <http://aspe.hhs.gov/hsp/08/sr/statelaws/statelaws.shtml>.
5. **You have just completed an aspiration (for abortion or early pregnancy loss) for a patient at 8 weeks gestation. The patient asks, “Can I see what it looks like?” How would your response differ at 12 weeks gestation?**
- Normalize the request and ask for clarification. “That’s a common question. Tell me more about what you’re thinking.” Sometimes a patient is really asking just if it’s possible to see it, or what you do with the tissue.
 - Before 9 weeks it is difficult to visualize fetal parts, and it can be therapeutic for a patient to see the pregnancy tissue, particularly if they perceive the pregnancy as “a formed baby” (often the impression from the protestors signs outside the clinic). You can say “The pregnancy looks like a blood clot or a cotton ball.”
 - For later gestations, consider asking tactfully what the patient expects to see. Alert the patient that the fetus may not be intact and that recognizable parts will be visible, and confirm they still want to see.
 - If you are asked about fetal tissue donation, you can let them know in the rare case that a tissue donation program exists at your facility, that it is entirely voluntary and in accordance with the highest ethical and legal standards. Federal law requires a separate consent, that there be no patient payment or control over what the tissue is used for, and no changes to how or when the abortion is done in order to obtain the tissue.

3. TEACHING POINTS: EVALUATION BEFORE UTERINE ASPIRATION

EXERCISE 3.1

Purpose: To distinguish appropriate uses for different types of pregnancy tests. For the following scenarios, indicate whether you would use a high sensitivity urine pregnancy test (HSPT) or a serum quantitative hCG test, the reasons why. Address related questions.

1. **A patient comes to your office requesting pregnancy confirmation and to discuss her options. She is 4 weeks 2 days LMP.**
 - A HSPT is the most useful test to confirm an early pregnancy, both for home and office-based confirmation of pregnancy.
 - The modern HSPT can detect levels as low as 20 mIU/ml. These levels may be seen in urine as early as a week after conception or before a missed period (although 95% sensitivity may not be reached until cycle day 32-35). Up to 10% of pregnancies have a negative HSPT at the time of missed menses, due often to delayed ovulation & implantation and to variable hCG concentrations in urine (Paul 2009; p.67); furthermore there is variable sensitivity among HSPT assays.
 - If **positive**, assess if pregnancy is desired, and proceed with clinical dating.
If **negative**, patient should retest in a week if menses does not start.
2. **A patient is 6 weeks by LMP with a pregnancy of unknown location (transvaginal ultrasound examination shows no intrauterine gestational sac and no ectopic pregnancy). The patient has been spotting intermittently but is otherwise asymptomatic. The quantitative hCG you draw comes back at 1000, and another 48 hours later comes back at 1400.**
 - a. **What is the differential diagnosis?**
 - The patient's hCG rise is <53% in 48 hours. Early pregnancy loss or ectopic are most likely, but early viable pregnancy is also a possibility.
 - b. **Would your approach to care differ with a desired vs undesired pregnancy?**
 - Although a rise of hCG level <53% over 48 hours rules out IUP 99% of the time, a lower cutoff of <35% rise rules out IUP 99.9% of the time (Morse 2012), and this stricter criterion of <35% can be considered in a desired pregnancy, instead of <53% (See Chapter 8 PUL algorithm). A third hCG measurement on day 4 can help clarify the diagnosis for PUL (Zee 2014).
 - If the pregnancy is undesired, an immediate diagnostic uterine aspiration will expedite the evaluation for possible ectopic pregnancy. If pregnancy tissue **is** found in the aspirate, an ectopic pregnancy can be ruled out. In the more likely case that pregnancy tissue **is not** found, a repeat hCG level 24-48 hours after the aspiration will be helpful. If the gestational sac was aspirated, the hCG level will drop by more than 50%. If the patient is symptomatic or the hCG does not drop by 50%, an ectopic pregnancy becomes more likely, and an immediate high level TVUS is warranted.

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3. **A patient returns for a follow-up visit 3 weeks after a first trimester aspiration because of intermittent bleeding since. The patient started taking oral contraceptive pills the day following the aspiration and have been sexually active since the uterine aspiration.**
 - The HSPT can stay positive for 4 to 6 weeks following an abortion. Only a negative HSPT test is helpful in that window.
 - Take history for other signs of pregnancy. Keep in mind that breast tenderness may be a consequence of starting estrogen-containing oral contraceptives.
 - Consider checking the procedure record to check that aspiration was complete and appropriate POC (products of conception) were noted.
 - If there are ongoing symptoms or signs of pregnancy or retained POC, check serial hCGs to assess trend. Repeat US can also be helpful.

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EXERCISE 3.2

Purpose: To review key information about ultrasound in early pregnancy.

1. **What is the differential diagnosis of the following ultrasound findings? What steps would you take to clarify the diagnosis?**
 - a. **Mean gestational sac diameter 18 mm with no yolk sac or embryo visible.**
 - A mean sac diameter of 16-24 mm with no yolk sac or embryo is highly suggestive of a non-viable pregnancy, while a mean sac diameter of ≥ 25 mm without an embryo is diagnostic of early pregnancy loss (anembryonic pregnancy).
 - If a pregnancy is **undesired**, there is no reason to delay uterine aspiration to wait for diagnosis; and a diagnostic aspiration will assist in the evaluation of a possible ectopic pregnancy.
 - If a pregnancy is **desired**, recheck US in 7-10 days.
 2. **Embryonic pole length 5 mm with no visible cardiac activity.**
 - Early pregnancy loss is highly suggested by lack of embryonic cardiac activity in a 5-7 mm embryonic pole, and diagnostic > 7 mm embryonic pole.
 - If a pregnancy is **undesired**, avoid delaying uterine aspiration / management.
 - If the pregnancy is **desired**, repeat US in 7 – 10 days.
 3. **A 3 mm x 3 mm central anechoic fluid collection in pregnant patient 5w3d by LMP with history of intermittent right lower quadrant cramping.**
 - This case indicates likely **ectopic pregnancy**. By 5 3/7 weeks, or 38 days, the mean sac diameter should be 8 mm. A normal sac should also be eccentrically placed and not centrally located in the uterine cavity. Combined with the cramping pain in the right lower quadrant, findings consistent with a pseudosac should make you think of ectopic pregnancy. Refer for workup.
 4. **Embryonic pole length 8 mm with no visible cardiac activity**
 - Embryonic pole length > 7 mm is diagnostic for early pregnancy loss ([Doubilet 2013](#)). Management options including aspiration, medication, or expectant management. See [Chapter 8](#) for more on EPL counseling and management.

5. **Irregular, flattened gestational sac without embryo, with cystic changes present resembling “swiss cheese” pattern in patient who is 8 weeks LMP.**
 - This suggests **molar pregnancy**, which may appear with heterogeneous or mixed-density echoes resembling early pregnancy loss on ultrasound. The classic moth-eaten, “swiss cheese”, or what was described as “snowstorm” appearance of molar pregnancy on ultrasound often is not visible until after 10 weeks gestation.
 - Patients with molar pregnancy are at increased risk for bleeding. Some clinicians will refer for inpatient management after 12 weeks.
 - If performing aspiration, send tissue for pathologic examination, and obtain baseline serum hCG.
 - Can monitor hCGs according to established protocols (such as [ACOG 2004](#)) or refer for further management.

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EXERCISE 3.3

Purpose: To identify pre-procedure conditions that may warrant special management. Consider how would you manage the following case scenarios. Not all material is covered in the Chapter.

1. **A 41-year-old patient presents for aspiration at 5 weeks LMP. Pelvic examination reveals an irregular uterus that is 17 weeks in size. Ultrasound examination shows an intrauterine sac in the fundus consistent with 5 weeks gestation and multiple submucosal uterine fibroids.**
 - Uterine fibroids may inhibit our ability to complete the procedure, and medication aspiration is an excellent alternative to aspiration.
 - Consider checking hemoglobin, as patients with significant fibroids can be anemic, and also may bleed more than others during MAB & aspiration.
 - Use ultrasound to identify sac location in relation to the fibroids. If a small 5-week sac is high in the fundus “behind” the curve of large or multiple fibroids, it may be very difficult to reach. Refer beyond the outpatient setting with an experienced provider.
 - Ultrasound guidance may be a helpful adjunct to any procedure with fibroids.
2. **A 26-year-old patient presents to your office at 7 weeks gestation. They had a chest x-ray and abdominal series after a motor vehicle accident 2 weeks ago and decided to have an abortion because of concerns about the effects of the radiation on the fetus.**
 - Many patients overestimate the harmful effects of exposures. While this may be a conscious or unconscious way to justify a pregnancy termination, it is so useful to point this out. But it is our responsibility to give accurate information for informed choices.
 - A cumulative fetal radiation exposure should be limited to less than 5 rad (radiation absorbed dose). ([ACOG 2016](#), [ACR 2014](#))
 - Although fetal exposure to ionizing radiation is linked to malformations, the exposure of most plain-film radiographs is far below the harmful threshold.

Chest x-ray (2 view)	0.00007 rad
Abdominal x-ray (1 view)	0.1 rad
IVP	≤ 1 rad
CT of head or chest	≤ 1 rad
CT of abdomen or LS spine	3.5 rad

 - MRI: Although there have been no documented adverse fetal effects, its use is advised against in the first trimester (National Radiological Protection Board).

3. **You are preparing to perform a uterine aspiration on a patient who is 5 weeks pregnant. When you insert the speculum, you note that the cervix looks inflamed and friable and has pus at the os.**
- CT / GC testing and treatment is indicated, as cervical infection with these pathogens greatly increases risk of post-abortal endometritis.
 - Pre-treatment prior to the procedure is indicated ([Achilles 2011](#)). Most providers delay the aspiration until at least one dose of antibiotic is given pre-procedure. No randomized trials have compared no delay / pre-aspiration treatment with delay/post-abortion treatment (Paul 2009; p.82).
 - [CDC 2015 Guidelines](#) for treatment of cervicitis include:
 - Chlamydia: Azithromycin 1 gm single oral dose OR Doxycycline 100 mg orally twice daily for 7 days are the recommended regimens.
 - Gonorrhea: Ceftriaxone 250 mg intramuscular PLUS treatment for Chlamydia.
 - Symptomatic BV at the time of aspiration should be treated with metronidazole 500 mg orally twice daily for 7 days. There is no need to delay the abortion to complete treatment. There is insufficient data to recommend that treatment for asymptomatic BV is superior to routine pre-procedure antibiotic prophylaxis ([Achilles 2011](#)).
4. **40-year-old G4P3 patient at 7w4d presents for termination with a BMI of 35 and a history of three previous cesareans.**
- The patient's age, obesity and previous cesarean sections put this patient in the moderate risk category for hemorrhage ([Kerns 2013](#)) in addition to a difficult uterine aspiration. In addition to what you would do for a low risk patient (see Chapter 5 [Managing Complications Table](#)), the following should also be considered:
 - Have uterotonic medications and Foley balloon readily accessible.
 - If not routinely used, add vasopressin or epinephrine to paracervical block
 - Consider intraoperative ultrasound guidance.
 - With additional risk factors, consider referring out to center with transfusion capability, anesthesia, and / or interventional radiology.
5. **A 29-year-old patient presents for aspiration at 7 weeks gestation. They have a prior history of venous thromboembolism and are currently anti-coagulated on warfarin; the INR is in the therapeutic range.**
- Additional blood loss in anti-coagulated patients was not clinically significant in a recent small study of anti-coagulated patients seeking aspiration < 12 weeks gestation compared with matched controls ([Kaneshiro 2011](#)). A likely explanation is that myometrial contraction is the primary mechanism of hemostasis after uterine aspiration.
 - Cases such as this can be done in the outpatient setting with appropriate preparation for unlikely bleeding. Some providers will ask the patient to hold the morning dose of low- warfarin or molecular-weight heparin although the benefit of this is unclear.

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6. **A 38-year-old patient presents for an aspiration at 6 weeks gestation, with a blood pressure is 170/110 and a headache.**
- **Mild to moderate hypertension** is not a contraindication for an outpatient procedure, but requires subsequent referral for treatment of hypertension.
 - Confirm the blood pressure with adequate cuff size; check if patient is on anti-hypertensive medication and if they took it today. Consider allowing patient to take their anti-hypertensive medication if they have it, or relax for a while and recheck. Sedation will also reduce the blood pressure.
 - For **severe hypertension** (i.e. >160/110) who is symptomatic – with new onset headache or neurologic changes and pressures concerning for malignant hypertension. The patient should be treated prior to the procedure (beta-blocker or vasodilator) or referred for additional management.
7. **A 26-year-old patient with a history of diabetes presents for an aspiration at 8 weeks gestation. A pre-operative glucose level is 520 mg/dL.**
- Take patient history for diabetic control medications and whether taken today, trends, A1c, typical levels, history of emergency care.
 - **Mild hyperglycemia** (200-400 mg/dL) is not a contraindication for uterine aspiration, but an assessment is appropriate above this range to determine if the patient has ketoacidosis (including urine dip for ketones and evaluation of volume status); in which case they should be stabilized or referred prior to the procedure.
 - **Hypoglycemia** (<70 mg/dL) warrants a patient to be fed or stabilized prior to a procedure.

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4. TEACHING POINTS: MEDICATIONS AND PAIN MANAGEMENT

EXERCISE 4.1

Purpose: To review management of side effects and complications from medications used to control pain and anxiety. How would you manage the following case scenarios of patients undergoing uterine aspiration?

- 1. A patient states that last year they had an allergic reaction to the local anesthetic that the dentist used.**
 - It is important to distinguish between allergic reaction, side effect, and toxicity.
 - Allergic reactions to -caines are extremely rare, and mostly occur from the preservative or epinephrine.
 - Allergic reactions include itching, hives, bronchospasm, and progression to anaphylactic shock.
 - In this case, the safest alternative may be to avoid local anesthetic.
 - Instead use saline (plain or bacteriostatic), which is slightly less effective than lidocaine (Chanrachakul 2001, Glanz 2001).
- 2. A patient chooses to have IV pain management due to extreme anxiety. You administer midazolam 1 mg and fentanyl 100 mcg. As you dilate the cervix, the patient falls asleep and is not easily arousable. The oxygen saturation falls from 99% to 88%.**
 - Both medications cause sedation and respiratory depression. Individuals react differently due to interaction with other agents (e.g. alcohol) or genetic differences in metabolism.
 - Prevention can be aided by using a stepwise approach to pain management.
 - Smaller doses for low weight patients.
 - Serial doses until adequate pain control is achieved.
 - Reversal using antagonists, in a stepwise and titrated fashion.

O2 Saturation	Management
95 –100%	Continue monitoring
90 – 94%	Check monitor lead placement Advise deep breathing Head tilt – chin lift to protect airway
89% or less	Provide titrated reversal agents Head tilt – chin lift to protect airway Initiate oxygen PPV if inadequate spontaneous breathing Transfer if persistent

- Hypoxic patients who have received both an opioid and a benzodiazepine should generally receive naloxone before flumazenil. Naloxone reverses both opioid sedation and respiratory depression. Flumazenil has not been shown to reliably reverse respiratory depression, and also carries seizure risk if the patient has benzodiazepine tolerance or a seizure disorder.
 - Monitoring is recommended for two hours after use of reversal agents, because the sedative may last longer than the antagonist (ASA 2002).
- 3. A patient who is 5 weeks by LMP has a history of alcohol and heroin abuse, and states that they “shot up” yesterday. The patient wants all the pain medication possible for the abortion procedure. Venous access is limited, but you finally succeed in inserting an IV, and administer midazolam 1 mg and fentanyl 100 mcg. You insert the speculum, and the patient complains that “I can feel everything” and “I need more meds.”**

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- a. **How would you treat this pain? What do you need to take into consideration for patients with opioid tolerance?**
- Patients with opioid tolerance often require higher doses of medication to achieve pain control. A reasonable starting place for someone with significant tolerance would be to double the starting dose of fentanyl.
 - Keep in mind that intoxication can interfere with informed consent, warranting a delay in the procedure or LARC placement.
 - Rapid reversal of opiates or benzodiazepines in chronic users can also provoke withdrawal or seizures respectively.
 - Remember to utilize non-opioid forms of pain control and relaxation.
- b. **How would this change if the patient were on suboxone?**
- Individuals on OMT or on chronic pain medications will also raise specific management issues such as caution with use of other meds (benzodiazepines), in addition to higher tolerance of opioids.
 - Those who are prescribed OMT or chronic opioids should continue taking their medications as prescribed.
 - If possible, communicate with their prescriber to plan for the procedure and follow-up or provide a note for patient regarding medications used.
 - Increase opioid dose as needed, guided by monitoring, reported pain, alertness, and respiratory rate.
 - Encourage the patient to have close follow-up with their prescribing physician.

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EXERCISE 4.2

Purpose: To become familiar with other medications used with uterine aspiration.
Please answer the following questions.

1. **In which of the following situations is administration of Rh-D immunoglobulin (Rhogam) suggested?**
- a. **Patient has positive anti-D antibody titre.**
- The patient may already be sensitized (in which case RhoGam will not help).
 - Or the patient recently received RhoGam and still has those anti-D antibodies in their blood (t_{1/2} is 24 days).
 - In either case, don't give RhoGam unless there is a new indication and 3 weeks have elapsed since the last dose.
- b. **Rh-negative patient received RhoGam 4 weeks ago during evaluation for threatened abortion.**
- RhoGam may be present for up to 9-12 weeks after full-dose administration ([Bichler 2003](#)), but the manufacturer advises that it be given if three or more weeks have elapsed since the initial injection in term pregnancies.
 - Until further data delineates therapeutic levels after mini-dose RhoGam, re-dosing after 3 elapsed weeks may be prudent.

- c. **Rh-negative patient is 4 days post-abortion and did not receive RhoGam at the uterine aspiration visit.**
 - RhoGam should ideally be administered within 72 hours.
 - Beyond 72 hours, some recommend anti-D still be given as soon as possible, for up to 28 days (Fung Kee Fung 2003).
 - For medication abortion, RhoGam is ideally given at the time of mifepristone, but many give it up to 72 hours afterwards.

2. **While completing an early uterine aspiration procedure using local cervical anesthesia only, the patient complains of nausea and “feeling faint”. The patient is pale and sweating. The blood pressure is 90/50 with a pulse of 48.**

a. **What is the differential diagnosis?**

- This appears to be a classic vasovagal reaction, with low pulse, hypotension, and sweating. Vasovagal reflex is caused by stimulation of the parasympathetic nervous system, and occurs often with cervical dilation, fear and other emotions. A patient who is overheated, dehydrated, hypoglycemic, or over-medicated may also be predisposed to syncope.
- Differential Diagnosis: Vasovagal, hemorrhage, low blood sugar, or an inadvertent intravascular –caine injection.

Vasovagal Reflex	Hemorrhage	Low Blood Sugar	Intravascular -caine
Slow pulse (< 50) Low BP Pallor Cool clammy skin +/- N/V +/- Abdominal Cramps Rare: Syncope, Seizure-like activity Not orthostatic	Rapid Pulse Late low BP Pallor, Cool clammy skin +/- N/V +/- Uterine cramps Rare: Syncope Becomes orthostatic	Normal / late rapid Late low BP Pallor, Cool clammy skin +/- N/V +/- Abdominal Cramps Rare: Syncope, Seizures Not orthostatic	Slow pulse (<50) Tinnitus Perioral tingling Metallic taste Irregular pulse Rare: seizure, ventricular arrhythmias, cardiac arrest Not orthostatic

b. **How might you prevent this reaction?**

- To help prevent vasovagal reactions, emphasize hydration, keeping cool (i.e. walking to clinic during warm weather), and staying calm. Isometric extremity contractions may also help prevent vasovagal (see below).

c. **How would you manage this patient?**

a. Vasovagal Management

- a. Airway / Positioning: supine or Trendelenburg, head to side if vomiting
- b. Cool cloth on head or neck
- c. Sniffing ammonia capsule may help
- d. Vasovagal reflex may be aborted prior to syncope by isometric contractions of the extremities (gripping the arm, hand, leg and foot muscles) (Cason 2014). These maneuvers activate the skeletal-muscle pump to augment venous return and abort the reflex.
- e. Prolonged vasovagal, consider:
 - a. Atropine
 - b. IV Fluids, oxygen
 - c. Evaluation for other potential causes (hemorrhage, etc.)
 - d. Record events, and transfer as needed.

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5. TEACHING POINTS: UTERINE ASPIRATION PROCEDURE

EXERCISE 5.1

Purpose: To practice management of challenging situations that can arise at the time of aspiration abortion procedures.

1. **You are performing an abortion for an anxious 20-year old G1P0 patient at six weeks gestation. You complete the cervical block and have the tenaculum in place. As you attempt to introduce the smallest dilator, you are unable to advance the dilator through the internal os. After readjusting the speculum and the tenaculum, you again find that there is severe resistance as you attempt to advance the dilator into the cervical canal; it feels dry, gritty, and tight, and does not have the “normal” feel of the dilator tip advancing through the cervical canal.**
 - a. **What is the differential diagnosis?**
 - Acute flexion or tortuosity of the cervix
 - Congenital or acquired uterine abnormalities:
 - a. Abdominal scarring due to prior (especially multiple) cesarean sections, which often limit adequate traction.
 - b. Cervical stenosis from prior cone biopsy
 - c. Fibroid in the lower uterine segment
 - d. Müllerian anomaly
 - Error in assessment of uterine position (for example: the possibility of a sharply anteverted uterus with high cervix that may appear retroverted by visual exam without a thorough bimanual exam).
 - False passage of the cannula due to any of the above.
 - b. **What would you do next?**
 - See dilation tips from Steps for Uterine Aspiration of this chapter.
 - Consider having trainer or more experienced provider finish the procedure.
2. **You have just completed an aspiration abortion for a 19-year old patient at six weeks gestation. They had reported intermittent episodes of vaginal bleeding on three occasions during the past week, but did not have any severe cramping or clotting. Their pre-procedure ultrasound was performed one week ago, with a 5 mm gestational sac identified, but no yolk sac or embryonic pole. Their pregnancy test was positive. Dilation was not difficult and you were able to use a 6 mm flexible cannula. The tissue specimen is very scant and you are not certain whether you see sac or villi.**
 - a. **What is the differential diagnosis?**
 - a. Spontaneous abortion since last ultrasound
 - b. Failed aspiration abortion
 - c. Completed aspiration abortion with POC too small to visualize
 - d. Ectopic pregnancy
 - b. **What do you do next?**
 - An US prior to aspiration might have ruled out an early pregnancy loss since prior US, in which case aspiration could have been avoided.
 - Recheck POC, MVA, EVA bottles, tubing, cannula, and strainer, (if used).
 - Use a magnifier and backlighting if available.
 - Repeat US and reaspirate if tissue is still visible, with US guidance as indicated.

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- Consider using a different cannula, such as rigid curved cannula to follow flexion.
- Consider an ectopic pregnancy in any case without definitive POC:
 - a. Draw serial hCGs and give ectopic precautions.
 - b. An hCG decrease of 50% within 48 hours suggests successful abortion (and is more reliable than US or pathology).
- If free-floating villi are seen without any membranes present, consider the possibility of retained gestational sac, and repeat US.
- If you see no villi, you can send the specimen to pathology. “Villi” on a pathology report confirms a pregnancy but not size estimation to confirm completion. Provider examination of POC reduces the risk of failed abortion, but routine histologic exam by a pathologist confers no incremental clinical benefit, and adds cost (Paul 2002).

3. **You are performing an abortion on a nulliparous 16-year old patient at seven weeks gestation. You notice that their cervix is very small and it is hard to choose a site for the tenaculum. As you put traction on the tenaculum and try to insert the dilator, the tenaculum pulls off, tearing the cervix. There is minimal bleeding, so you reapply the tenaculum at a slightly different site, although it is difficult because the cervix is so small. This time, the cervix tears after inserting the third dilator, and there is substantial bleeding.**

a. **What should you do now?**

These tears are fairly common, especially in small cervixes. Try the following:

- Before applying tenaculum to a small or flat cervix, inject several mLs of anesthetic to add bulk and facilitate placement (deeper in cervix, not in bleb).
- Try a second tenaculum elsewhere on the cervix to provide a broader base of support, or an atraumatic tenaculum (pictured in Chapter 4 [Paracervical Block image](#)); then re-attempt dilation.
- If bleeding, apply pressure to the cervix (clamp cervix with ring forceps or apply direct pressure). Dilute vasopressin (4-6 units in 5-10 cc sterile saline injected intra-cervically), Monsel's solution, or silver nitrate may also be used; sutures are rarely required.
- If unsuccessful, consider additional analgesia, misoprostol for 2–4 hours, delaying the procedure for a week to allow for more cervical ripening, or offering the patient medication abortion if eligible.
- Consider pre-treatment with misoprostol in adolescents (WHO 2012) or those with a prior difficult dilation.

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4. **You are inserting the cannula for a procedure on a patient at 9 weeks gestation with a retroflexed uterus. Although the dilation was easy, you feel the cannula slide in easily but at a different angle and much further than you sounded with one of the dilators. You don't feel any “stopping point.” The patient feels something sharp.**

a. **What is the differential diagnosis?**

- a. A probable uterine perforation vs. a false tract.

b. **What should you do now?**

- Remove cannula. Evaluate for sharp or localized pain, vital signs, and bleeding.
- US may assess fluid collection in the cul-de-sac, but in first trimester it is rare to be able to identify abdominal contents in the uterus, or uterine contents in the abdomen.
- If the uterine cavity can be re-identified, an experienced provider may choose to finish the procedure under ultrasound guidance.
- If vacuum has been applied, look for evidence of intra-abdominal contents (i.e. omental fat) in the aspirate. If seen, send to pathology and consider patient transfer.
- If patient remains asymptomatic for pain or bleeding, consider observation for two hours, antibiotic coverage if appropriate (Paul 2009; p. 241), and precautions before discharge.

- Consider **uterotonics** if bleeding is significant.
- Hospitalization is indicated if:
 - The patient is hemodynamically unstable. Place IVs and initiate IV fluid.
 - The patient has significant pain.
 - There is evidence of large perforation, laceration, expanding hematoma, fetal parts in abdomen, or viscera / omentum in uterus or aspirate.

c. **How might you have anticipated and prevented this problem?**

- Use gentle steady pressure during dilation until beyond the internal os.
- Traction on the tenaculum helps straighten uterine flexion. Consider posterior placement for a retroflexed uterus to help straighten the angle.
- Passage of a flexible uterine sound, os finder, or lacrimal duct probe may help to find the correct path, although use caution as a smaller instrument may increase perforation risk.
- If your dilator passes easily but the cannula does not, consider using a smaller cannula or dilating one size higher.
- Do not hesitate to re-check your pelvic exam.
- Use US guidance, if available.
- Consider a rigid curved cannula to maneuver the angle better.
- Cervical ripening with misoprostol can be helpful.

5. **A G3P2 patient at 8w5d presents for termination, with a history of a previous cesarean and a post-partum hemorrhage not requiring transfusion. The aspirator quickly fills with blood when suction applied. You empty it, recharge, and it again fills with blood. You have seen some tissue come through. You ask your assistant to prepare another MVA but it promptly fills with blood when attached to the cannula. Given the patient's risk factors, what additional preparations would you consider beyond normal precautions?**

a. This patient is in the moderate risk category for hemorrhage ([Kerns 2013](#)). In addition to what you would do for a low risk patient (see [Managing Immediate Complications Table](#)), the following should also be considered:

- Consider obtaining consent for transfusion.
- Have uterotonic medications readily accessible.
- Consider intraoperative ultrasound guidance.
- With additional risk factors, you might also consider referring out to center with transfusion capability, anesthesia, and interventional radiology.

b. **What do you suspect?**

- The patient has already bled about 200 cc, and is at risk for hemorrhage (defined as 500 cc EBL).
- Consider some causes of hemorrhage with 4 T's mnemonic: tissue (incomplete aspiration), tone (atony), trauma (cervical laceration or perforation), or thrombin (a rare underlying bleeding disorder). Also consider ectopic pregnancy.

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c. What can you do now?

As a memory tool, practice 2 primary steps for each of for 6Ts:

- **Tissue:** Assure uterus is empty
 - Estimate EBL
 - Reaspiration (with US guidance) EVA for rapid evacuation; check POC is adequate. US may assist and identify the rare cervical or cesarean ectopic.
- **Tone:**
 - Uterine massage
 - Medications (methergine, misoprostol, and / or dilute vasopressin)
- **Trauma:** Assess source
 - “Cannula test” (watching return as you slowly withdraw cannula from fundus to external os, to identify bleeding zone)
 - Walk or clamp cervix with ring forceps
- **Thrombin:**
 - Review bleeding history
 - Consider additional tests as indicated (clot test, coagulation tests, CBC)
- **Treatment:**
 - IV fluid bolus
 - Uterine tamponade with Foley catheter (inflate bulb)
- **Transfer:**
 - Vitals every 5 minutes
 - Initiate transfer

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EXERCISE 5.2

Purpose: To practice managing challenges that may occur after uterine aspiration.

1. **The nurse consults with you about a possible problem phone call regarding a patient who had an abortion at the clinic five days ago. The patient complains of severe cramping and rectal pressure, has had minimal bleeding, and has a mild fever.**
 - a. **What is the differential diagnosis?**
 - This patient may well have developed a hematometra, or accumulation of blood in the uterus following the procedure.
 - b. **Which exam and ultrasound findings would support your diagnosis?**
 - a. Physical examination reveals a large, tense, and tender uterus.
 - b. US shows an expanded uterine cavity with heterogeneous echo complex, consistent with clots in the uterus.
 - c. **What are your management recommendations?**
 - While small collections of clot may pass spontaneously or with uterotonics if patient’s pain is tolerable, aspiration is usually required for larger clots, with or without intraoperative uterotonics.

- d. **If these symptoms developed immediately after abortion, what would you do?**
- Aspiration is usually required with or without uterotonics, and may save an ED visit.
2. **A 21-year-old patient comes to your office for follow-up after an 8-week abortion two weeks ago at another facility, and still has some symptoms of pregnancy including breast tenderness and abdominal bloating. Medications include birth control pills. The patient has had intercourse regularly for the past six days. The patient is afebrile, with normal vital signs. Pelvic exam is normal except for an 8-week size uterus. A high sensitivity urine pregnancy test is positive.**
- a. **What is the differential diagnosis?**
- A completed abortion in a patient with hormonal contraceptive side effects
 - A failed attempted abortion with an ongoing pregnancy
 - Retained POC / asymptomatic hematometra
 - Ectopic pregnancy or heterotopic pregnancy with continuing ectopic
 - Hydatidiform mole
- b. **How can you rule in or out any of your diagnoses?**
- Home pregnancy tests are high sensitivity pregnancy tests (HSPT; positive at 20-25 mIU/mL) and can remain positive 4 – 6 weeks after abortion so a positive HSPT two weeks later may be positive for any of the differential diagnoses in this example.
 - Assess whether POC, post-abortion US, or an hCG were checked after the abortion, but a quantitative hCG is an important baseline for further testing.
 - Is serial serum hCG rising or falling, and at what rate? See Chapters 3 and 8.
 - US can help identify an ongoing pregnancy, remaining clots, or an ectopic pregnancy. However, a negative US is inconclusive and cannot definitively rule out an ectopic.
 - Exam may be helpful to evaluate uterine size, bogginess, or adnexal masses.
 - Re-aspiration determines uterine contents: presence of POC or pathologic changes.
 - Breast tenderness could be from hormonal contraceptives.
 - 8-week size could be due to fibroids, retained clots, or inter-examiner variability.
- c. **How might your approach differ if the ultrasound showed a moderate amount of heterogeneous contents**
- This suggests retained tissue, decidua and/or clotted blood. Uterine re-aspiration may show evidence of chorionic villi, membranes, or fetal parts.
- d. **If the patient is not pregnant, how can you explain their positive urine pregnancy test and breast tenderness?**
- A high sensitivity pregnancy test may still be positive for up to 4 – 6 weeks following an abortion.
 - Breast tenderness may be secondary to the initiation of hormonal contraceptives.

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6. TEACHING POINTS: CONTRACEPTION AND AFTERCARE

EXERCISE 6.1

Purpose: To role-play contraceptive counseling and to understand recent evidence based contraceptive developments and medical criteria for use.

1. **A 17-year-old G0P0 patient comes to the clinic that is sexually active and currently using withdrawal and condoms comes to your office. Can you role play how you might initiate the conversation, learn about their priorities, and simplify the choice process for them? Consider using either Your Birth Control Choices or How Well Does Birth Control Work chart as a visual aid.**
2. **A 28-year-old G3P3 patient presents to the clinic seeking to switch to a new method of contraception. They are currently on DMPA, which has been causing weight gain, and want something non-hormonal. A friend mentioned having pain with an IUD, so your patient is hesitant to consider that option. Role-play a healthcare encounter using a patient-centered model. (Adapted from Dehlendorf).**
 - **What did you like about it or find challenging?**
 - **How was it different or similar to other patient encounters you've had?**

For role-play 1: the patient's priorities are privacy (from parents) and infection prevention.

For role-play 2: the patient's priorities are to avoid weight gain and other "hormonal side effects".

Teaching Points: Consider the following steps:

- a. Establishing rapport, accessibility, and trust is the most important first step, unless you already know the patient
- b. Acknowledge the patient's priorities and preferences (such as effectiveness, side, effects, privacy, cost, etc.)
 - Can choice of withdrawal and condoms represent an informed choice?
 - Given a strong interest in one method, ask permission to discuss other methods that align with the patient's priorities.
 - Provide education about relative effectiveness of methods as appropriate.
 - Promote continued use of condoms to prevent STI transmission
 - Address side effects for methods aligning with the patient's preferences.
 - Recognize that patients may prefer to risk pregnancy rather than use a method that is not acceptable to them.
- c. Proactively provide evidence-based information including method safety, side effects, and bleeding changes for methods that align with patients' preferences
- d. Encourage and enable the patient to ask questions
- e. Facilitate the selection of a contraceptive choice that reflects a patient's preferences and satisfies them
 - When you finish each role-play, you might look over the Best Practice and consider other things that you might add.

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3. **What would you want to discuss with patients regarding to their desire for contraception?**

Classification of Categories for Medical Eligibility Criteria (MEC)

1. A condition for which there is no restriction for the use of the contraceptive method.
2. The advantages of using generally outweigh the theoretical or proven risks.
3. The theoretical or proven risks outweigh the advantages of using the method.
4. The condition represents an unacceptable health risk if the contraceptive is used.

a. **A 36-year-old smoker with moderate obesity who wants the patch.**

- There are 2 issues to consider:
 - Tobacco users who smoke more >15 cigarettes/day and are [≥]35 years old should not be prescribed estrogen-containing contraceptives due to increased risk of stroke and M.I. (MEC 3-4).
 - The patch is less effective in heavier patients (30% of failures in 3% of patients > 198+ lbs).
 - This patient could safely use an IUD, progestin-only, or barrier method.

b. **A 29-year-old with migraine headaches with aura who wants the pill.**

- Avoid estrogen-containing contraceptives in patients with migraines with aura because of an increased stroke risk. Use caution with patients with migraines without aura, and consider additional prothrombotic risks (e.g. smoking). These patients are best served with an IUD/IUS, progestin-only or barrier method:
 - Migraine with aura or focal neurological symptoms any age (MEC 4).
 - [≥]35 years old and migraine without aura (MEC 3).
 - <35 years old & migraine without aura (MEC 2).
- Patients with non-migraine headaches at any age can use estrogen-containing contraceptives (MEC 1). Migraine with focal neurological symptoms is equivalent to migraine syndrome with aura (or classic migraine), and consists of one or more of the following that usually precedes and sometimes accompanies the headache:
 - Visual disturbances.
 - Scintillating scotoma.
 - Paresthesias (numbness and tingling).
 - Hemiparesis (weakness or partial paralysis in an extremity).
 - Dysphasia (slurred speech or inability to speak).

c. **A 20-year-old nulliparous patient with a history of Chlamydia at age 15 and who wants an IUD.**

- IUDs are safe and well accepted among nulliparous patients. MEC lists IUD category 2 for nulliparous patients; benefits outweigh risks.
- Tubal infertility is linked to presence of antibodies to Chlamydia but not to history of IUD use ([Hubacher 2001](#)).
- Return to baseline fertility is almost immediate upon removal.
- Although past studies suggested nulliparous patients have a slightly increased risk of IUD expulsion, a prospective study found no difference in rates of expulsions by parity among CuT users, and lower expulsion rates in nulliparous users of the LNG52 IUD compared with parous users ([Birgisson 2015](#)).

d. **A 28-year-old patient, who is overweight, has vaginitis, and who wants emergency contraception (for unprotected intercourse 3 and 5 days ago), as well as ongoing contraception.**

- CuT is nearly 100% effective for EC and ongoing contraception, including for overweight and obese patients (Wu 2013, Cleland 2012).
 - Effectiveness of EC: Cu-T IUD > Ulipristal (UPA) EC > LNG EC (Turok 2014).
 - Offer CuT or UPA EC to those at increased risk of EC pill failure: overweight, obese and patients with repeat episodes unprotected intercourse (Glasier 2011)
 - Vaginitis is a MEC 2 for IUD, so should not preclude placement today, although you should initiate treatment as indicated.
 - Patients receiving IUDs were half as likely to become pregnant in the following year compared to oral EC (Turok 2014).
 - Routine counseling patients seeking EC on CuT EC in a primary care setting resulted in 11% uptake and 80% 12 month continuation (Schwarz 2014).
 - Alternatively use Ullipristal with other method of ongoing contraception
 - After UPA: The patient needs to abstain from intercourse or use barrier contraception for 14 days or until their next menses, whichever comes first. (ASEC 2016).
 - LNG EC effectiveness drops to 65% after 3 days and is not recommended.
- e. **A 25-year-old with SLE who is interested in the ring.**
It is important to find out more about the patient's disease. If the patient is:
- Antiphospholipid antibody positive (MEC 4 for CHCs, 3 for most methods, 1 for Cu-T IUD).
 - Has associated thrombocytopenia (MEC 3 for DMPA and Cu-T IUD).
 - Is taking Immune modulators (MEC 2 for all methods).

f. **A 31-year-old who takes anti-seizure medications and wants the pill.**

Select anti-seizure medications, antibiotics, and anti-fungals activate the p450 enzyme system in the liver, resulting in faster metabolism of hormones, and decreased efficacy of combination and progestin-only pills and implants (all MEC category 3 while taking these select medications; see table below). Keep in mind that some of these medications may also be used to treat certain psychiatric illnesses, headaches, chronic pain and other conditions. Note that CHCs may reduce bioavailability of lamotrigine (Lamictal).

IUDs or DMPA are the best options (categories 1 and 2 respectively).

Drugs known to increase liver enzyme metabolism / reduce contraceptive effectiveness	Drugs with questionable effects	Drugs known not to effect liver enzyme metabolism or contraceptive effectiveness
<ul style="list-style-type: none"> • Carbamazepine (Tegretol, Equetro, Carbetrol) • Oxcarbazepine (Trileptal) • Phenobarbital • Phenytoin (Dilantin) • Primidone (Mysoline) • Topiramate • (Topamax) mild ↓ • Rifampin • Rifampicin • Rifamate • Griseofulvin • St John's Wort 	<ul style="list-style-type: none"> • Troglitazone (Rezulin) • Felbamate (Felbatol) 	<ul style="list-style-type: none"> • Lamotrigine (Lamictal) • Gabapentin (Neurontin) • Tiagabine (Gabitril) • Levetiracetam (Keppra) • Valproic Acid (Depakote) • Zonisamide (Zonegran) • Vigabatrin (Sabril) • Ethosuximide (Zarontin) • Benzodiazepines • INH (not in combination with Rifampin) • Ketoconazole (anti-fungal) • Fluconazole (anti-fungal)

4. **A 27-year-old who wants a combined hormonal method but doesn't want a monthly period.**

- Extended contraception is safe, acceptable, and as efficacious as monthly cyclic regimens (Edelman 2005, Nelson 2007).
- Increased ovarian suppression is noted in regimens that shorten or eliminate the hormone free interval, with the potential for increased effectiveness (London 2016).

- Regimens result in fewer scheduled bleeding episodes and fewer menstrual symptoms, particularly headache (Edelman 2005).
- Break through bleeding is common in the first six months of continual use; however this side effect usually resolved within 4-6 months.
- Seasonale, Seasonique, Mono-phasic COCs, and Nuvaring may be used.
- Patch is not recommended due to concern over increased levels of estrogen.

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EXERCISE 6.2

Purpose: To review routine aftercare, please answer the following questions.

1. **A patient has had nausea and vomiting throughout pregnancy. How long will it take for them to feel better after the abortion?**
 - Nausea is one of the first pregnancy symptoms to subside after an abortion, usually within 24 hours.
 - If it persists beyond a week, rule out ongoing pregnancy or retained products.
 - Breast tenderness subsides in 1-2 weeks, but may be influenced by CHCs.
2. **Providers typically advise patients to call if they have certain “warning signs” following uterine aspiration. What “warning signs” would you include and why?**
 - Persistent severe pain or cramping:
 - May indicate hematometra, infection, uterine trauma, or ectopic.
 - Pelvic / rectal pain with little or no bleeding:
 - Suggests hematometra.
 - Heavy bleeding (saturating >2 pads per hour for >2 hours) or orthostatic symptoms:
 - Suggests the need for intervention.
 - Peritoneal signs (pain with cough, palpation, or sudden movement):
 - May suggest perforation or infection and warrant reevaluation.
 - Sustained fever (greater than 100.4° F):
 - Raises concern about pelvic infection.
3. **After an aspiration, how long would you advise your patient to wait before resuming exercise, heavy lifting, and vaginal intercourse? What is the rationale for your recommendations?**
 - **Resuming exercise or heavy lifting**
The patient may resume normal activity when they feel ready, typically within 1-2 days. Providers empirically discourage strenuous exercise for 1-2 weeks, to prevent exacerbation of bleeding or cramping, although there is little evidence. Probably the best advice is to “*listen to your body,*” enjoy the activities that make them feel better, and avoid activities that make them worse.
 - **Resuming vaginal intercourse**
No data suggest increased infection with intercourse after an abortion, so advice may be liberalized. As ovulation can occur within 8-10 days, encourage the patient to initiate their chosen method of contraception promptly after abortion.

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7. TEACHING POINTS: MEDICATION ABORTION

EXERCISE 7.1

1. I live 4 hours away. Can I still get the abortion pill?

- Yes. Patients can undergo medication abortion if they live reasonably close to emergency medical care, and they have access to a phone and transportation.
- Some protocols require a 2nd office visit, and others allow serial hCGs (baseline and follow-up) with telephone contact, and clinic visits with you or patient's primary care provider as needed.
- Telemedicine has been shown to be a safe and efficacious means of providing medication abortion in the right patient population, with high rates of patient satisfaction ([Grossman 2011](#)).

2. What are my chances of needing an aspiration abortion?

- Continuing viable pregnancy rate is $\leq 1\%$ in most studies up to 63 days EGA, increasing to 3% in 64-70 days EGA. However, uterine aspiration may be needed for multiple reasons, including excessive bleeding/cramping, or by patient request. The total incidence of aspiration after medication abortion is 2-4% of cases up to 63 days EGA, and 6-9% of cases for 64-70 days EGA. (A second dose of misoprostol may be necessary to achieve these rates).
- With continuing viable pregnancy (true drug failure), a second dose of misoprostol is $>30\%$ effective; alternatively, aspiration can be offered.
- With a persistent gestational sac without evidence of development, a second dose of misoprostol can be offered, or the patient can be followed for several more weeks if stable.
- In an asymptomatic patient with minimal bleeding or cramping who has echogenic material in the uterus but no ongoing pregnancy seen on ultrasound, no further treatment is necessary.

3. How will I know if I'm bleeding too much?

- After misoprostol, bleeding usually starts within 1 to 10 hours (average 4 hours).
- Bleeding can be heavier than a normal period and accompanied by cramps and/or clots. Bleeding usually slows substantially after passing the pregnancy.
- If the bleeding soaks more than 2 maxi-pads per hour for greater than 2 hours, that is more than normal; have patient call if they are concerned.
- Hypovolemia symptoms warrant immediate evaluation (history, orthostatic vital signs, pelvic exam) and urgent uterine aspiration.
- Hemoglobin or hematocrit can guide the need for iron or blood transfusion.
- Blood transfusion is rarely needed ($<0.2\%$ of cases).
- There is scant data regarding the optimal treatment for moderate bleeding. The efficacy of commonly used agents (such as a second dose of misoprostol, methylergonovine, or a tapered regimen of high-dose OC's) is unknown.

4. Will I see "the baby" when it comes out?

- Up to 7 weeks EGA, tissue, blood, and clots are normally be visible to the naked eye.
- At 7-9 weeks EGA, it is unlikely that a patient would inadvertently identify an embryo.
- At 9-10 weeks EGA, fetus may be identifiable ([Winikoff 2012](#)), so counsel the patient accordingly.
- If the patient is anxious about seeing the pregnancy tissue, they can be shown a drawing or counseled with information like "At X weeks of pregnancy, this is what the sac/embryo/fetus looks like. Would you like more information or do you want to go ahead with the medical abortion?" If they are not comfortable, they may prefer to have an aspiration abortion. .

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EXERCISE 7.2

- 1. I took the misoprostol 2 hours ago. Now my temperature is 100.5° F and I feel like I have the flu. Should I be concerned?**
 - No. Common side effects of MAB are temperature elevation, and flu-like symptoms. These are usually self-limited, and the body temperature should return to normal within a few hours. Have the patient recheck temperature again in 2-3 hours.
- 2. I took the misoprostol 30 hours ago and passed the pregnancy 24 hours ago, but now my temperature is 101.5.**
 - Persistent elevated temperature (>100.4° F) for several hours or > 24 hours after misoprostol warrants an office visit to evaluate for infection. Work-up should include:
 - Questions about pelvic pain, bleeding pattern, or odorous discharge
 - Review of systems to rule out other sources of fever
 - Pelvic exam
 - CBC to evaluate for leukocytosis.
 - Significant pelvic or cervical motion tenderness with fever suggests post-abortal endometritis, and appropriate antibiotics should be initiated. If US shows significant intrauterine material, uterine aspiration is also indicated.
 - If additional concerns arise for atypical infection, further evaluation may be warranted. In very rare cases, patients have presented with low-grade fever and nonspecific complaints (abdominal or pelvic pain, nausea, diarrhea, malaise) along with dramatic leukocytosis and hemoconcentration (Fjerstad 2011, Meites 2010) In patients with this presentation, a high index of suspicion is needed. *Clostridium*-mediated toxic shock syndrome may progress rapidly to fulminant sepsis and death. If atypical infection is suspected, refer for inpatient sepsis management with infection disease consultation.
- 3. I used the medication vaginally, but I think one of those pills just fell into the toilet (or vomited if using buccal, sublingual, oral misoprostol). What should I do?**
 - If the pills are vomited (or fall out if taken vaginally) less than 30 minutes after misoprostol, the patient may need to return for a second misoprostol dose. The active ingredient will have had adequate time to be absorbed, even if the pill appears undissolved. They may choose to wait a few hours to see if appropriate bleeding begins.
- 4. I took mifepristone in clinic yesterday and started to bleed (like a period) this morning. I have not taken the misoprostol yet. What should I do?**
 - Mifepristone alone may cause bleeding but is often inadequate for successful abortion; misoprostol significantly increases the efficacy – and therefore the safety of the regimen.
 - Many providers counsel patients to use the dispensed misoprostol regardless of post-mifepristone bleeding to improve chances of success.
 - Advise the patient to take misoprostol now.

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EXERCISE 7.3

1. **A 29 year-old G3P1011 patient requests medication abortion and is 6 weeks by LMP. Examination reveals a barely enlarged uterus, and serum hCG level is 782 IU/L. They take mifepristone 200 mg, followed 24 hours later by an appropriate dose of buccal, vaginal, or sublingual misoprostol. They have moderate bleeding and cramping during the next several hours. When the patient returns on Day 4, examination is essentially unchanged, and serum hCG level is 5530 IU/L.**
 - This patient's rapidly rising hCG level suggests continuing viable pregnancy, despite history of bleeding after misoprostol. Ectopic pregnancy should also be excluded.
 - Consider ultrasound, if available and the patient is able to follow up in the office.
 - Treatment options include aspiration or repeat misoprostol (second dose is about 30% effective).
2. **A 25 year-old G2P1011 patient who received mifepristone 200 mg 7 days ago and took misoprostol 800 mcg 6 days ago, returns to clinic today for a follow-up visit. They report moderate bleeding and cramping a few hours after misoprostol, and have had no complaints since then. On a follow-up ultrasound, there is a moderate amount of heterogeneous material in the endometrial cavity.**
 - a. **What management would you suggest for heterogeneous uterine material?**
 - If US is performed at the follow-up visit, the sole purpose is to determine if the patient is still pregnant ([SFP 2014](#)).
 - Endometrial thickness should not be used to guide management after MAB. The post-abortion uterus will normally contain sonographically hyperechoic tissue that consists of blood, blood clots, and decidua ([Reeves 2009, 2008](#)). In the absence of heavy bleeding or cramping, avoid unnecessary intervention for US findings ([NAF CPG 2016](#)).
 - Providers can monitor such patients based on symptoms ([SFP 2014](#)).
 - b. **How would you manage this patient differently if they were symptomatic with ongoing moderate vaginal bleeding and/or cramping?**
 - An aspiration may be warranted for hemodynamic instability or for patient preference ([SFP Clinical Guidelines 2014](#)).
 - Clinicians providing MAB may wish to be trained in uterine evacuation procedures; alternatively, they may establish referral relationships with other providers trained in aspiration.

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3. **A 19 year-old G4P0 patient who received mifepristone 4 days ago and took misoprostol 3 days ago returns today because of very heavy vaginal bleeding. They state they have soaked 5 maxi-pads in the last 3 hours.**
- a. **What should you assess first?**
- Hemodynamic status (orthostatic vital signs)
 - Exam to assess active bleeding and uterine boggy
- b. **What diagnostic work-up may be of assistance?**
- Hemoglobin/hematocrit
 - Ultrasound (if available)
- c. **What management options would you offer this patient?**
- Emergent uterine aspiration is indicated
 - If hemoglobin or hematocrit indicate that there has been substantial blood loss, even if the patient does not seem to be bleeding heavily at the moment, they should have a uterine aspiration.
 - If blood loss is severe (low hemoglobin or hematocrit), consider transfusion
 - Initiate iron supplementation as needed.
- d. **What are indications for a uterine aspiration after medication abortion?**
- Bleeding in hemodynamically unstable patient (emergent)
 - Continuing pregnancy: Persistent growth and cardiac activity at follow-up, or persistent increase in hCG. Can offer a second dose of misoprostol prior to aspiration. Of note; in MAB clients < 63 days returning with persistent cardiac activity, a 2nd dose of miso led to complete expulsion in 36%; [Reeves 2008](#))
 - Symptomatic problematic bleeding / cramping unresponsive to medical treatment
 - Patient preference

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8. TEACHING POINTS: MANAGEMENT OF EARLY PREGNANCY LOSS

Purpose: To practice management of challenging situations in early pregnancy loss, and consider care continuity with one patient. Note: gender specific language is used for this case.

1. **A 25-year-old woman you have been seeing for 5 years presents for an urgent visit. Her past history includes irregular periods, which you have managed with OCPs. She reports not having had a period for 7 weeks, and now is having abdominal cramping and moderately heavy bleeding, up to a pad every hour. Her urine hCG is positive.**
 - a. **How would you proceed with evaluation?**
 - Differential diagnosis: Threatened abortion with viable IUP, incomplete or inevitable abortion, resolving early pregnancy loss, and ectopic pregnancy.
 - First consider and ensure hemodynamic stability.
 - Then assess how the patient feels about the pregnancy.
 - Proceed with speculum exam, bimanual exam, hCG and/or ultrasound, and Rh type.
 - If the hCG is above the discriminatory zone, an ultrasound is important to determine the location of the pregnancy unless the patient has a previously diagnosed IUP or EPL. Alternatively, serial hCGs can be obtained.
 - If initial value is below the discriminatory zone, serial hCGs can be obtained.
 - If ultrasound is non-diagnostic, proceed with first hCG now. Or if initial value is above the discriminatory zone, proceed with a second hCG in 48 to 72 hours,.
 - If the pregnancy is undesired, the patient can choose to proceed directly to uterine aspiration (without waiting for hCG results). This enables the patient to receive treatment without delay, and may enable immediate confirmation of IUP vs. ectopic (if membranes and villi are confirmed).
 - b. **How would you counsel her while waiting for results?**
 - a. The uncertainty of waiting for results can be stressful. Keep her fully informed.
 - b. Inform that in > 50% of bleeding cases in the first trimester, the pregnancy continues.
 - c. Ask if she has someone who can support her in this potentially difficult time.
 - c. **If an ultrasound reveals an intrauterine pregnancy with the presence of fetal cardiac activity, how would you discuss the result with her?**
 - Over 85% of women with fetal cardiac activity on ultrasound go on to have full term pregnancies. You can initiate or refer for routine prenatal care if desired.
 - Mention a lack of evidence to support limiting activities, being sensitive to anxieties.
 - If bleeding or cramping continues or begins again, repeat the evaluation.
 - Determine Rh status, and administer Rhogam as appropriate.
 - If a termination is desired, you can offer abortion services or a referral.

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2. **The same woman comes in one year later. She had a normal delivery following the previous threatened abortion, and never restarted her OCPs. She recently began a new relationship, and has been using condoms intermittently. She began having vaginal bleeding about 5 days ago, and it is now decreasing. Her last menstrual period was 8 weeks ago. Her urine pregnancy test is positive. She brings in tissue and you see gestational sac and chorionic villi.**
- a. **How would you proceed with evaluation?**
- The foremost question of ectopic pregnancy is answered by the finding of gestational sac and chorionic villi, except in the rare case of heterotopic pregnancy.
 - The history is consistent with a spontaneous abortion, likely complete given her decreasing bleeding.
 - As with all cases, it is essential to assess for hemodynamic stability, or need for evaluation for anemia or infection. These concerns would prompt a physical exam and labs, including Rh status.
 - If her bleeding and cramping are ongoing, an ultrasound is optional to evaluate the contents of the uterus.
 - If the overall picture is consistent with an incomplete abortion, the patient should be offered expectant, medication, or aspiration management.
- b. **How would you approach her initially with these results? How would you answer her if she asks, “Was this miscarriage my fault?”**
- Avoid preconceived notions about her feelings about this pregnancy. For example, even though she has a small infant at home, do not assume that this pregnancy was undesired.
 - Tell her an early pregnancy loss is common, unlikely to occur in subsequent pregnancies, and not a woman’s fault, even though many women feel guilty.
 - After discussing the results, await her response and consider open-ended questions about her expectations, such as *“How are you feeling about what is happening?”* or *“How do you feel about what I have told you?”*
- c. **What information would you provide about how this event will affect her ability to carry subsequent pregnancies to term?**
- Early pregnancy loss is common, and in the majority of cases one or two previous EPLs does not predict subsequent pregnancy loss. Studies of women with 3 EPLs found that over half were later able to carry a pregnancy to term.
 - Encourage a follow-up visit to discuss ways to minimize problems with subsequent pregnancies, such as minimizing smoking and alcohol intake and to gain control of chronic medical conditions.
 - Following three consecutive EPLs (or two for patients with advanced age), it is appropriate to initiate evaluation for conditions such as chromosomal abnormalities, anatomic problems, luteal phase defects, or immunologic disorders such as anti-phospholipid syndrome, that may contribute to recurrent pregnancy loss.
- d. **What other evaluation or management would you initiate? When can she attempt to conceive again**
- Administer Rh immune globulin as appropriate.
 - Address contraceptive goals, methods and use. In most cases the woman can attempt to conceive when she feels emotionally and physically ready.
 - Offer a follow-up visit for continuity and support.

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3. **The same patient presents to you three years later, at 29 years of age. She is now in a long-term relationship with one partner, and has been attempting to become pregnant. It has been 5 weeks since last menstrual period, urine hCG is positive, and she has been spotting for 6 days, without passage of tissue or pain. She is tearful and distraught, as this pregnancy is desired.**

a. **Does she need an ultrasound in this case? How would you assess her without the use of ultrasound?**

- It is unclear if this is an IUP or if the pregnancy is viable.
- With a stable patient, you can either obtain an US or serial hCG levels.
- Given her distress, an US (if available) may provide answers more quickly.
- If unavailable, begin evaluation with a physical examination and hCG level.
- Examination should assess for hemodynamic stability, an open os and/or tissue, uterine size, and assessment for adnexal masses or tenderness.
- Inform her of the possibility of ectopic pregnancy, and give ectopic precautions.
- She should return in 2 days for a second hCG level.

b. **On examination, you find a closed cervical os, no gestational tissue, and a non-tender uterus consistent with 5-week gestation size without adnexal tenderness or enlargement. You are able to obtain a transvaginal US, which shows an intrauterine fluid collection measuring < 4mm with no yolk sac present. How do you interpret these results? What are the next steps in her evaluation?**

- The location of your patient's pregnancy is still undetermined at this point.
- Differential diagnosis includes:
 - IUP too early to be definitively diagnosed on US.
 - Ectopic with an intrauterine pseudosac.
 - EPL
- When unable to clearly visualize a pregnancy on US in a stable patient, draw serial hCG levels.
- In patients with desired pregnancies, diagnosis based on a more conservative, or slower, rate of increase is preferred, as it can help avoid misclassification of a desired IUP as an ectopic or EPL.
- With a viable IUP, the change in hCG level over 2 days can range from an increase of just 35% to the traditionally expected doubling. Using an increase of > 53% in 2 days you will detect 99% of viable IUPs (Barnhart 2009).
- For patients experiencing EPL, a decline in hCG level is expected. A decline of >50% in 2 days from last hCG supports a diagnosis of resolving PUL.

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c. **A hCG level drawn at her initial evaluation is 1000. Repeat hCG level drawn two days later is 1300. How do you interpret these results? What are your next steps?**

Based on her examination and initial hCG level, this patient could be experiencing EPL, ectopic pregnancy, or have an early IUP. Repeat her bimanual exam, to assess evolution in the clinical picture. Although her second hCG level increased, it did so by only 30%, which is less than expected for a viable IUP. A rise in hCG of less than 53% in 2 days suggests an abnormal pregnancy and should prompt intervention to distinguish an ectopic pregnancy from an EPL. For patients with a desired pregnancy, you may use a cut off of 35% in order to avoid misclassification of an IUP as an EPL or ectopic.

For example considering that this is a desired pregnancy:

Initial hCG = 1000

Repeat hCG done on day 2

Initial hCG x minimal expected % rise on day 2 = minimal expected rise (for a desired pregnancy)

$1000 \times 0.35 = 350$

Initial hCG + expected rise = minimum expected 2nd hCG

$1000 + 350 = 1350$ (by day 2 should be > 1350)

If this was a non-desired pregnancy, the following calculations could be used if diagnostic aspiration is negative for POC and you are considering ectopic management.

Initial hCG x expected % rise on day 2 = expected rise

$1000 \times 0.53 = 530$

Initial hCG + expected rise = minimum expected 2nd hCG

$1000 + 530 = 1530$ (by day 2 should be > 1530)

If ectopic is not definitively excluded, continue to follow hCG levels. Due to overlap in levels, hCG levels must be correlated with the full clinical picture.

When the hCG level does not increase as expected for an IUP or decrease as expected for EPL, adding a third hCG level on day 4 or 7 increases the sensitivity for detecting ectopic pregnancy.

d. **If EPL is confirmed and completed, what kind of support may be of use to her?**

- Reminding her that EPL is not her fault may address her unspoken fears.
- She has now had 2 spontaneous abortions, so she has a $> 70\%$ chance of successful future pregnancy. Further work-up is recommended at this time, as described in [Exercise 8.2.c](#).
- Useful resources for support include her family and community, or counseling resources such as a miscarriage support group.
- With desired pregnancies, giving space to grieve is crucial. You can encourage her to acknowledge her to take special time or find a grieving practice. Set up additional follow-up appointments as needed.

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9. TEACHING POINTS: BECOMING A PROVIDER

EXERCISE 9.1

- 1. In which setting(s) do you visualize your future participation in reproductive health or abortion care? Do you imagine joining a team that already offers services? Or do you picture starting services in a new site? Do you see yourself adding services in a setting where access is currently limited?**
 - There are multiple settings in which reproductive health and abortion services may be offered: clinics (community, non-profit, for profit, independent, residency program continuity sites), outpatient surgical centers, private doctor's offices, and hospitals.
 - You could work on expanding services to include the full range of contraceptive options, outpatient miscarriage management, medication and / or aspiration abortion.
 - There are many ways to get involved: moonlight at a local clinic, join a practice already providing, get involved in teaching other providers, integrate services into your new practice, or providing services through Telemedicine.
- 2. How would you connect with other providers in your region?**
 - Ask faculty mentors to help introduce you to providers in your new area.
 - Look online for providers or ask for contacts on one of the listservs.
 - Contact one of the organizations listed to help make an introduction, or to become a member.
 - Get on mailing lists of state and local pro-choice groups so you know what is happening in your community.
 - Attend a regional or national conference.
- 3. How do you frame this discussion with potential employers? How would you ascertain if your potential employer is open to offering abortion services?**
 - Role-playing a discussion with a potential employer may give you maximal benefit from this exercise, in order to consider your comfort with various approaches and possible responses. Specific questions to ask are discussed in [Strategies for Interviewing](#) section of Chapter 9.
- 4. If an employer thought that a Title X clinic couldn't provide abortions, what would you say to them?**
 - This is not the case. Agencies who receive Title X funding may still perform and self-refer for abortion services. While federally restricted funds can't be used for abortion services directly or indirectly, your clinic may have other revenue streams that do not restrict the type of services you can provide.
 - The cost of abortion services and time must be broken out, in most cases, from other services in order to prove that federal funding is not being used to provide abortions. This may require setting up a separate cost center, which is easy to do. More information is available in [Chapter 11 \(Office Practice Integration\)](#), and guides to assist your administrative / billing department are available.
 - Title X clinics may provide "factual, neutral information about any option including abortion, as they consider warranted by the circumstances, but may not steer or direct clients towards selecting any option in providing options counseling." 65 Federal Register, Section 41270.

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EXERCISE 9.2 – Employment negotiations

- 1. Preparation is key to successful interviewing and negotiations with a future employer. Examine your practice priorities and rank them by their relative importance. What strategies can you use to ensure that your priorities are met?**
 - During the interview, highlight your unique contributions to the organization in terms of valuable skills you have as a reproductive health provider.
 - Understand your market worth prior to or as a part of the process of these negotiations. How much are you worth elsewhere (the dollar and reputational value of the skills you are bringing in). Don't leave it up to the employer to tell you your market worth; you should go into the negotiation knowing (and literally having thought about how you are going to express that).
 - Understand the priorities of the person you are interviewing with and which priorities are aligned or in conflict with yours (Herbert 2012, [Sarfaty 2007](#)).
 - After a negotiation, e-mail the other party summarizing the session to be sure you are both on the same page.
 - Do not accept an offer until you review the details in writing.
 - In academic medicine, terms of employment often are conveyed in a formal letter or contract; the contract supersedes all other agreements.
 - Check your contract carefully for clauses that would prevent you from providing abortion services or restrict you from practicing at another site.
- 2. Creating a list of questions prior to your interview will help you prepare. What information would you want to obtain? How will you address parts of the interview process that will be more challenging for you?**
 - Get advice from mentors and faculty to obtain different perspectives.
 - You will want to understand the scope of your duties and responsibilities.
 - Understand the chain of command (Herbert 2012, [Sarfaty 2007](#)).
 - Role-playing with a trusted mentor or peer may help you prepare.

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EXERCISE 9.3-Managing stigma: the decision to disclose

(Adapted from The Providers Share Workshop, Hassinger, 2012)

- If, when, and how you decide to disclose that you provide abortions is a deeply personal issue that this exercise will help you consider.
- Your ideas on this can and will likely change with time and circumstances.
- Reaching out to others in the field can help provide a supportive environment.

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The background of the page is a light teal color. It features several large, overlapping geometric shapes in a darker teal and a greyish-teal color. These shapes are primarily triangles and quadrilaterals, some pointing downwards and others upwards, creating a dynamic, abstract pattern.

Training in Early Abortion for Comprehensive Healthcare

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