

ANSIRH

ADVANCING NEW STANDARDS IN REPRODUCTIVE HEALTH ▶

Bixby Center for Global Reproductive Health | University of California, San Francisco

Early Abortion Training Workbook

TABLE OF CONTENTS

INSTRUCTIONS FOR OPTIMAL USE	1
1. ORIENTATION.....	2
PROGRAM OVERVIEW.....	4
TRAINING PLAN.....	6
ABORTION FACTS AT A GLANCE	8
AN OVERVIEW OF ABORTION LAW	9
ADOPTION FACTS AT A GLANCE	10
EXERCISES: VALUES CLARIFICATION	11
2. COUNSELING AND INFORMED CONSENT	16
OPTIONS COUNSELING: TECHNIQUES & CHALLENGES	18
FRAMEWORK FOR COUNSELING	19
COUNSELING QUICK GUIDE.....	22
EARLY ABORTION OPTIONS.....	23
CONFIDENTIALITY AND INFORMED CONSENT	24
COUNSELING DURING THE PROCEDURE	25
EXERCISES: COUNSELING AND INFORMED CONSENT.....	28
3. EVALUATION BEFORE UTERINE ASPIRATION	32
PREGNANCY DATING	34
ULTRASOUND: METHODS AND TIPS	35
ULTRASOUND AND POC DATING TABLE	36
ULTRASOUND IMAGES FROM EARLY PREGNANCY	37
MEDICAL EVALUATION PRIOR TO ASPIRATION	38
EVALUATION FOR ECTOPIC VS. EARLY PREGNANCY LOSS	39
EXERCISES: EVALUATION PRIOR TO UTERINE ASPIRATION	40
4. MEDICATIONS AND PAIN MANAGEMENT.....	44
PRE-PROCEDURE MEDICATIONS.....	46
PAIN MANAGEMENT	47
BASIC MEDICATION OPTIONS.....	52
MANAGING EMERGENCIES	53
EXERCISES: MEDICATIONS AND PAIN MANAGEMENT	54
5. UTERINE ASPIRATION PROCEDURE	58
NO-TOUCH TECHNIQUE.....	60
STEPS FOR VACUUM ASPIRATION.....	61
USING MVA AND EVA EQUIPMENT	62
MANAGING COMPLICATIONS	65
EXERCISES: ASPIRATION ABORTION PROCEDURE	67

6. AFTERCARE AND CONTRACEPTION	70
ROUTINE POST-ABORTION CARE	72
CONTRACEPTIVE CARE	74
CONTRACEPTIVE OPTIONS	77
CDC U.S. MEDICAL ELIGIBILITY CRITERIA.....	81
EXERCISES: AFTERCARE AND CONTRACEPTION	83
7. MEDICATION ABORTION	86
COMPARISON OF MIFEPRISTONE REGIMENS.....	88
MIFEPRISTONE ABORTION: STEP BY STEP	89
ULTRASOUND WITH MEDICATION ABORTION	91
MANAGING MEDICATION ABORTION COMPLICATIONS.....	92
EXERCISES: MEDICATION ABORTION	93
8. MANAGEMENT OF EARLY PREGNANCY LOSS	96
INTRODUCTION.....	98
COUNSELING TIPS FOR EARLY PREGNANCY LOSS	99
EPL DIAGNOSTIC AND CLINICAL CONSIDERATIONS	100
MANAGEMENT OPTIONS FOR EPL	102
COMPARISON OF MANAGEMENT OPTIONS FOR EPL	105
EXERCISES: MANAGEMENT OF EARLY PREGNANCY LOSS.....	106
9. BEYOND TRAINING: BECOMING A PROVIDER	110
BUILDING AND MAINTAINING YOUR SKILLS.....	112
STRATEGIES FOR INTERVIEWING.....	114
CONSIDERING PRACTICE OPPORTUNITIES	115
ADDRESSING BARRIERS TO PRACTICE INTEGRATION	117
EXERCISES: BEYOND TRAINING	119
10. TEACHING POINTS	122
11. EVALUATIONS.....	Online
12. BECOMING A TRAINER	Online
13. OFFICE PRACTICE INTEGRATION.....	Online

Suggested Citation:

Goodman S, Wolfe M, and the TEACH Trainers Collaborative Working Group.* *Early Abortion Training Workbook, Fourth Edition*. UCSF Bixby Center for Global Reproductive Health: San Francisco, CA (2012).

* Hufbauer E, Flaxman G, Jackson E, Kaminski A, Schonberg D, Sheinbein M, Shih G, Wallace R, Wang L, McNeil S, Les J, Leung L, Nelson-Munson K.

Bixby Doc: ANSIRH-2012-001 (07/12)

Author Information:

Editors: Suzan Goodman MD, MPH and Michelle Wolfe MD
TEACH Trainers Collaborative Working Group – Ellen Hufbauer MD,
Gabriel Flaxman MD, Emily Jackson MD, Anna Kaminski MD, Dana Schonberg MD MPH,
Miriam Sheinbein MD, Grace Shih MD MAS, Robin Wallace MD MAS, Lin-Fang Wang MD,
Sarah McNeil MD, Jessica Les MD MSc, Lydia Leung MD, Kaaren Nelson-Munson MD MPH.

Based on previous versions:

Goodman S, Wolfe M, and the TEACH Trainers Collaborative Working Group. *Early Abortion Training Workbook & Trainer's Workbooks, 3rd & 2nd Editions*. UCSF Center for Reproductive Health Research & Policy: San Francisco, CA (2007). CRHRP Docs: ANSIRH-2007-012 & -013 (07/07)

Goodman S, Paul M, Wolfe M, and the TEACH Trainers Collaborative Working Group. *Early Abortion Training and Trainer's Workbooks, 2nd & 1st Editions*. UCSF Center for Reproductive Health Research & Policy: San Francisco, CA (2004). CRHRP Docs: FHS-2004-010 & -011 (11/04)

Paul M, Stewart FH, Weitz TA, Wilcox N, Tracey JM. *Early Abortion Training Workbook*. UCSF Center for Reproductive Health Research & Policy: San Francisco, CA (2003). CRHRP Doc: FHS-2003-009 (9/03)

This publication is designed for use by licensed medical providers. Individuals who wish to provide any of the medical services described herein should obtain appropriate training prior to initiating services. This resource is not intended to provide legal, medical or other professional advice. It is not a substitute for consultation with a healthcare provider or for independent judgment by healthcare providers or other professionals regarding individual conditions and situations. This workbook is protected by copyright; replication for sale is prohibited. For authorization to reproduce the document (whole or in part) for non profit use in your training program, please contact the authors at:



ANSIRH Program
UCSF Bixby Center for Global Reproductive Health
University of California, San Francisco
1330 Broadway, Suite 1100
Oakland, CA 94612
ANSIRH@obgyn.ucsf.edu
© 2012, The Regents of the University of California

Acknowledgments

The authors appreciate the generous help and advice that we have received from our advisory committee (listed on the following page) and collaborating organizations (listed below). Participation by these individuals and organizations should not be interpreted as an endorsement, and any limitations of the curriculum are solely the responsibility of the authors.

Collaborating organizations include: Center for Reproductive Health Education in Family Medicine (RHEDI), Reproductive Health Access Project (RHAP), Planned Parenthood Federation of America (PPFA), National Abortion Federation (NAF), and Association of Reproductive Health Professionals (ARHP).

Advisory Committee

We want to thank the following individuals who helped contribute to the success of this publication.

Susan Baldwin MD, MPH	University of Arizona
Ian Moore Bennett MD, PhD	University of Pennsylvania
Laura Castleman MD, MPH, MBA	University of Michigan, Ipas, Planned Parenthood Michigan
Mitchell Creinin MD	University of California, Davis
Vanessa Cullins MD	Planned Parenthood Federation of America
Philip D. Darney MD	University of California, San Francisco
Anne Davis MD	Columbia University Medical Center
Christine Dehlendorf MD, MAS	University of California, San Francisco
Carla Eckhardt	bdi Consulting, Marie Stopes International
Mayra Ferreira	Physicians for Reproductive Choice & Health
Dick Fischer MD	Planned Parenthood Mar Monte
Mary Fjerstad RN, NP, MA	WomanCare Global
Diana Foster PhD	University of California, San Francisco
Lori Freedman PhD, MPH	University of California, San Francisco
Dorothy Furgerson MD	Planned Parenthood Mar Monte
Emily Godfrey MD, MPH	University of North Carolina, University of Illinois
Marji Gold MD	RHEDI, Albert Einstein College of Medicine
Alisa Goldberg MD, MPH	Harvard Medical School, PP League of Massachusetts
Rivka Gordon PA-C, MHS	Association of Reproductive Health Professionals
Dan Grossman MD	Ibis Reproductive Health
Lisa Harris MD, PhD	University of Michigan
Susan Higginbotham	Society for Family Planning
Lawrence Leeman MD, MPH	University of New Mexico
E. Steve Lichtenberg MD, MPH	Northwestern University Feinburg School of Medicine
Lisa Maldonado MA, MPH	Reproductive Health Access Project
Karen Meckstroth MD	University of California, San Francisco
Tom Moran MD	Planned Parenthood Pacific Southwest
Mark Nichols MD	Oregon Health and Sciences University
Melissa Nothnagle MD, MSc	Brown University
Susan Osborne	bdi Consulting
Alissa Perrucci PhD, MPH	University of California, San Francisco
Rachael Phelps MD	Planned Parenthood of Rochester / Syracuse
Suzanne Poppema MD	University of Washington
Linda Prine MD	Reproductive Health Access Project; Beth Israel Residency
Matthew Reeves MD, MPH	WomanCare Global
Susan Robinson MD	Southwestern Women's Options
Pablo Rodriguez MD	Women's Care, Inc.
Vicki Saporta	National Abortion Federation
Eric Schaff MD	Temple University, Greater Philadelphia Action Center, Inc.
Shelley Sella MD	Southwestern Women's Options
Wayne Shields	Association of Reproductive Health Professionals
Scott Spear MD	Planned Parenthood of Greater Texas
Diana Taylor RNP, PhD	University of California, San Francisco
James Trussell PhD	Princeton University
Ushma Upadhyay PhD, MPH	University of California, San Francisco
Deborah Vanderhei, BSW	University of Washington
Jeff Waldman MD	Planned Parenthood Shasta Pacific
Carolyn Westhoff MD	Planned Parenthood Federation of America, Columbia University
Tracy Weitz PhD, MPA	University of California, San Francisco
Beverly Winikoff MD, MPH	Gynuity Health Projects, LLC
Susan Yanow MSW	Reproductive Health Access Project, Independent Consultant
Melanie Zurek EdM	Abortion Access Project

Scientific Advisory Committee

The following individuals were responsible for ensuring the scientific integrity of this publication:

Laura Castleman, MD, MPH, MBA
University of Michigan
Medical Director, Ipas
Planned Parenthood Mid and Southeast Michigan

Emily Godfrey, MD, MPH
Assistant Professor of Obstetrics & Gynecology
University of North Carolina Chapel Hill
Associate Professor of Family Medicine
University of Illinois, Chicago

Lawrence Leeman, MD, MPH
Professor, Family & Community Medicine, Obstetrics & Gynecology
University of New Mexico
Albuquerque, NM

Matthew Reeves, MD, MPH
Chief Medical Officer
WomanCare Global
Washington, DC

Disclosures

The following scientific advisory committee participants have a financial interest or affiliation with the manufacturers of commercial products discussed in this education program. These financial interests or affiliations are in the form of grants, research support, speaker support, and/or other support. This support is noted here to fully inform course participants and should not have an adverse impact on the information provided by these reviewers / speakers.

Castleman: There are no disclosures for Dr. Castleman.

Godfrey: There are no disclosures for Dr. Godfrey.

Leeman: There are no disclosures for Dr. Leeman.

Reeves: There are no disclosures for Dr. Reeves

Instructions for Optimal Use

This Workbook, available in online or printed versions, is now more interactive and searchable, with online functionality. Links to original references, chapters and teaching points allow quick access to areas of interest. If a hard copy is desired, it can be printed as a double-sided document or ordered by emailing info@rhedi.org.

Easy linking to original references

- For online versions of available abstracts, articles or documents, click on:
 - Citations within chapters:
 - Scroll and click on the author name.
 - In the Reference section of each chapter
 - Click on the [blue link](#).
 - For problems with a link, copy and paste it into your browser.

Easy searching throughout the document

- To use the Find Function
 - Use CTRL+f (for PCs) or use Command+f (for Macs).
 - Type in the item you are looking for and hit Enter.
 - Continue to hit Enter to scroll until you find the desired material.

Direct access to chapters via Table of Contents

- To access each chapter and subsection via the Table of Contents, click on any heading of interest and you will be taken there.

Direct access between Exercises and Teaching Points

- To access the Teaching Points for Exercises, click on the statement “Click here for the Teaching Points to these Exercises” at end of each Chapter’s Exercises.
- To return to the Exercises, go to the end of each Chapter’s Teaching Points and click the link that says “Click here to return to the Chapter Exercises”.

Access to Supplemental Readings in the NAF Textbook

- Supplemental readings are available in *Management of Unintended and Abnormal Pregnancy* (Paul M. et al, Wiley-Blackwell, 2009).
- An online copy can be requested for all residents by inquiring through their institutional or residency library. Or individual online copies can be purchased at: <http://www.prochoice.org/education/resources/textbook.html>.

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 women.

Whether or not you choose to participate in all aspects of family planning, including abortion services, this curriculum can help you be a better primary care provider for women of reproductive age. There are many skills to gain in pregnancy dating, options counseling, timely referrals, miscarriage management, and contraception.

It may be beneficial to read Chapters 1 and 2 before the beginning your training to help you clarify your personal values about pregnancy options and abortion training 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 reproductive and abortion care, and ways this affects access to health care.

READINGS / RESOURCES

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 3: Unintended pregnancy and abortion in the USA: epidemiology and public health impact
- Planned Parenthood pregnancy options information <http://goo.gl/bj00F>
- The Evan B. Donaldson Adoption Institute. <http://goo.gl/nWJzo>
- Clinic Policies and Procedures (if applicable)
- State Legal and Reporting Requirements (may be provided)
 - <http://www.guttmacher.org/statecenter/updates/index.html>
 - <http://aspe.hhs.gov/hsp/08/sr/statelaws/report.pdf>

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 a patient about her pregnancy, abortion, or contraceptive options, use a non-directive approach with active listening, open-ended questions, and accurate information.

SAFETY

- Abortion is safe. Access to legal abortion is associated with significant reductions in maternal morbidity and mortality.
- Providers face safety risks in some settings. Risks may be reduced by taking appropriate precautions for your setting, such as remaining alert and avoiding wearing a white coat or scrubs outside.

ROLE

- Abortion is common; it is the most common outpatient procedure performed. One in 3 U.S. women will have an abortion in her lifetime.
- Given the high rates of unintended pregnancy, abortion, and early pregnancy loss in the U.S., most physicians caring for women will face these issues.
- Access to abortion is threatened. While restrictive laws do not lower abortion rates, they do increase the disparity in access, and increase the gestational age that women have abortions.
- 87% of U.S. counties are without a provider, and are home to 35% of reproductive-aged women.
- By providing high quality pregnancy options counseling and either services or timely referrals, you will improve the access and quality of care women 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.
- Be a conscientious clinician in the areas of pregnancy options counseling and contraceptive information for all women of reproductive age.

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 and / or provide early medication abortion.
5. Describe the management of complications related to early pregnancy loss, medication abortion, and uterine aspiration.
6. Provide patient-centered contraceptive counseling and management.

TRAINING SUMMARY

This program will vary depending on the training setting. We encourage adaptation as needed for use in residency programs, higher-volume training 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 and staff 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 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 women experiencing early pregnancy loss.
- Complete evaluations to provide feedback about the training program.

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

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

Supplemental readings are available in *Management of Unintended and Abnormal Pregnancy* (Paul M. et al, Wiley-Blackwell, 2009), and some can be accessed online at: <http://www.prochoice.org/education/resources/textbook.html>.

LENGTH OF TRAINING

- For all participants (including alternative curriculum): time for orientation, observation, workbook review, and completion of Training Plan and evaluations.
- For those learning uterine aspiration: time for “hands on” training plus workbook review.

ADVANCED TRAINING OPPORTUNITIES

- See Advanced Column of Training Plan for outline (next page).
- Those interested in gaining more in-depth skill and knowledge may add:
 - Elective clinical time.
 - Beyond Training Chapter.
 - Completion of supplemental readings.
 - Opportunities to participate in networking, advocacy, and leadership activities (see discussion in Chapter 9: Beyond Training).
 - Planning and mentorship for additional training, fellowship opportunities, and / or future practice in reproductive health.

ALTERNATIVE CURRICULUM (OPT-OUT) OPTIONS

This training workbook and rotation 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 the services your patients seek and the knowledge to help manage their follow-up care.

The AAFP recommends all family physicians–in-training receive exposure to many core skills covered in this curriculum, including:

- Evaluation of dating and pregnancy risk.
- Pregnancy options and contraceptive counseling.
- Aspiration / management of incomplete first trimester abortion.
- First trimester aspiration abortion (advanced).
- IUD and contraceptive implant placement.

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 curriculum recommendation on the following pages of the Training Plan covers 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.

TRAINING PLAN

NAME: _____

TRAINING INITIATION DATE: _____

TRAINING COMPLETION DATE: _____

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		
	NAF Chapter 3: Unintended pregnancy and 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		
	NAF 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		
	NAF Chapter 6 & 7 – Clinical Assessment and U.S. 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		
	NAF Chapter 8 – Pain Management		
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		
	NAF Chapters 10, 13, & 15 – First Trimester Aspiration, The Challenging Abortion, & Surgical Complications		

Note: **SHADING** indicates additional activities depending on training goals.

Date	Activity	Basic	Advanced
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		
	NAF 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		
	NAF 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		
	NAF Chapter 16: Pregnancy loss		
9. BEYOND TRAINING: BECOMING A PROVIDER			
	Discuss Workbook Readings		
	Complete NAF Textbook Supplemental Readings		
	Discuss Beyond Training Exercises		
	Discuss advanced opportunities		
10. EVALUATION (Options available online)			
	Complete Skills Assessment		
	Complete Training Program Evaluation		

SUGGESTED EXERCISES FOR ALTERNATIVE CURRICULUM (OPT OUT)

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. Aftercare and Contraception	All / All	
	7. Medication Abortion	All / 7.3	
	8. Management of Early Pregnancy Loss	All / All	
	10. Evaluations	All / All	

Note: **SHADING** indicates additional activities depending on training goals.

ABORTION FACTS AT A GLANCE

Abstracted from Guttmacher Institute's Facts on Induced Abortion in the United States 2011 Fact Sheet

ABORTION BY THE NUMBERS

- Nearly half of pregnancies among women in the U.S. are unintended.
- Unintended pregnancy is more common among women with lower socioeconomic status; this disparity is growing.
- Abortion is common and safe, but there is a shortage of providers.
- 22% of all pregnancies end in abortion (excluding miscarriages).
- Most abortions occur early in pregnancy; about 88% in the first 12 weeks.
- Medication abortions account for about 25% of abortions below 9 weeks.
- 87% of all U.S. counties lacked an abortion provider in 2008. These counties were home to 35% of reproductive age women.

WHO HAS ABORTIONS

- Women of all backgrounds have abortions; including 1 of every 3 U.S. women.
- Over 60% of abortions are among women who have had 1 or more children.
- 37% of women obtaining abortions identify as Protestant, and 28% as Catholic.
- On average, women give ≥ 3 reasons for choosing abortion: 3/4 say a baby would interfere with work, school or responsibilities; 3/4 say they cannot afford a child; 1/2 say they do not want to be a single parent or are having relationship problems.
- Almost half of the women having abortions > 15 weeks of gestation say the delay was because of problems in affording, finding or getting to abortion services.

CONTRACEPTIVE USE

- 54% of women 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 concerns about using a method, 26% had unexpected sex, 1% were forced to have sex.
- 76% of pill users and 49% of condom users reported inconsistent use; only 13% of pill users and 14% of condom users reported correct use.

SAFETY OF ABORTION

- First trimester abortions pose no long-term risk of infertility.
- The mortality associated with childbirth is 12 times that of legal abortion.
- The risk of abortion complications is minimal; less than 1% of all abortion patients experience a major complication, and less than 0.3% require hospitalization.
- 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; accounting for 13% of maternal mortality worldwide.
- Leading experts conclude that abortion does not pose a hazard to women's mental health. The most common emotional response being a sense of relief.

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 wks), 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 wks), state laws may regulate abortion procedures only in order to protect the woman's health.
- During third trimester (after 24 wks), state laws may prohibit abortion except when it is necessary to preserve the life or health of the woman.

In **1992, *Planned Parenthood of SE Pennsylvania v. Casey*** established:

- States can restrict abortions, even in the first trimester, as long as restrictions do not place "undue burden" on women.

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, 2012

- *Gestational Limits*: 40 states prohibit abortions, except to protect the woman's life or health, after a specified point in pregnancy, most often fetal viability.
- *Public Funding*: 32 states 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.
- *Waiting Periods*: 26 states require a specified waiting period, usually 24 hours, between counseling and abortion; 9 of these require two separate clinic trips.
- *State-Mandated Counseling*: 19 states mandate that women be given pre-abortion counseling with **inaccurate** information on a purported link between abortion and breast cancer (5 states), early fetal pain (11 states), long-term mental health consequences (7 states), or required ultrasound (7 states).
- *Parental Involvement*: 37 states require some type of parental involvement in a minor's decision to have an abortion; the majority requiring parental consent, the rest requiring notification.
- *Federal Abortion Ban*: In 2007, the so-called "Partial Birth Abortion" Act was passed, and retreats from an unbroken line of precedent that a woman's health must remain the paramount concern in any abortion regulation.

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

INCIDENCE OF ADOPTION

- There is no updated central database on adoption. Approximately 1% of infants born to never-married women are placed for adoption (National Survey of Family Growth, 2002), representing a many-fold decline from the pre-Roe era.
- Information is limited on women choosing to place a child for adoption, but the majority have never been married. They have higher income and aspire to more education than those choosing parenting (Bachrach 1992, Stolley 1993).

THE ADOPTION PROCESS

- In adoption, a woman 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 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, visits, health and income statements, 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

Open vs. Confidential:

- In open adoption, the birth mother may select and have contact with the adopting family (through ongoing visits, phone calls, or pictures). Women may choose it to be reassured and maintain contact as the child grows.
- In confidential adoption, the birth mother and adopting parents have no contact, but do share relevant medical history. Women may choose it for more privacy.

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 for yourself 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: Challenging Cases in Medicine (Optional)

Consider a time you observed another medical provider react (based on his/her pre-existing judgments or assumptions) toward a patient in a way that negatively impacted that relationship. How did this affect the patient care?

EXERCISE 1.2: 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, parenthood, or adoption.

1. In general, how do you feel about your patients choosing abortion? Are you challenged to accept a patient's decision in the following circumstances?

- if the pregnancy threatens her physical health or life
- if the pregnancy involves significant fetal abnormality
- if she is not financially able to support a child
- if having a child would interfere with education or career goals
- if she is a victim of intimate partner violence
- if she is an active substance abuser
- if she has lost previous children to Child Protective Services
- I can accept an informed decision to choose abortion in any circumstance.

Were you surprised by any of your reactions? How have your life experiences contributed to these feelings?

2. In general, how do you feel about your patients choosing adoption? Are you challenged to accept a patient's decision in the following circumstances?

- if the pregnancy threatens her physical health or life
- if the pregnancy involves significant fetal abnormality
- if she is not financially able to support a child
- if having a child would interfere with education or career goals
- if she is a victim of intimate partner violence
- if she is an active substance abuser
- if she has lost previous children to Child Protective Services
- I can accept an informed decision to choose adoption in any circumstance.

Were you surprised by any of your reactions? How have your life experiences contributed to these feelings?

3. In general, how do you feel about your patients choosing parenthood? Are you challenged to accept a patient's decision in the following circumstances?

- if the pregnancy threatens her physical health or life
- if the pregnancy involves significant fetal abnormality
- if she is not financially able to support a child
- if having a child would interfere with education or career goals
- if she is a victim of intimate partner violence
- if she is an active substance abuser
- if she has lost previous children to Child Protective Services
- I can accept an informed decision to choose parenthood in any circumstance.

Were you surprised by any of your reactions? How have your life experiences contributed to these feelings?

EXERCISE 1.3: Gestational Age and Abortion

Purpose: The following 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 the end of the first trimester
- At quickening (i.e. point of fetal movement)
- 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?

EXERCISE 1.4: Your Feelings about Women's Reasons

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

How would you feel about referring or providing an abortion for a woman who:

- is ambivalent about having an abortion but whose partner wants her to terminate the pregnancy.
- wishes to obtain an abortion because she is carrying a female fetus.
- has had many previous abortions.
- indicates that she does not want any birth control method to use in the future.

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

EXERCISE 1.5: 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, and how your decision to offer options counseling, referrals, or services might influence the accessibility of abortion.

1. What is your reaction to the following accounts?

A) Jennie is 9 weeks pregnant and seeking an abortion. The two providers in her state are 2 and 4 hours away, and because they share a single doctor, offer services only on alternating days. Mandatory counseling and waiting laws in her state require she make two separate trips to the clinic. Because she needs to schedule time off work in advance, she is unable to make an appointment until the 11th week of pregnancy. She has the money to pay for the procedure, but cannot afford the additional cost if she is further delayed. (Courtesy of the Abortion Access Project)

B) It is estimated that for every 99 U.S. women receiving abortion, 1 shows up too far along in pregnancy to receive one. Many factors delay women seeking care. Here two women's explanations of what slowed them down from the Turnaway Study (UCSF Bixby Center for Global Reproductive Health):

"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 woman from New Mexico, 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."

A 24-year old white woman from Minnesota at 24 weeks

C) A doctor who was a resident in a New York City Hospital during the 1960's described what she called the "Monday morning abortion line-up":

"Women would get their paychecks on Friday, and that night they would go to their abortionist and spend their money on the abortion. Saturday they would start being sick and they would drift in on Sunday or Sunday evening, either hemorrhaging or septic, and they would be lined up outside the operating room to be cleaned out Monday morning. There was a lineup of women on stretchers outside the operating room, so you knew if you were an intern or a resident, when you came in on Monday morning, that it was the first thing you were going to do." (Joffe, 1995, p.60)

2. 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?

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- AAFP Recommended Curriculum Guidelines: Womens Health, Reprint No 282. <http://goo.gl/QPsDe>
- AAFP Recommended Curriculum Guidelines: Maternity & Gynecologic Care, Reprint No 261. <http://goo.gl/HSrRV>
- Bachrach CA, Stolley KS, London KA. Relinquishment of premarital births: evidence from national survey data. *Fam Plann Perspect*. 1992 Jan-Feb;24(1):27-32, 48. <http://goo.gl/D0cps>
- Chandra A, et al. "Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. National Center for Health Statistics. *Vital Health Stat* 23 (25). 2005. <http://goo.gl/TMQpH>
- Chandra A, et al. "Adoption, Adoption Seeking, and Relinquishment for Adoption in the U.S." Advance data from vital and health statistics; no. 306. Hyattsville, Maryland: National Center for Health Statistics. 1999. <http://goo.gl/drBkT>
- Child Welfare Information Gateway, U.S. Dept of Health & Human Services: Administration for Children & Families. <http://goo.gl/Oxk3y>
- Freundlich, M. Supply and demand: the forces shaping the future of infant adoption. *Adoption Quarterly* 1998;2(1):13-42. <http://goo.gl/TlaOQ>
- Guttmacher Institute's State Policies in Brief: An Overview of Abortion Law. 2012. <http://goo.gl/Mq17B>
- Henshaw SK. Unintended pregnancy in the US. *Family Planning Perspectives* 1998;30(1):24-29 & 46. <http://goo.gl/BLyk8>
- Joffe C, *Doctors of Conscience: The Struggle to Provide Abortion Before and After Roe v. Wade*. Boston: Beacon Press 1995.
- Jones RK, Darroch JE, and Henshaw SK. Contraceptive use among U.S. women having abortions in 2000-2001. *Perspectives on Sexual and Reproductive Health* 2002;34(6):294-303. <http://goo.gl/3O8es>
- Jones RK and Kooistra, K., *Abortion incidence and access to services in the United States, 2008, Perspectives on Sexual and Reproductive Health, 2011, 43(1):41-50.* <http://goo.gl/mkCOi>
- Jones RK, Singh S, Finer LB, Frohworth LF. Repeat Abortion in the U.S. Occasional Report No. 29, 2006. <http://goo.gl/unzM8>
- Kumar, A., Hessini, L., & Mitchell, E. M. H. (2009). Conceptualising abortion stigma. *Culture, Health & Sexuality, 11(6), 625-639.* <http://goo.gl/hfOFu>
- Moore KA et al. Beginning too soon: adolescent sexual behavior, pregnancy, and parenthood. Executive Summary, Washington D.C.: Child Trend 1995. <http://goo.gl/Ki9Rn>
- National Abortion Federation. *Obtaining Abortion Training: a Guide for Informed Decision-Making*, 2005.
- National Adoption Information Clearinghouse (HHS). *The Adoption Home Study Process*. 2004. <http://goo.gl/vRYHJ>
- Planned Parenthood: Thinking about Adoptions. <http://goo.gl/idaQn>
- Stolley, KS. Statistics on adoption in the United States, *The Future of Children*. Adoption. 1993;3(1) 26-42. <http://goo.gl/SQ36k>
- Trussell J, Ellertson C, Stewart F, Raymond EG, Shochet T. The role of emergency contraception. *Am J Obstet Gynecol*. 2004;190:S30-8. <http://goo.gl/Qiuxe>
- The Evan B. Donaldson Adoption Institute. <http://goo.gl/nWJzo>

2. COUNSELING AND INFORMED CONSENT

This chapter covers the fundamentals of presenting women 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 better able to:

- Deliver pregnancy test results in a confidential and nonjudgmental manner.
- Describe the full range of pregnancy options.
- Guide and support patients through the decision making process.
- Address issues of ambivalence and ensure that decisions made by patients are informed, voluntary and uncoerced.
- Use language that is mindful, sensitive and unassuming.
- Provide information on the important differences between medication and aspiration abortion.
- Talk a woman through an aspiration procedure.

READINGS / RESOURCES:

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 3: 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. Rowman and Littlefield Publishers. 2012
- Ferre Institute Pregnancy Options Workbook
<http://www.pregnancyoptions.info/pregnant.htm>
- Related Content:
 - Chapter 7: Medication Abortion: Counseling issues
 - Chapter 8: Early Pregnancy Loss: Counseling issues

SUMMARY POINTS

SKILL

- The words and tone of voice that you use to disclose pregnancy test results or offer counseling have a direct effect on your patient's experience.
- Open-ended questions and nonjudgmental listening are key components of successful counseling.
- Allow time for a patient to think, talk further, or ask additional questions, as needed. Some patients may need to delay the procedure until they find clarity.
- Important aspects of options counseling include validating and normalizing a patient's feelings, reflecting on why this may or may not be the best decision for her, and reframing the decision as a positive one for her.
- Seek help from experienced providers when coping with a challenging counseling situation.

SAFETY

- Occasionally, a patient may need to be referred to a facility that can provide more extensive counseling.

ROLE

- The clinician is ultimately responsible for determining that the patient's decision about the pregnancy was made freely and without coercion.
- Maintain your attention to privacy and confidentiality.
- While you are in the procedure room, your attention should always be directed to the patient, and the conversation should include her.

OPTIONS COUNSELING: TECHNIQUES & CHALLENGES

Portions adapted from:

- Perrucci A. Decision Assessment and Counseling in Abortion Care: Philosophy and Practice, 2012.
- Singer J. Options Counseling: Techniques for Caring for Women with Unintended Pregnancies, 2004.

PREGNANCY OPTIONS COUNSELING

Many women will come to you for information about their pregnancy options. Information and counseling is ranked first among the factors that patients correlate with their satisfaction (Kaiser Family Foundation 1999). For most women the decision is clear and they don't need much counseling. It is important for you to listen actively and provide basic information in a non-directive manner.

Use open-ended questions

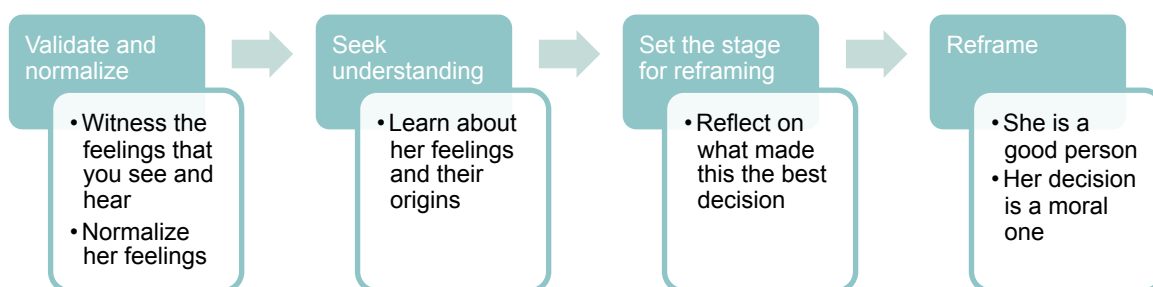
Before running the pregnancy test, you might ask her, "What do you think or hope the results will be?" It is important not to assume that you and the patient share an understanding of medical terminology and the meaning of a positive test result: "I have the results of your pregnancy test. The test came back positive; that means you are pregnant."

After disclosure of results, allow a moment for the information to sink in. Remaining silent after giving the result allows the patient to respond when she is ready. The following questions may be useful starting points for discussion:

- *"What are you feeling right now?"*
- *"What's going through your mind?"*
- *"No matter whether you choose to keep or end this pregnancy, this may be a hard decision, and women often feel conflicting emotions."*
- *"What part of this situation is most difficult for you?"*
- *"Although it can be helpful to talk with friends and family members about this, it is ultimately both your right and responsibility to decide what is best for you."*
- *"I want to look at this situation with you so you can find some peace of mind and come to a decision that you are sure of."*
- *"What is your picture of the next year or five years of your life? How does this pregnancy change or affect your hopes and goals?"*
- *"How have you made difficult decisions before? Did you feel like the choices were yours, or did someone else decide 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?"*

FRAMEWORK FOR COUNSELING

The following framework may be a helpful way to contextualize your counseling and the emotional conflict your patient may be experiencing. In this framework (Perrucci 2012), there are four central stages. The examples may assist your counseling conversation.



Validate and Normalize	Seek Understanding	Set the State for Reframing	Reframe
<p>I can see that you're sad.</p> <p>It's okay to cry here.</p> <p>It seems like you're really hurting right now.</p> <p>It's okay; everyone is scared.</p> <p>That's not strange at all; a lot of women have asked me the same question.</p>	<p>Can you say more about what you're feeling?</p> <p>How has that been for you?</p> <p>Can you put your finger on where that feeling is coming from?</p>	<p>Use what you've learned about what made this the best decision for your patient. Reflect that back to her:</p> <p>For example, when choosing abortion: Women have abortions for many reasons including to be able to care for the children they already have and to be able to plan their lives so that they can care for the children they may have in the future.</p> <p>I can imagine that you are a good person trying to do the right thing based on what is going on in your life.</p>	<p>What I hear is that you are making this decision because you care about the well being of your children. You are following your family values.</p> <p>There are many people who rely on you. You have a young child right now who needs you to be there for her. This is about what is fair and just.</p> <p>It sounds like for you, this decision will reduce the suffering of everyone involved. That sounds like a moral decision.</p>

Dealing with Ambivalence

Most life decisions are characterized by a normal degree of ambivalence. If you are not sure that the patient is clear and confident in her decision, however, it is appropriate to provide more time for thought and supportive counseling, even if it means delaying a procedure.

Helpful Exercise for Ambivalent Patients

Try to have her imagine her life now and a few years from now if she continues this pregnancy, or end this pregnancy. And how will she feel about her decision in each circumstance.

	Parenting	Abortion	Adoption
Pros:			
Short term			
Long term			
Cons:			
Short term			
Long term			

Dealing with Spiritual or Moral Conflict

If you have little background in religious or spiritual matters, do not panic. Release yourself from the obligation of having to know the answer to the patient's dilemma. Instead it is helpful to be inquisitive about what this conflict means for her, and what is getting in the way of her feeling like a good person who can be forgiven. It may be beneficial to make a plan with her that can include readings (see Maguire 2001), internet resources (<http://www.faithaloud.org/faith/faith-counseling.php>), discussions with a prochoice religious group, or other counseling referrals.

Moral conflict also raises difficult issues regarding women seeking abortion who at the same time believe that it 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 her reconcile this conflict.

SPECIAL CASES

Early Pregnancy Loss: If a pregnancy failure is discovered during the evaluation, assure that the patient understands the diagnosis, implications, and the various management options. Explicitly address feelings of guilt; reassure her that there is no evidence that something she might have done caused the pregnancy loss. See Chapter 8 Counseling Tips for more information.

Multiple Pregnancies: Twin pregnancies currently make up approximately 1% of all pregnancies, but are increased in the setting of assisted reproductive technologies. It is not uncommon to discover a multiple gestation during the ultrasound evaluation. While many women want to know if they have a multiple pregnancy, others do not. Occasionally, this information will change a patient's decision. Routinely ask each patient if she wants to know prior to her ultrasound, so you can honor her 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 woman feel safe and supported by offering:

- *“This isn’t your fault. I’m so sorry this has happened to you.”*
- *“Is this hard for you to talk about?”*
- *“I’m glad you told me; you’re brave to do that.”*
- *“Many women in this situation feel alone; you don’t have to feel alone with us.”*
- *“No one ever deserves for this to happen to them.”*

It can be helpful to ask for permission to begin, check in frequently and explain each step of the exam and procedure so the patient is prepared. In describing steps, consider using the word “gentle”. For example, *“I am going to gently insert the speculum...”*

Rape or sexual abuse counseling referrals are essential, and local reporting laws will dictate any legal action the provider is required to take. Document the woman's symptoms or injuries, cause, history of abuse, identity of the abuser, and relationship to the patient. It is also vital to facilitate a process of closure for her.

COUNSELING QUICK GUIDE

Ask open-ended questions	<i>“What questions do you have for me?” “What is the most difficult part for you?” “How are you feeling about your decision?” “Tell me more...”</i>
Clarify the facts	The actual timing of pregnancy and possibility that she may not need to decide today.
Reflect/ Normalize	<i>“You seem to be feeling...” “It is ok to cry here.” “You sound... Let’s talk about why you may feel...” “Lots of women feel confused/scared/ambivalent...”</i>
Seek to understand	<i>“Can you say more about that?”</i>
Validate, don’t fix	<i>“This can be hard.” “What can I do that is most helpful for you?”</i>
Reframe the situation	<i>“It sounds like you are making the most responsible decision by ...”</i>
Reassure her	Encourage her to trust and respect her decision
Give the patient control	<i>“Which would you prefer?” “If... then” instead of “You should...” Keep her informed.</i>
Communicate acceptance	In your tone. Use eye contact. Sit at her level.
Pay attention to body language	Sit at her level.
Use silence	Let things sink in. Let her finish.
Address Common Fears	
Procedure pain	Review options for pain control and relaxation.
Spiritual conflict	<i>“Let’s talk for a moment about your beliefs. What does your faith say about forgiveness?”</i>
AVOID	
False reassurances	<i>“You’ll be fine. This won’t hurt.”</i>
Over-identification	<i>“I know exactly how you feel.”</i>
Medical jargon	<i>“Have you had previous pregnancy terminations?”</i>
Loaded statements	<i>“Your family supports your decision, right?”</i>

EARLY ABORTION OPTIONS

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

Factors to consider when trying to decide between medication and aspiration abortion.

	Medication Abortion	Aspiration Abortion
Gestational Age	Up to 9 weeks in U.S.	Aspiration up to 14 weeks D&E beyond 14 weeks depending on state regulation
Advantages	Occurs in privacy of own home Avoids invasive procedure Avoids anesthesia More support options possible Perceived as more natural	Completed in one day May experience less bleeding More pain management options
Disadvantages	Completed in multiple days (≥ 2) May experience heavier and longer bleeding	Requires clinical setting Risks of instrumentation Risks of anesthesia Fewer options on support person(s) during procedure
Protocol	Mifepristone in office Misoprostol at home	Procedure in office
Effectiveness	98-99% of the time If fails, may need aspiration	Over 99% of the time If fails, may repeat aspiration
Duration	One to several days to complete	1 visit: 5-10 minute procedure
Pain	Mild to strong cramps after taking misoprostol lasting a few hours	Mild to strong cramps during the abortion
Bleeding	Heavier bleeding with clots during the abortion Light bleeding can persist for 1-2 weeks or more	Most bleeding during procedure Light bleeding can persist 1-2 weeks
Pain management	Oral pain medication	Options of: Oral pain medication Local anesthesia IV or general anesthesia
Safety	Used safely for > 15 years At least 10 times safer than continuing a pregnancy	Used safely for > 40 years At least 10 times safer than continuing a pregnancy

CONFIDENTIALITY AND INFORMED CONSENT

Adapted from: Management of Unintended and Abnormal Pregnancy, 2009.

Information disclosed to providers and staff must be protected and is available only to other staff directly involved in that patient's care. Patient information may only be shared if the patient expressly gives permission to do so, or with an exception, such as to:

- Comply with health department laws about required infectious disease reporting.
- Comply with required reporting of suspected child abuse to CPS.
- Comply with required reporting of domestic violence to the local police.
- Provide formal subpoenaed information.

Disclosure of information under any other circumstance is considered a breach of confidentiality.

Voluntary and informed consent of the patient must be obtained and documented prior to the abortion. State laws, malpractice standards, and the ethical standards of medical practice define the parameters of the informed consent process.

The clinician or a trained staff member may obtain informed consent (unless state laws prohibit delegation of this duty to a non-physician). The informed consent is similar to those obtained for other procedures. In first trimester abortion, the following issues are typically addressed during the informed consent process:

- The gestational age of the pregnancy.
- Pregnancy alternatives (parenting, placing for adoption, or abortion).
- The voluntary nature of the patient's decision.
- A description of abortion procedures available to her at that gestation.
- The nature, benefits, and risks of the abortion (bleeding, infection, damage to nearby structures, ongoing pregnancy) and any ancillary procedures (e.g. state reporting requirements for sexually transmitted infections).
- Tests that may be performed (e.g. pregnancy tests, hemoglobin, ultrasound).
- Available options for pain management.
- Permission to treat the patient in the event of a complication or emergency.
- Her understanding of the forms.

Even when the patient expresses certainty about her decision to have an abortion, take care to establish that she is making her choice without coercion from her partner, parent, guardian, or anyone else. Talk to the patient alone at first, before allowing others to participate in the discussion, so that she has an opportunity to disclose any coercion.

State laws may influence the consent process. For example, some states require:

- A specific waiting time between informed consent and the abortion procedure.
- An ultrasound to be completed by the clinician providing the abortion.
- Parental notification or consent.
- Inaccurate information on a purported link to breast cancer, early fetal pain, or long-term mental health consequences.

- For current state laws:

<http://www.guttmacher.org/statecenter/updates/index.html>.

COUNSELING DURING THE PROCEDURE

ESTABLISHING RAPPORT AND RESPONDING TO PATIENTS

A friendly introduction and taking a seat at the patient's level demonstrate respect and support and help ease the anxiety that typically occurs prior to a procedure. These conversations are best held with the patient sitting up, rather than lying down or in lithotomy position.

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 an unmanageable level of fear, or it may be that the reality of being in the procedure room is making her reconsider her decision.

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

In deciding how to proceed, it is appropriate to trust your own 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 aren't sure, we can postpone until you are more sure. Do you need some more time?"

For many women, 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.

HELPFUL TECHNIQUES DURING THE PROCEDURE

- Use description, distraction, and breathing techniques discussed in Chapter 4, p. 47.
- Provide instructions using "if...then" statements, to help your patient regain control.
"If you want the procedure to go as quickly as possible, then it will help to hold as still as you can." instead of "You have to hold still."
- Use supportive statements such as "Everything is going really well" or "You are doing a good job relaxing your bottom into the table".
- Keep her updated on the progress of the procedure, saying, "We're about halfway through" or "This part takes about 1 minute."
- Provide physical and emotional support during the procedure, offering an assistant's reassurance or hand to squeeze.
- Take breaks during natural pauses in the procedure, saying "We have a break right now. Take some slow deep breaths."

- 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 her regain control.
- Continue to communicate with quiet or silent patients. At regular intervals throughout the procedure, it can help to ask the patient how she is doing.
- Avoid phrases that are forceful, sexual, or have double meaning.

Avoid	Instead
Open or spread your legs.	Relax or drop your knees to the side.
I am cleaning your cervix (implies the cervix is dirty).	You will feel some cool wet cotton.
You are going to feel a poke/prick/stick with the injection.	This is the numbing medication. You may feel a cramp or pinch.
Your baby is 8 weeks old.	Alternative words are pregnancy or fetus.
Your cervix/vagina/uterus looks/feels great.	Alternative words are healthy and normal.

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 her 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 or regret. To avoid responding based on that assumption, providers might say,

“A lot of women ask about that. Can you tell me a little more about what is concerning you?”

The patient might then tell you that she wants to know what will happen to the fetus. A suggested response would be,

“I examine the pregnancy tissue to make sure that you are no longer pregnant.”

Some patients may ask, ***“Can I see the pregnancy?”*** In first-trimester abortion, many providers show the patient the pregnancy tissue and explain the process of fetal development. Consider describing what the pregnancy tissue looks like at that stage, so she can make an informed choice about if she would like to see it.

A patient might ask, **“Will this hurt the baby?”** For patients having a first-trimester abortion procedure, providing facts may alleviate this concern. For example,

“At this point in the pregnancy, the nervous system is still in a very early stage of development. Most brain cells are not developed and there is no pain.”

Post-Procedure Support

After the procedure, the provider should move to the head of the table and reassure the patient that everything went well, and offer guidance for next steps.

Let patients know that emotions arising after the abortion are normal and there are various outlets and resources to support them beyond the procedure day.

- Consider providing a journal where patients can share their thoughts.
- Many women respond well to encouragements of artistic expression, through writing, (<http://projectvoice.org/>), visual art, or music.
- All women can be offered post-abortion support through Exhale (1-866-4 EXHALE, www.exhaleprovoice.org/), Backline (1-888-493-0092), or Connect and Breathe, <http://www.connectandbreathe.org>.
- All women can be reassured that you or your staff will be available to them. They can be offered a follow-up visit if desired or if you think it would helpful, especially if there is a continuity relationship.

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. How would you approach this?
2. When you ask a patient what questions she has, she wants to know if an abortion will affect her ability to have children in the future. How would you respond?
3. A woman is leaning toward adoption, but is trying to decide, and wants to know more about the process and options. How would you respond?
4. Your 15-year old patient is excited when the home pregnancy test comes back positive. She has not told her parents yet because she thinks they will be angry. Her boyfriend wants her to have the baby, and says he will find a job to support them. How would you respond?
5. Consider the following responses to a common patient statement, in terms of the doors opened or closed within the conversation, or what it allows or disallows in further conversation. Which response do you think is most 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?"*

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.

1. As you enter the exam room you hear the patient's partner criticizing her for "*acting stupid*" and telling her angrily to "*just shut up.*" He 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, she raises her hips off the table.
5. You have just completed an aspiration (for abortion or early pregnancy loss) for a patient at 8 weeks gestation. She asks, "*Can I see what it looks like?*" How would your response differ if the patient were at 12 weeks gestation?

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- Foster DG, Gould H, Kimport K. How women anticipate coping after an abortion. *Contraception*. Dec. 2011. <http://goo.gl/PpDdb>
- Harris AA. Supportive Counseling Before and After Elective Pregnancy Termination. *Journal of Midwifery & Women's Health*. March/April 2004;49(2):105-112. <http://goo.gl/8V5L9>
- Herbitter C, Greenberg M, Fletcher J, Query C, Dalby J, Gold M. Family planning training in US family medicine residencies. *Fam Med*. 2011 Sep;43(8):574-81. <http://goo.gl/jZYDu>
- Johnston MR. *Pregnancy Options Workbook*. c.1998, rev. 2003, distributed by Ferre Institute 124 Front St. Binghamton NY 13905. <http://goo.gl/Z2iYM>
- Kaiser Family Foundation. *From the Patient's Perspective: The Quality of Abortion Care*. 1999. <http://goo.gl/44zKd>
- Kimport K, Perrucci A, Weitz TA. Addressing the silence in the noise: how abortion support talklines meet some women's needs for non-political discussion of their experiences. *Women Health*. 2012 Feb 9;52(1):88-100. <http://goo.gl/9dW3T>
- Maguire DC. *Sacred Choices: The Right to Contraception and Abortion in Ten World Religions*. 2001.
- Moore AM, Frohwirth L, Blades N. What women want from abortion counseling in the United States: a qualitative study of abortion patients in 2008. *Soc Work Health Care*. 2011;50(6):424-42. <http://goo.gl/ul7i4>
- Perrucci A. *Decision Assessment and Counseling in Abortion Care: Philosophy and Practice*. Rowman and Littlefield Publishers. 2012.
- Singer J. Options Counseling: Techniques for Caring for Women With Unintended Pregnancies. *Journal of Midwifery & Women's Health*. May/June 2004;49(3):235-242. <http://goo.gl/9Frxi>
- Upadhyay UD, Cockrill K, Freedman LR. Informing abortion counseling: An examination of evidence-based practices used in emotional care for other stigmatized and sensitive health issues. *Patient Education and Counseling* 81 (2010) 415–421. <http://goo.gl/laKw9>

3. EVALUATION BEFORE UTERINE ASPIRATION

This chapter will address methods for evaluation of pregnancy dating, location, and integrity, including the use of human chorionic gonadotropin (hCG) testing and diagnostic ultrasound. Women of childbearing age are typically healthy, and uterine aspiration can be done safely for most women in an outpatient setting. This chapter also addresses issues in the medical history that may warrant further management or modify how, where, or when uterine aspiration takes place, as co-morbid conditions can change the risks for outpatient aspiration.

CHAPTER LEARNING OBJECTIVES

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

- Use clinical and / or sonographic findings to accurately estimate gestational age.
- Differentiate sonographic characteristics of a true gestational sac vs. pseudosac.
- Use sonographic findings to diagnose a non-viable pregnancy.
- List clinical, lab, and sonographic findings that constitute red flags for ectopic pregnancy.
- Gather appropriate history, physical, and lab information to safely perform a first-trimester uterine aspiration in an outpatient setting.

READINGS / RESOURCES

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 6: Clinical Assessment and Ultrasound in Early Pregnancy
 - Chapter 7: Medical Evaluation and Management
- Ultrasound in Abortion Care Training Workbook. Affiliates Risk Management Services, Inc. 2007
- Organization of Teratogenic Information Specialists
 - 1-866-626-6847; <http://www.otispregnancy.org>

SUMMARY POINTS

SKILL

- Accurate gestational age assessment is a key component of the pre-procedural evaluation, and helps prevent complications associated with underestimation.
- Ultrasound can determine the gestational age of an intrauterine pregnancy, diagnose early pregnancy failures, and assist in ectopic evaluation.

SAFETY

- Abortion is safe, with minimal risks of complications
- If there is suspicion of ectopic pregnancy, diagnostic testing including pelvic exam, ultrasound, and possibly diagnostic aspiration should be done. A “normal” rise or fall in hCG levels alone is not sufficient to exclude an ectopic.
- The pre-operative medical evaluation may reveal conditions that warrant further management or that modify optimal timing or setting for the uterine aspiration.
- If it is known that women with chronic medical conditions are coming in for a uterine aspiration, they should be encouraged to continue their regular medications, with occasional modifications as needed.
- If relying on ultrasound records or lab reports from the chart, double check the report for the date of exam to confirm current gestational age.

ROLE

- Ultrasound is not a required component of first trimester pre-abortion evaluation, but can be used as needed. Providers in settings with limited access to US can safely provide abortion using patient history, LMP and pelvic sizing to determine gestational age.

PREGNANCY DATING

PREGNANCY TESTS

- High sensitivity urine pregnancy test (HSPT):
 - Detects hCG at urine concentrations of 20-50mIU/mL.
 - Is positive by time of missed menses in 90% of pregnancies.
 - Is a urine test available in pharmacies or clinics.
 - Is a simple, accurate, inexpensive way to diagnose pregnancy.
 - May remain positive 4-8 weeks post-abortion – a poor indicator of completed abortion unless negative.

- Serum quantitative hCG:
 - Detects serum levels as low as 1-10 mIU/mL.
 - Serial measurements often used to evaluate ectopic, early pregnancy loss, or molar and to monitor completion of abortion.
 - Initial rapid decline in hCG levels post-abortion (by 50% in 48 hours or 80% in 7 days), followed by a slower decline for several weeks.

- Other hCG assays:
 - Low sensitivity urine test (detects concentrations of 1000-2000 mIU/mL).
 - Serum qualitative test (indicates presence or absence of hCG).
 - Semi-quantitative urine test (graduated test; under study).

- Gestational age cannot be determined by hCG levels, due to wide variability in hCGs between patients at any given gestational age.


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 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"> • Fibroids • Multiple gestations • Marked uterine retroversion • Obesity • Abdominal scarring (multiple cesareans) 	

ULTRASOUND: METHODS & TIPS

<p>Skills Checklist</p>	<ul style="list-style-type: none"> • Ask if patient if wants to view image and/or be informed of multiple gestations. • Confirm no latex allergy. • Use appropriate language to discuss US findings with patient. • US is a useful, but not required adjunct for dating and procedural guidance <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Transvaginal</th> <th style="width: 50%; text-align: center;">Transabdominal</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • More invasive • Difficult if bladder is not empty • Easier to detect earlier pregnancy • Better resolution but less depth • Probe usually 7.5 -10 mHz </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> • Less invasive • Better uterine view with full bladder • Difficult to see pregnancy of <6 wks • Better depth but less resolution • Probe usually 3-5 mHz </td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Systematically scan in 2 planes to avoid missing twins, anomalies, fibroids, etc. • Longitudinal view of cervix & fundus. Scan side to side: ovary to ovary. • Transverse view: turn probe 90 degrees. Scan anterior to posterior: fundus to cx. • For first-trimester US, assess & document: <ul style="list-style-type: none"> ○ Presence or absence of GS, yolk sac, embryo. ○ Location of the pregnancy. ○ Gestational age measurement(s). ○ Fetal number & presence or absence of fetal cardiac activity. ○ Adnexal masses or fluid in the cul-de-sac if seen. • Switch to the other probe (abdominal or vaginal) if initial scan is inadequate. 		Transvaginal	Transabdominal	<ul style="list-style-type: none"> • More invasive • Difficult if bladder is not empty • Easier to detect earlier pregnancy • Better resolution but less depth • Probe usually 7.5 -10 mHz 	<ul style="list-style-type: none"> • Less invasive • Better uterine view with full bladder • Difficult to see pregnancy of <6 wks • Better depth but less resolution • Probe usually 3-5 mHz
Transvaginal	Transabdominal					
<ul style="list-style-type: none"> • More invasive • Difficult if bladder is not empty • Easier to detect earlier pregnancy • Better resolution but less depth • Probe usually 7.5 -10 mHz 	<ul style="list-style-type: none"> • Less invasive • Better uterine view with full bladder • Difficult to see pregnancy of <6 wks • Better depth but less resolution • Probe usually 3-5 mHz 					
<p>Gestational sac (GS)</p>	<p>The first ultrasound evidence of pregnancy. Measure 3 dimensions (length, width, height) in 2 planes (longitudinal & transverse). A normal early gestational sac is characterized by: (FEEDS mnemonic), but having all criteria does not guarantee a gestational sac</p> <ul style="list-style-type: none"> • 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 (criteria sometimes used to distinguish from pseudosac; which tends to be irregular, central, smaller, and without a decidual reaction) <p>Discriminatory levels: In a viable IUP, GS always visible when the serum hCG is:</p> <ul style="list-style-type: none"> • 1500 - 2000 mIU/ml by transvaginal probe • ≥ 3600 mIU/ml by transabdominal probe <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> <p>Calculate: Mean gestational sac diameter (MSD) = (L + W + H)/3</p> <p>Gestational Age (in days) = MSD (in mm) + 30</p> </div>					
<p>Yolk sac</p>	<ul style="list-style-type: none"> • First confirmation of gestational sac; excludes a pseudosac. • Round echoic ring with anechoic (dark) center in gestational sac. • Appears at approx 5 1/2 weeks. • May be seen when the mean gestational sac diameter is 5-10mm. • YS should always be seen when gestational sac reaches 13mm 					
<p>Embryo</p>	<ul style="list-style-type: none"> • Appears at approximately 6 weeks. • Measure crown rump length (CRL) = fetal pole at longest axis not including limbs or yolk sac. • Embryo should be seen when GS reaches 20 mm. • After 12 - 14 weeks biparietal diameter (BPD) provides better dating. <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> <p>Gestational age (days) = embryonic pole length (mm) + 42</p> </div>					
<p>Embryonic cardiac activity</p>	<ul style="list-style-type: none"> • Appears at approx 6 ½ weeks. • Should be visible when embryo reaches 5 mm. 					
<p>“Red flags”</p>	<p>For Ectopic Pregnancy: GS not characteristically normal Free fluid in cul-de-sac Pain and/or vaginal bleeding Risk factors for ectopic pregnancy</p>	<p>For Non-viability: No yolk sac by 13 mm GS No FHT by 5 mm CRL No fetal pole by >20 mm GS In desired pregnancy, may use more conservative cutoff; re-check in 1 week</p>				

ULTRASOUND & POC DATING TABLE

GA on US: weeks	4 wks				5 wks				6 wks				7 wks				8 wks											
days	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
ULTRASOUND FINDINGS																												
Mean Sac Diameter Size																												
Yolk Sac																												
Fetal Pole																												
Fetal Cardiac Activity																												
Embryo Size																												
POC (sac) SIZE																												
Gestational Age (Weeks) By US, not reported LMP	4 wks				5 wks				6 wks				7 wks				8 wks											



◆ — ◆ = At the beginning of the time range, each landmark first appears in a viable pregnancy.
At the end, the absence of the landmark may indicate a non-viable pregnancy.

ULTRASOUND IMAGES FROM EARLY PREGNANCY

Gestational Sac or Pseudosac?



Gestational Sac



Pseudosac

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

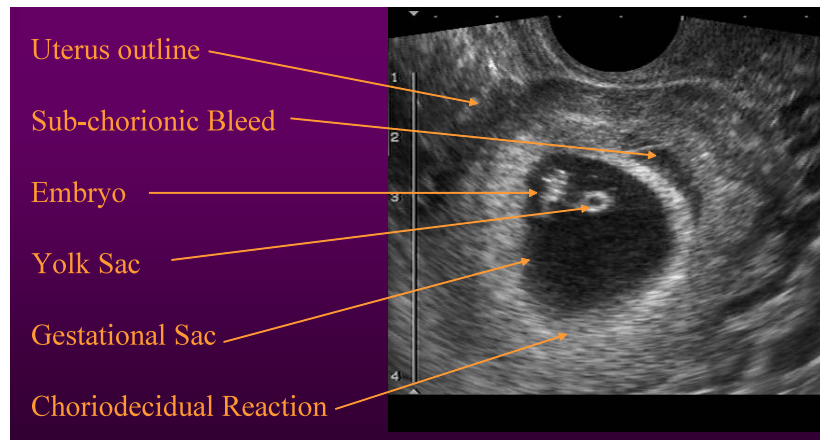
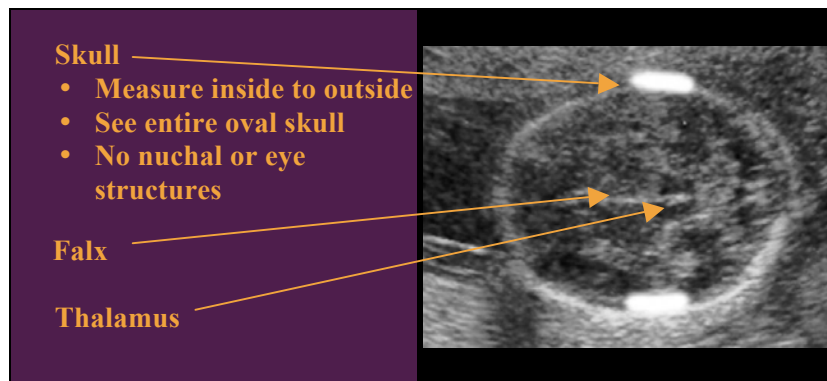


Image from *Manual Vacuum Aspiration*, a presentation by PRCH & ARHP, 2000.



Biparietal Diameter (BPD)

Image courtesy of Mary Fjerstad.

MEDICAL EVALUATION PRIOR TO ASPIRATION

History and Physical

- Review medical, OB and gynecologic history, meds and allergies.
- Review information for the following medical conditions: (Paul, p.79)
 - Cardiovascular (hypertension, valvular disease, arrhythmias).
 - Pulmonary (asthma, respiratory infection).
 - Hematologic (bleeding/clotting disorders, anticoagulants, severe anemia).
 - Endocrine (diabetes, hyperthyroidism).
 - Renal and hepatic disease (affecting drug metabolism & clearance).
 - Allergy to latex, iodine, or medications.
- Medical problems occasionally warrant management or referral prior to abortion.
- Make a contraceptive plan before the procedure; facilitates LARC placement.
- Perform a focused physical exam:
 - Vital signs, height and weight (BMI).
 - Cardiac, pulmonary, and / or abdominal exam as indicated by history.
 - Confirm elevated BP with appropriate sized cuff; may warrant pre-procedure treatment (i.e. >160/105) or referral with delay of procedure.
 - Tachycardia: anxiety, anemia, stimulants, arrhythmia, or thyroid disease.
 - Obesity associated with greater procedural difficulty.
- Perform pelvic exam prior to the procedure:
 - Bimanual for uterine size, position, fibroids or anomalies.
 - Speculum exam may reveal cervicitis or vaginitis requiring testing / Tx.

Lab Tests

- Chlamydia (CT) / Gonorrhea (GC):
 - CDC recommends screening for: Asymptomatic women ≤ 25 or at increased risk (i.e. new sexual partner in last year).
 - Recent cross-sectional study of women in the U.S. seeking 1st-trimester abortion found 11% CT-positive and 3% GC-positive (Patel 2008).
 - If untreated CT / GC, increases risk of postabortal endometritis.
 - Associated infertility, chronic pelvic pain, and SAB (Achilles 2011).
 - Universal pre-procedure antibiotic prophylaxis for aspiration abortion is well supported by the available evidence (Achilles 2011, Sawaya 1996).
 - No outcome data for post-procedure treatment.
- Rh₀(D) immune globulin:
 - Administer to prevent the sensitization of Rh(D)-negative women (ACOG Practice Bulletin 2004).
 - 50 mcg < 13 weeks EGA, 300 mcg ≥ 13 weeks EGA.
 - Within 72 hours of aspiration.
- Hemoglobin / Hematocrit
 - Many providers check level prior to abortion.
 - No studies evaluate if practice is beneficial (RCOG Guideline 2004).
 - Provides a baseline; indicates need for treatment (FeSO₄) post-abortion.

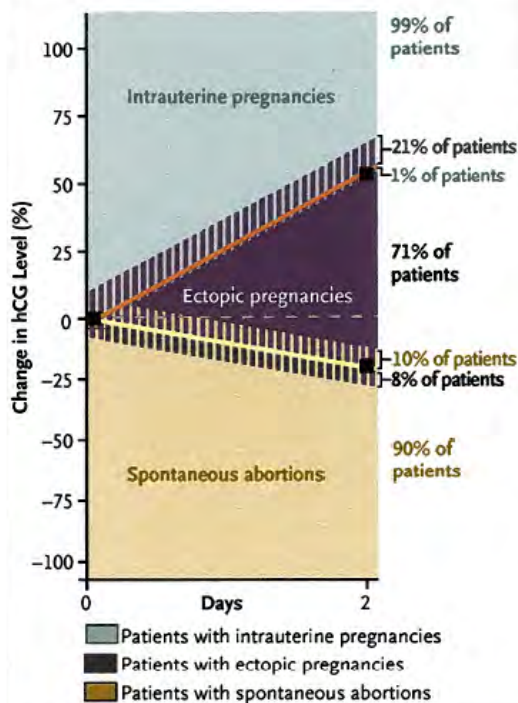
EVALUATION FOR ECTOPIC vs. EARLY PREGNANCY LOSS

Women may present in early pregnancy with symptoms of pain and / or bleeding, which require evaluation for ectopic or early pregnancy loss.

- Depending on the gestational age and initial serum hCG level, exam, ultrasound and / or serial hCGs are used to determine pregnancy location and viability.

Using serial hCGs:

- Rate of hCG rise with viable pregnancy is usually greater than with ectopic or early pregnancy loss.
- Change in serum hCG found in three large studies is summarized below (women with symptomatic early pregnancies, non-diagnostic ultrasounds, and an initial hCG <5000 with serial hCG measurements until a definitive diagnosis was made (Barnhart 2004, Barnhart 2004, Silva 2006)).
 - Among women diagnosed with ectopic pregnancies:
 - Majority had serial hCGs outside the normal range for either a viable intrauterine pregnancy (i.e. level rose < 53%) or a completed SAB (fell > 50% in 2 days).
 - Almost a third of women had a rise or fall of hCG that was within the boundaries of a potential viable IUP or completed SAB.
- Therefore, use caution when following women with symptomatic early pregnancy.
 - A “normal” rise or fall in levels is not sufficient to exclude ectopic pregnancy – 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.

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 SAB 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 21% of the time, and the decrease in the hCG level can mimic that of an SAB 8% of the time.

From Barnhart KT. NEJM 2009;361:379-87.

EXERCISES: EVALUATION PRIOR TO UTERINE ASPIRATION

EXERCISE 3.1

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

1. A patient comes to your office requesting pregnancy confirmation and to discuss her options. She is 4 weeks 2 days LMP and states that she had a positive home pregnancy test.
2. A patient is 6 weeks LMP and requests abortion. Transvaginal ultrasound examination shows no intrauterine gestational sac. The patient has been spotting intermittently but is otherwise asymptomatic.
3. A patient made an appointment for a follow-up visit 3 weeks after a first trimester abortion. She started taking oral contraceptive pills the day following the abortion. She has some breast tenderness but otherwise feels well.

EXERCISE 3.2

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

1. Calculate the gestational age in days for the following pregnancies seen on ultrasound:
 - a. Gestational sac: 6 mm x 7 mm x 5 mm; no yolk sac or embryo present.
 - b. Gestational sac: 18 mm x 16 mm x 16 mm; yolk sac present; embryonic pole length 5 mm.
2. What is the differential diagnosis of the following ultrasound findings? What steps would you take to clarify the diagnosis?
 - a. Mean gestational sac diameter 14 mm with no yolk sac or embryo visible.
 - b. Embryonic pole length 3 mm with no visible cardiac activity.
 - c. 3 mm x 3 mm central anechoic sac in pregnant patient 6 weeks LMP with history of intermittent right lower quadrant cramping.
 - d. Embryonic pole length 7 mm with no visible cardiac activity.
 - e. Irregular, flattened gestational sac without embryo, cystic changes present in decidua and myometrium resembling "swiss cheese" pattern in patient who is 8 weeks LMP.

EXERCISE 3.3

Purpose: To identify pre-procedure conditions that may warrant special management, consider how you would manage the following case scenarios.

1. A 41-year-old patient presents for abortion 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 uterine fibroids.
2. A 17-year-old patient with a history of severe asthma presents for abortion or early pregnancy loss at 8 weeks gestation. She was hospitalized three months ago for an asthma exacerbation, and she discontinued oral corticosteroids 4 weeks ago. She uses a steroid inhaler daily. She appears comfortable with normal vital signs, but pre-procedure examination reveals wheezes bilaterally.
3. A 26-year-old patient presents to your office at 7 weeks gestation. She had a chest x-ray and abdominal series after a motor vehicle accident 2 weeks ago. She decided to have an abortion because of concerns about the effects of the radiation on the fetus.
4. You are preparing to perform vacuum 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.
5. A 29-year-old woman presents for abortion at 7 weeks gestation. She has a prior history of venous thromboembolism and is currently anticoagulated on warfarin; her INR is in the therapeutic range.
6. A 38-year-old woman presents for an aspiration abortion at 6 weeks gestation, with a blood pressure of 170/110 and a headache.
7. A 26-year-old woman with a history of diabetes presents for an abortion at 8 weeks gestation. Her glucose level is 520 mg/dL.

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

ACC/AHA 2008 Guidelines for the Management of Patients With Valvular Heart Disease -- Focused Update on Infective Endocarditis. <http://goo.gl/ss86a>

Achilles SL, Reeves MF; Society of Family Planning. Prevention of infection after induced abortion: release date October 2010. Contraception. 2011 Apr;83(4):295-309. <http://goo.gl/BBjcw>

ACOG Committee on Obstetric Practice. Guidelines for diagnostic imaging during pregnancy. ACOG Committee opinion no. 299. Washington, D.C.: ACOG, 2004 (Reaffirmed 2009). <http://goo.gl/LZ4zx>

ACR Practice Guideline for Imaging Pregnant or Potentially Pregnant Adolescents and Women with Ionizing Radiation. 2009. <http://goo.gl/jMY3N>

Barnhart K, Sammel MD, Chung K, Zhou L, Hummel AC, Guo W. Decline of serum hCG and spontaneous complete abortion: defining the normal curve. Obstet Gynecol 2004;104:975-981. <http://goo.gl/GWrrz>

Barnhart K, Sammel MD, Rinaudo PF, Zhou L, Hummel AC, Guo W. Symptomatic patients with an early viable intrauterine pregnancy: hCG curves redefined. Obstet Gynecol 2004; 104(1):50-55. <http://goo.gl/WizhB>

Cole LA, Am J Obstet Gynecol 2004 & J Am Pharm Assoc 2005.

Fjerstad M, Creinin M. Mife Matters. Sonography for Very Early Pregnancy. Winter (6) 2003.

Kaneshiro B, Bednarek P, Isley M, Jensen J, Nichols M, Edelman A. Blood loss at the time of first-trimester surgical abortion in anticoagulated women. Contraception. 2011 May;83(5):431-5. <http://goo.gl/qxnL1>

Margulies R, Miller L. Fruit size as a model for teaching first trimester uterine sizing in bimanual examination. Obstet Gynecol. 2001 Aug;98(2):341-4. <http://goo.gl/S6E2a>

National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009).

Patel A, Rashid S, Godfrey EM, Panchal H. Prevalence of Chlamydia trachomatis and Neisseria gonorrhoeae genital infections in a publicly funded pregnancy termination clinic: empiric vs. indicated treatment? Contraception. 2008 Oct;78(4):328-31. <http://goo.gl/i6Q1t>

Sawaya GF, Grady D, Kerlikowske K, Grimes DA. Antibiotics at the time of induced abortion: the case for universal prophylaxis based on a meta-analysis. Obstet Gynecol. 1996 May;87(5 Pt 2):884-90. <http://goo.gl/5ohTy>

Silva C, Sammel MD, Zhou L, Gracia C, Hummel A, Barnhart K. Human Chorionic Gonadotropin Profile for Women with Ectopic Pregnancy. Obstet Gynecol 2006; 107(3):605-610. <http://goo.gl/8Bc5i>

Association for Reproductive Health Professionals. A Quick Reference Guide for Clinicians: Manual Vacuum Aspiration. 2008. <http://goo.gl/PhiUF>

RCOG Evidence-Based Clinical Guideline, The care of women requesting induced abortion: summary. Number 7, 2011. <http://goo.gl/HJxuJ>

Toppenberg KS, Hill A, Miller DP. Safety of Radiographic Imaging During Pregnancy. American Family Physician, April 1999. <http://goo.gl/GAfL9>

Barnhart K. Ectopic Pregnancy. N Engl J Med 2009;361:379-387. <http://goo.gl/3bb42>

"
"

4. MEDICATIONS AND PAIN MANAGEMENT

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

CHAPTER LEARNING OBJECTIVES

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

- Describe the role of prophylactic antibiotics and cervical ripening in uterine aspiration.
- Describe the various options for pain control, including non-pharmacologic methods, used during uterine aspiration, and the evidence for their effectiveness.
- Describe technique and precautions for paracervical block.
- Describe the differences in necessary monitoring and personnel for different types of anesthesia.
- Identify indications and dosages for medications used in clinical emergencies.
- Know the location and availability of emergency supplies in your clinical setting.

READINGS / RESOURCES

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 8: Pain Management
- National Clinicians' Post-Exposure Prophylaxis Hotline
 - 1-888-HIV-4911 (1-888-448-4911)

SUMMARY POINTS

SKILL

- Pain perception includes both physical and psychosocial elements, and is best managed with both pharmacological and non-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.
- Intravenous pain management may be chosen if time, monitoring, and staffing are available. General anesthesia is still used in some circumstances.

SAFETY

- Universal pre-procedure antibiotic prophylaxis for aspiration abortion is well supported by the available evidence.
- Medications used for pain control are arguably the area of greatest risk associated with the procedure and may require provision of respiratory support.
- Pay close attention to allergies, concurrent medications, conditions that compromise respiratory status, recommended dose limits, and antidotes.
- Make sure you know where the emergency cart or supplies are kept in your clinical setting, and review the procedures for emergencies and hospital transfer.

ROLE

- Do not underestimate the helpfulness of deep-breathing techniques, distraction through conversation, the support of a partner, friend or medical assistant, gentle operative technique, and the reassuring tone of your voice and words.

PRE-PROCEDURE MEDICATIONS

PROPHYLACTIC ANTIBIOTICS

There is strong evidence for the use of routine antibiotic prophylaxis in all subgroups of women undergoing uterine aspiration. In the meta-analysis of 12 studies, there was a 42% overall reduction in postabortal infection rates with antibiotics compared to placebo (Sawaya 1996). This protective effect was evident in women with and without risk factors (history of PID, positive CT, or pre-operative BV). Evidence supports pre-procedure dosing of prophylactic antibiotics for the maximal effect, and the shortest course possible to give the lowest risk of adverse reactions and antibiotic resistance. Despite varying practices in choice of antibiotic and duration of use, there is little data to support post-procedure antibiotics (Achilles 2011).

CERVICAL PREPARATION

There has been much research into the role of misoprostol and other methods of cervical ripening for uterine aspiration. Cervical preparation is not routinely indicated prior to a first trimester uterine aspiration (SFP 2007, Templeton 2012) due to increased waiting time, bleeding, cramping, other side effects, and minimal demonstrated benefit. The use of cervical preparation can be considered on an individual basis when a challenging dilatation is anticipated (such as history of difficult dilation). Use for a minimum of 1.5 hours, but up to 3 – 4 hours for best effect.

RHOGAM

RhoGam is recommended to prevent the isoimmunization of Rho-D negative women at the time of therapeutic or spontaneous abortion, and ectopic pregnancy (ACOG). 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 (ACOG). Given its success in term pregnancies, its use has been extended to early first trimester, even though the evidence is sparse.

PAIN MANAGEMENT

Perception of pain is a complex phenomenon influenced by both physical and psychosocial elements, and as such, can vary considerably between individuals. Many variables have been studied and the table below summarizes the research to date.

PREDICTORS OF PAIN ASSOCIATED WITH UTERINE ASPIRATION

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

REASSURANCE AND RELAXATION

Supportive verbal communication, “verbicaine”, or distraction can play a significant role in reducing a woman’s anxiety and pain. Some women are inordinately anxious about anticipated procedural pain. Providers can acknowledge the possibility of pain without overly alarming patients. Including elements of positive suggestion may help to allay concerns. For example,

“Most patients are worried about pain, and are often surprised when the procedure is easier and faster than they expected. I can’t promise that you won’t feel any pain, but I will be as gentle as possible. I will be giving you a local anesthetic and will show you some breathing techniques to relax. Avoiding clenching your muscles will also help.”

Guiding patients to take slow, deep, regular breaths assists in relaxation, avoids hyperventilation, and also gives an increased sense of control. Patients can be encouraged to relax their hips into the table, to help overcome any urge to pull away.

Some women fear cervical injection more than of the procedure itself. Avoid reference to “injection” or “needle”, instead using non-specific language.

“You might feel a pinch or pressure from the medicine that will numb your cervix.”

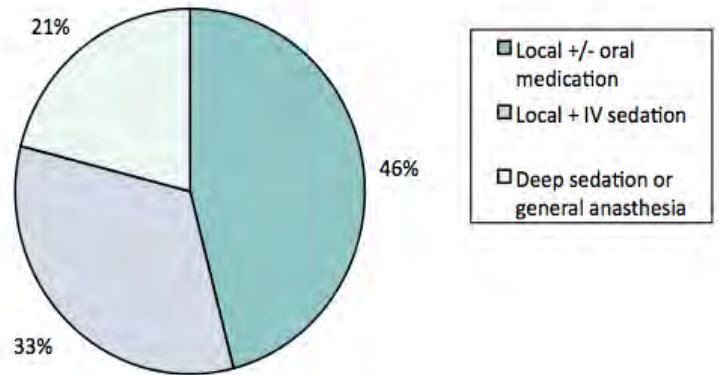
Mention that as cramps become more intense, the procedure is near the end.

“The cramps you are experiencing mean your uterus is getting smaller and the procedure is almost over.”

Studies have shown that guided imagery can decrease anxiety and analgesic requirements for surgical patients (Gonzales 2010). The patient may be invited to describe a favorite place or activity, and to recall that place during the procedure.

PREFERRED ANESTHESIA METHODS

Preferred method of anesthesia for first-trimester surgical abortion cases performed by responding NAF clinics in 2001 ($n=110$) (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

Based on Continuum of Depth Sedation: Definition of General Anesthesia and levels of Sedation/Anesthesia, 2009, ASA.

CHOICE OF PAIN CONTROL METHODS

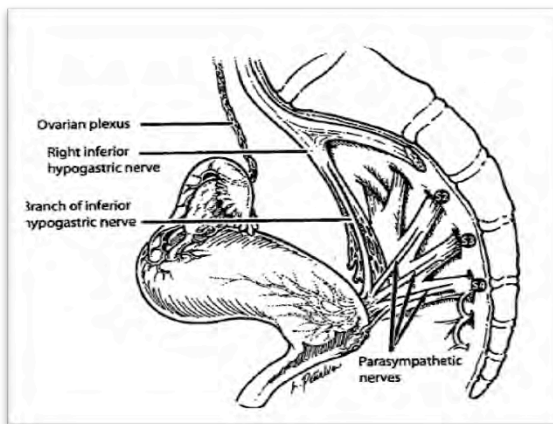
Relevant information about pain management should be reviewed as part of the informed consent process, including the range of possible pain experiences, available options for pain control, as well as their risks and benefits. If a woman has a strong preference for an option your facility does not offer, an appropriate referral may be given. Some women choose a less sedating option to be more alert, have shorter recovery, or to drive themselves home. Others choose a more sedating option to be more relaxed, to manage higher levels of anxiety, or to manage a later procedure. Lastly, some medical conditions, monitoring, or facility limitations preclude deeper sedation.

MONITORING GUIDELINES

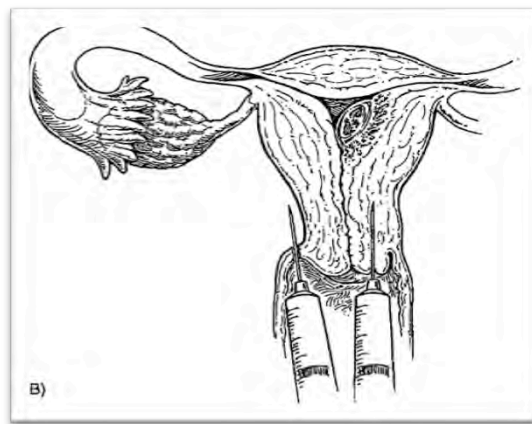
1. When moderate sedation is used, a person other than the clinician must be present who is trained to monitor appropriate respiratory, cardiovascular and neurologic parameters, including level of consciousness.
2. The personnel administering moderate sedation must recognize that conscious sedation may lead to deep sedation with hypoventilation and be prepared to provide respiratory support.
 - a. Pulse oximetry should be used to enhance monitoring.
 - b. IV access should be considered.
 - c. The patient should be checked frequently for verbal responsiveness.
 - d. Patients with severe systemic disease should receive care by an anesthesia professional.
3. 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.
4. The practitioner administering general anesthesia or deep sedation must be certified according to applicable local, hospital, and state requirements.

PROVIDING EFFECTIVE LOCAL ANESTHESIA

For uterine aspiration, local anesthesia with supplemental oral or IV medication is the most frequently used approach (O'Connell 2009). Below are some techniques and pitfalls of the paracervical block, common preparations, and review of innervation and injection approach.



Innervation of the uterus: paracervical anesthesia reaches the nerve plexuses that lie adjacent to the cervix but not the nerves that accompany the ovarian vessels at the level of the uterine fundus. From Management of Unintended and Abnormal Pregnancy, NAF 2009



Depiction of paracervical (left) and intracervical (right) deep injections. From Management of Unintended and Abnormal Pregnancy NAF 2009

INJECTION 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 with deep injections (1.5 cm to 3 cm) (Renner 2010).
- Slower injection (60 vs. 30 sec) decreases pain, but waiting after injections to begin cervical dilation does not conclusively decrease pain.
- Four-site injections offer no benefit over two-site injections.
- Some use a forced cough technique during injection, although data are limited.
- Local anesthetics block nerve impulses, although physical pressure on nerves due to volume injected also provides analgesic effect. Saline (plain or bacteriostatic) has somewhat less effect than lidocaine (Chanrachakul 2001, Glanz 2001, Miller 1996).
- No evidence suggests one anesthetic is superior; alternatives include lidocaine, chloroprocaine (nesacaine), or bupivacaine (marcaine).

TIPS FOR MINIMIZING SYSTEMIC ABSORPTION

Maximum lidocaine dose recommended for pregnant women is 200 mg (achieved for example, by giving 20 cc of 1% lidocaine (10 mg/cc)).

At low concentrations, patients may have peri-oral tingling, dizziness, tinnitus, or metallic taste. At much higher concentrations, they can proceed to have muscular twitching, seizure, cardiac instability, unconsciousness, and even death (Paul 2009).

- Minimize direct intravascular injection and excessive anesthetic dosing.
- Use a combination of superficial (0.5") and deep injections (1.5").
- Move the needle while injecting (superficial to deep) OR aspirate before injecting.
- Use a lower lidocaine concentration.
- 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.

Atropine may be added 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 HIV, hepatitis B and other blood-borne pathogens when providing health care. Under universal precautions, blood and certain body fluids of all patients are considered potentially infectious.

- Wear gloves and protective face gear when working with blood and body fluids, including mucous membranes, non-intact skin, and items soiled with blood or body fluids (i.e. bimanual exams, POC handling, speculums, and dilators).
- Avoid recapping contaminated needles unless there is no feasible alternative. Place sharps immediately in a puncture-resistant container for disposal.
- If there is a needle-stick or blood exposure, immediately tell your trainer or supervisor. More information is available through the National Clinicians' Post-Exposure Prophylaxis Hotline at (1-888-448-4911 or http://www.nccc.ucsf.edu/about_nccc/pepline), or OSHA at <http://www.osha.gov/SLTC/bloodbornepathogens/index.html>.

BASIC MEDICATION OPTIONS

Drug (Class)	Dose Range	Comment
Local Anesthesia and Additives		
Lidocaine (0.5% – 1%)	Up to 200 mg (20 cc 1% or 40 cc 0.5%)	Most common in U.S. Lower concentration as effective but more \$
Bacteriostatic Saline	20 cc	Somewhat less effective than lidocaine
Bicarbonate (Buffer)	5 cc / 50 cc anesthetic	Less injection pain
Vasopressin	5-10 u / 50 cc anesthetic	Decreases bleeding and systemic absorption
Atropine	2 mg / 50 cc anesthetic	Theoretically prevents vasovagal response
Oral and IV Pain Medications		
Ibuprofen	600 – 800 mg PO	More effective at least 30 minutes before procedure
Naproxen	250 – 500 mg PO	More effective at least 30 minutes before procedure
Vicodin / Tylenol 3	1-2 tablets 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	50 – 100 mcg 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-Abortion Hemorrhage		
Methylergonovine (Methergine)	0.2 mg PO/IM or intracervically	Use with caution in hypertensive patients
Misoprostol	800-1000mcg PR or 800mcg SL	Sublingual dose has been used for postpartum hemorrhage
Carboprost (Hemabate)	0.25 mcg IM, may repeat at 15-90 minute intervals to max of 2mg	Use with caution in asthmatic patients
Oxytocin	10 u IM, or 10-40 u IV in crystalloid, or 10 units IVP	More uterine oxytocin receptors > 20 weeks
Emergency Medications		
Atropine Sulfate	0.2 mg (0.5 cc) IV push or 0.4 mg (1cc) IM, each 3-5 min to max dose of 2 mg	For prolonged symptomatic bradycardia
Benadryl	25 – 50 mg IM/IV/PO	For allergic reaction Can use oral if mild symptoms
Epinephrine (1:1000)	0.3 – 0.5 mg (1 mg/ cc) 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 cc) IV/ IM each 2-3 min Max dose 0.4 mg	Narcotic antidote
Flumazenil (Romazicon)	0.2 mg (2 cc) IV each min Max dose of 1 mg	Benzodiazepine antidote

MANAGING EMERGENCIES

MAINTAIN CLIENT SAFETY • CALL FOR HELP • ASSESS CLIENT CONDITION					
<ul style="list-style-type: none"> recent medication low pulse flushed/agitated coughing/sneezing SOB, hives 	<ul style="list-style-type: none"> high pulse cool, clammy skin low BP peri-oral cyanosis onset over minutes or hours 	<ul style="list-style-type: none"> low pulse low BP pale, sweaty nausea, vomiting may lose consciousness sudden onset 	<ul style="list-style-type: none"> no pulse absent respirations unconsciousness 	<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
MODERATE - SEVERE (difficulty breathing): <ul style="list-style-type: none"> 50-100 mg Benadryl IM epinephrine (1:1000) 0.5 SQ or IV in 10cc solution, slow push oxygen call 911 	<ul style="list-style-type: none"> call 911 elevate legs light blanket oxygen Place large bore IV, start LR or NS, infuse rapidly 	<ul style="list-style-type: none"> elevate legs, cool cloth ammonia capsule oxygen 	<ul style="list-style-type: none"> call 911 start CPR 	<ul style="list-style-type: none"> prevent injury 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 shock developing: <ul style="list-style-type: none"> start IV LR or NS 	<ul style="list-style-type: none"> continue IVF start 2nd IV line 	<ul style="list-style-type: none"> if continued symptomatic bradycardia, give Atropine 0.4mg IV or IM 		<ul style="list-style-type: none"> if continues >2min., call 911 give Diazepam (Valium) 5 mg IV or Midazolam 5-10 mg IM 	<ul style="list-style-type: none"> assure patient is stable before she leaves clinic
↓	↓	↓	↓	↓	↓
		<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <ul style="list-style-type: none"> if no recovery, call 911 </div>		<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <ul style="list-style-type: none"> repeat x1 in 5 min. if needed </div>	

NOTE: Emergency Scenarios are available for medical staff role-plays, debrief, and teaching points for review at teachtraining.org/Resources.html.

EXERCISE 4.2

Purpose: To become familiar with other medications used in abortion care.
Please answer the following questions.

1. At what gestational age range is it acceptable to administer mini-dose Rhogam (50 mcg) rather than full dose Rhogam (300 mcg) to the Rh-negative patient?

2. 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 spontaneous abortion.

 - c. Rh-negative patient is 4 days post-abortion and did not receive RhoGam at the abortion visit.

3. While completing an early vacuum aspiration procedure using local cervical anesthesia only, the patient complains of nausea and “feeling faint.” She is pale and sweating. Her blood pressure is 90/50 and her pulse is 48. What is your differential diagnosis? How would you manage this patient?

4. After completing an uncomplicated vacuum aspiration abortion, the patient states that she forgot to mention that she is allergic to latex. In the recovery room, the patient develops urticaria, pruritis, and becomes acutely short of breath. What is your diagnosis? In addition to supplemental measures such as oxygen administration, what medications might you administer?

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- Achilles SL, Reeves MF; Society of Family Planning Prevention of infection after induced abortion: release date October 2010: SFP guideline 20102. *Contraception*. 2011 Apr;83(4):295-309. <http://goo.gl/7at7C>
- ACOG Committee on Obstetric Practice. Guidelines for diagnostic imaging during pregnancy. ACOG Committee opinion no. 299. Washington, D.C.: ACOG, 2004 (Reaffirmed 2009). <http://goo.gl/DKWzr>
- American Society of Anesthesiologists, Practice Guidelines for Sedation and Analgesia by Nonanesthesiologists. *Anesthesiology* 2002;96:1004-1017. Continuum of Depth Sedation 2009. <http://goo.gl/W0NAq>
- Bichler J, Schondorfer G, Pabst G, Andresen I. Pharmacokinetics of anti-D IgG in pregnant RhD-negative women. *BJOG*. Jan 2003;110(1):39-45. <http://goo.gl/QmtH7>
- Fung Kee Fung K, Eason E, Crane J, Armson A, De La Ronde S, Farine D, Keenan-Lindsay L, Leduc L, Reid GJ, et al. Prevention of Rh alloimmunization. *J Obstet Gynaecol Can*. 2003 Sep;25(9):765-73. <http://goo.gl/Yjeid>
- Chanrachakul B, Likittanasombut P, O-Prasertsawat P, Herabutya Y. Lidocaine versus plain saline for pain relief in fractional curettage: a randomized controlled trial. *Obstet Gynecol*. 2001 Oct;98(4):592-595. <http://goo.gl/pYgzl>
- Edelman A, Nichols MD, Jensen J. Comparison of pain and time of procedures with two first-trimester abortion techniques performed by residents and faculty. *Am J Obstet Gynecol*. 2001 Jun;184(7):1564-1567. <http://goo.gl/JF7R2>
- Glantz JC, Shomento S. Comparison of paracervical block techniques during first trimester pregnancy termination. *Int J Gynaecol Obstet*. 2001 Feb;72(2):171-8. <http://goo.gl/6vk3N>
- Gonzales EA, Ledesma RJ, McAllister DJ, Perry SM. Effects of guided imagery on postoperative outcomes in patients undergoing same-day surgical procedures: a randomized, single-blind study. *ANA J*. 2010 Jun;78(3):181-8. <http://goo.gl/HHEjH>
- Meckstroth KR, Mishra K. Analgesia/pain management in first trimester surgical abortion. *Clin Obstet Gynecol*. 2009 Jun;52(2):160-70. Review. <http://goo.gl/VknLT>
- Miller L, Jensen MP, Stenchever MA. A double-blind randomized comparison of lidocaine and saline for cervical anesthesia. *Obstet Gynecol*. 1996 Apr;87(4):600-604. <http://goo.gl/WkcQv>
- National Abortion Federation (NAF). *Management of Unintended and Abnormal Pregnancy* (Paul M. et al, Wiley-Blackwell, 2009).
- O'Connell K, Jones HE, Simon M, Saporta V, Paul M, Lichtenberg ES. First-trimester surgical abortion practices: a survey of National Abortion Federation members. *Contraception*. 2009 May;79(5):385-92. <http://goo.gl/arilyL>
- Renner RM, Nichols MD, Jensen JT, Li H, Edelman A. Paracervical block for pain control in first trimester surgical abortion. *Obstet Gynecol* 2012 May;119(5):1030-7. <http://goo.gl/xbDJ6>
- Renner RM, Jensen JT, Nichols MD, Edelman A. Pain control in first trimester surgical abortion. *Cochrane Database Syst Rev*. 2009 Apr 15;(2):CD006712. <http://goo.gl/XbfPR>
- Renner RM, Jensen JT, Nichols MD, Edelman A. Pain control in first trimester surgical abortion: a systematic review of RCTs. *Contraception*, 2010 May, 81 (5), 372-88. <http://goo.gl/GgS9m>
- Sawaya GF, Grady D, Kerlikowske K, Grimes DA. Antibiotics at the time of induced abortion: the case for universal prophylaxis based on a meta-analysis. *Obstet Gynecol* 1996 May;87(5 Pt 2):884-890. <http://goo.gl/Nfvk7>
- Templeton A. Misoprostol for all women seeking abortion? *Lancet*. 2012 Mar 7. <http://goo.gl/NMfzl>
- Wiebe ER, Rawling M. Pain control in abortion. *Int J Gynaecol Obstet* 1995 Jul;50(1):41. <http://goo.gl/EfJ>

5. UTERINE ASPIRATION PROCEDURE

MANUAL VACUUM ASPIRATION (MVA)

ELECTRIC VACUUM ASPIRATION (EVA)

This section contains information on early uterine aspiration with manual and electric vacuum, used for both abortion* and management of early pregnancy loss. You will 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 the more complex cases and complications will also be discussed.

CHAPTER LEARNING OBJECTIVES

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

- List the steps of the uterine aspiration procedure and tips for dilation.
- Identify and correctly use equipment for manual vacuum 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:

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 10: First Trimester Aspiration Abortion
 - Chapter 13: The Challenging Abortion
 - Chapter 15: Surgical Complications: Prevention and Management

* "Aspiration abortion" is the term we use instead of "surgical abortion", as suggested in Weitz et al. 2004. First-trimester abortions are most often completed through either electric or manual aspiration – typically simple procedures that can be safely undertaken in a regular exam room, with local &/or oral analgesics and little recovery time. The abortion procedure can also be called "suction abortion." Use of the term "surgical" connotes cutting of tissue, in a process likely to take place in a hospital operating room. In addition, it distances aspiration abortion from other common and routine gynecological procedures like IUD insertion or endometrial biopsy.

SUMMARY POINTS

SKILL

- Performing a uterine aspiration requires the development of hand-eye coordination and an awareness of internal uterine landmarks.
- Both uterine position and direction of the cervical canal will guide 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.

SAFETY

- The risk of abortion complications is minimal, with fewer than 0.3% of patients experiencing a complication that requires hospitalization. Abortion-related mortality is > 10 times lower than that associated with continuing a pregnancy.
- Identifying risk factors ahead of time for a more difficult procedure allows a provider to customize care and minimize complications.
- Key complications associated with significant uterine flexion, fibroids, or uterine anomalies include failed attempted abortion and perforation.
- If you are having trouble dilating the cervical canal, know when to stop. Giving misoprostol or rescheduling in a week may improve success.
- Arguably, the two most important problems to identify are continuing pregnancy and ectopic pregnancy. Important post-procedure steps include:
 - Thorough evaluation for adequacy of the products of conception (POC).
 - If POC is inadequate: Consider reaspiration, serial hCGs, and US.
 - Ectopic warnings as needed.
 - A follow-up plan.
- Routine post-abortion tissue examination by a pathology lab has been shown to confer no incremental clinical benefit, although may be required in some settings.

ROLE

- 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 for staff and “normalization” of the abortion experience will ensure a respectful, supportive environment for all.

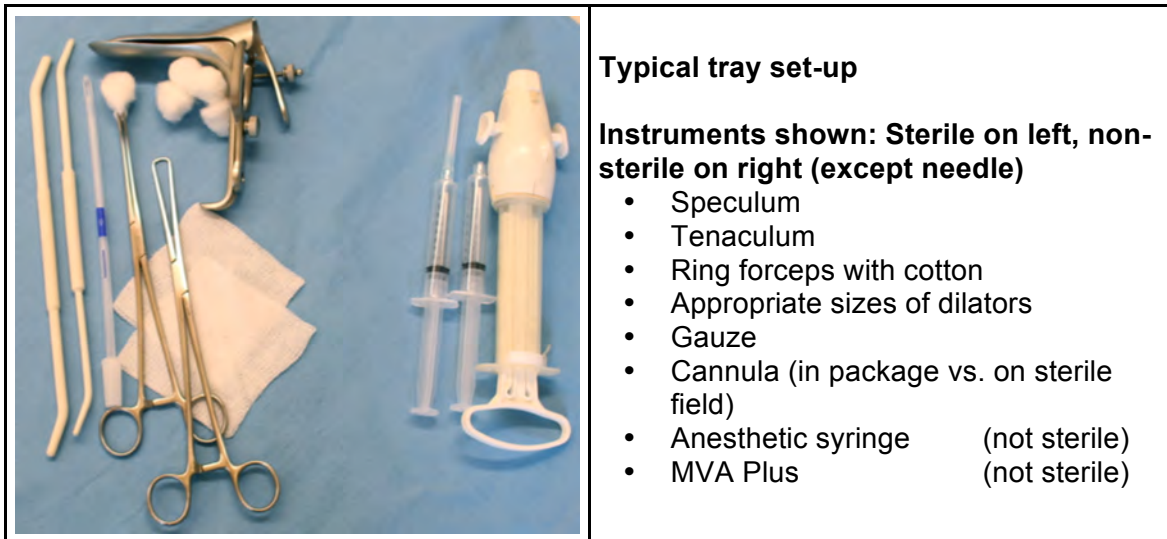
NO-TOUCH TECHNIQUE

Preventing infection after uterine aspiration is an important goal. Measures to accomplish this include properly sterilizing instruments, administering prophylactic antibiotics, minimizing bacterial entry into the sterile uterine cavity, and meticulously using the “no touch” technique to assure that the parts of instruments that will enter the uterine cavity remain sterile.

The provider:

- Holds only the center of dilators, not the tips that will enter the uterus.
- Attaches the cannula to the vacuum source without touching the cannula tip.
- Avoids vaginal contamination of uterine instruments.
- Separates sterile and non-sterile instruments or material on the surgical tray.
- Avoids contamination by gathering needed materials before placing speculum.
- Changes instrument that will go in 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-abortion infection rates (Lundh 1983, Varli 2006). 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.



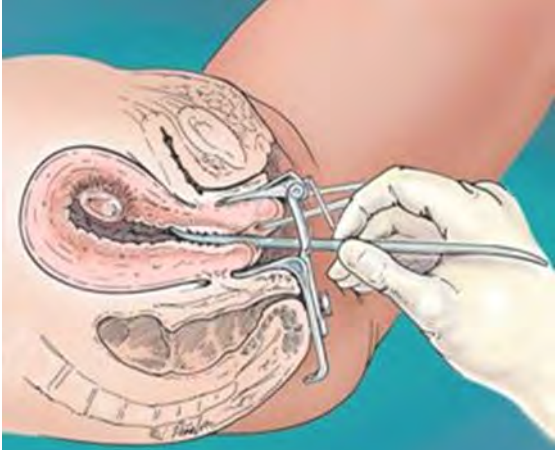



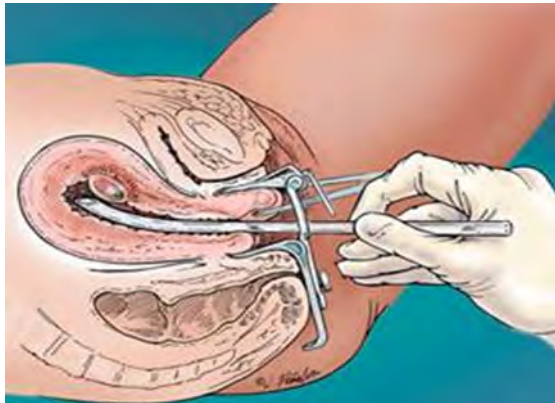
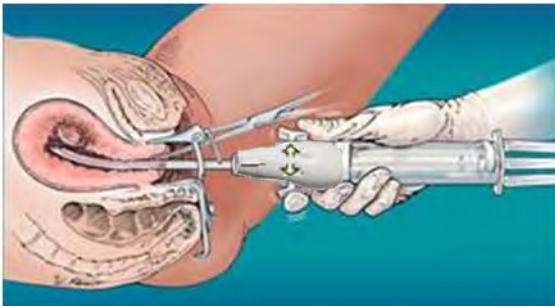
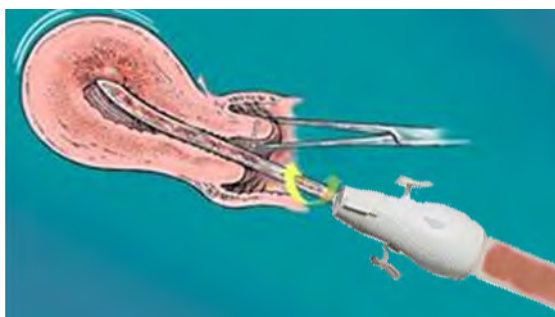
STEPS FOR VACUUM ASPIRATION

1. Review patient history.
2. Introduce yourself and ask patient's name to confirm identity.
3. Elicit and answer patient's questions and confirm consent:
 - a. "What questions do you have for me?"
 - b. Reassure her and explain process to the extent that she desires.
4. Give IV medications if using.
5. Perform bimanual examination to confirm uterine size and position.
6. Assess patient's pain level visually and/or verbally throughout procedure.
7. Gather all items needed for procedure (cannula, dilators, etc), adjust table and light.
8. Don gloves and protective eye wear; check equipment tray.
9. Insert the speculum; perform infection screening tests as needed.
10. Apply antiseptic to cervix.
11. Administer paracervical block.
12. Place tenaculum with substantial cervical purchase. Exert gradual traction to straighten the canal.
13. Dilate the cervix:
 - a. Provider variation: gestational age in weeks = mm cannula (+/- 1-2 mm).
 - b. Gently explore canal, holding the dilator loosely & allowing it to rotate within the canal.
 - c. The canal has a smooth, mucosal feel.
 - d. You often feel the internal os "give way" to gentle, steady pressure.
 - e. If unable to pass through the internal os, try the following:
 - Change angle of dilator.
 - Try flexible plastic sound or os finder.
 - Change tenaculum location (posterior lip if retroflexed uterus).
 - If acutely flexed cervix, try widening the speculum blades.
 - Use transabdominal US guidance.
 - Repeat pelvic exam.
 - Consider shorter wide speculum.
 - Try misoprostol & reattempt dilation in 1.5 - 3 hours.
14. Use manual or electric vacuum to empty the uterus until signs that it is empty (see page 63).
15. Insert IUC if requested (must 1st check POC are appropriate for gestational age).
16. Remove the tenaculum and assure minimal bleeding.
17. Remove the speculum.
18. Check for adequacy of POC.
19. Assess patient's pain level. Inform her of complete procedure or explain follow-up care needed.

USING MVA & EVA EQUIPMENT

Adapted from Manual Vacuum Aspiration, a presentation by PRCH and ARHP, 2000.

	<p>Prepare the aspirator</p> <ul style="list-style-type: none">• Begin with the valve buttons open and the plunger pushed all the way into the barrel.• Close the valve by pushing the buttons down and forward until they lock into place.
	<p>Create the vacuum</p> <ul style="list-style-type: none">• Pull the plunger back until its arms snap outward over the end of the barrel.• Make sure the plunger arms are positioned over the wide edges of the barrel.
	<p>Dilate the cervix</p> <ul style="list-style-type: none">• Gently dilate with dilators of increasing size to accommodate cannula size (labeled in mm).• Dilators:<ul style="list-style-type: none">Denniston – dilate to same as cannula size (eg. size 7 for a 7mm cannula).Pratt – dilate to cannula size x 3 (eg. dilate to 21 for a 7mm cannula).

	<p>Choose a cannula</p> <ul style="list-style-type: none"> • No studies compare rigid vs flexible. • Flexible: longer with two openings at tip. • Rigid: larger single opening at tip. • Larger: faster aspiration, intact tissue. • Smaller: Less dilation and resistance. • NAF Provider's survey (O'Connell 2009): <ul style="list-style-type: none"> • 54% used size (in mm) = weeks • 37% used 1-2 mm < weeks • 9% used 1-3 mm > weeks
	<p>Insert the cannula</p> <ul style="list-style-type: none"> • Holding cannula with fingertips, gently insert through the cervix with a rotating motion, with traction on the tenaculum to straighten the uterus. • Attach aspirator to cannula. • Do not grasp aspirator by plunger arms.
	<p>Release the pinch valve</p> <ul style="list-style-type: none"> • When the pinch valve is released, the vacuum is transferred through the cannula to the uterus. • Blood, tissue, and bubbles will flow through the cannula into the aspirator.
	<p>Evacuate the uterus</p> <ul style="list-style-type: none"> • Move the cannula gently from fundus to internal os, rotating the aspirator until: <ul style="list-style-type: none"> • Grittiness is felt through cannula. • Uterus contracts and grips the cannula. • There is an increase in cramping. • No more blood passing through cannula.



Choice for Vacuum for Aspiration

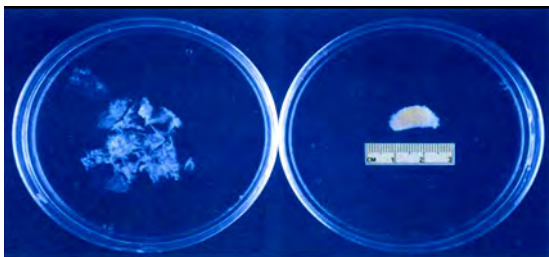
Availability & preference determine use.
 MVA approved to 12 wks.
 Some providers charge > 1 MVA to minimize emptying; or switch to EVA at 8-10 wks.
 EVA use:

- Attach cannula & 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

- Strain and rinse the tissue.
- Place tissue in a clear container.
- Recommended: backlight to inspect tissue.



Gestational sac at 6 weeks

- Shredded vs. intact for comparison.

Membranes and Villi	Decidua
Frond-like villi (floating or attached)	No fronds
Clumped villi held together by membrane	No villi or thin membrane
More transparent—like plastic wrap	More opaque—like wax paper
Luminescent, light refractory	Less light refractory
Turns white if vinegar added	Minimal color change with vinegar
<u>Gestational Sac Size guidelines:</u> 4W < 5 mm 5W = 5-10 mm 6W = dime size 7W = nickel size 8W = quarter size	Variable quantity. Caution: Don't confuse sac with <u>decidua capsularis</u> , which grows proportionally to gestational sac but is thicker & tougher
Fetal part development: 10W = 4 extremities, spine, calvarium (and gestational sac) ≥12W = must see all fetal parts + placenta	

MANAGING COMPLICATIONS

Immediate Complications	Clinical Presentation	Management Options	Occurrence Rate*
Vasovagal	Presentation: <ul style="list-style-type: none"> • During or after procedure • Pale, clammy, dizzy, nauseated or emesis • Pulse < 60 • Rare syncope • Usually resolves quickly and spontaneously Etiology: <ul style="list-style-type: none"> • Parasympathetic nerve stimulation & painful stimuli 	Pause procedure: <ul style="list-style-type: none"> • Apply cool compresses • Trendelenberg position • Sniffing ammonium may help For persistent symptomatic bradycardia: <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	EBL > 150 cc = excessive EBL ≥ 500 cc = hemorrhage Etiology: 4 T's (first 2 most common) <ul style="list-style-type: none"> • Tissue (POC or clot not completely evacuated) • Tone (inadequate uterine tone) • Trauma (perforation, false track, or cervical laceration) • Thrombin (underlying bleeding disorder) 	<u>Tissue:</u> Assure uterus is empty <ul style="list-style-type: none"> • Use 2nd MVA or switch to EVA for rapid evacuation • Check POC for adequacy • US guidance Increase Uterine <u>Tone:</u> <ul style="list-style-type: none"> • Uterine massage • Methergine 0.2 mg IM • Misoprostol 800 mcg pb/sl/po/pr Assess for <u>Trauma:</u> <ul style="list-style-type: none"> • Assess & treat perforation (see below) or cervical laceration • Clamp cervical lac w/ ring forceps • Vasopressin 4-8 units (diluted in 5-10 cc NS) intra--cervically to control bleeding <u>Thrombin:</u> <ul style="list-style-type: none"> • Review bleeding hx • Insert foley catheter in uterus & inflate bulb with sterile solution to tamponade bleeding 	0.07 – 0.4 % Bennett 2009 Goldberg 2004 Goldman 2004 Hakim-Elahi 1990
Perforation	Instruments pass deeper than expected by EGA & pelvic exam Patient may feel sudden sharp pain	Stop procedure: <ul style="list-style-type: none"> • Turn off suction • Assess patient: VS, pain, bleeding, abdominal exam • Check contents of aspirate for omentum or bowel & for POC If stable: <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 hour • Give uterotonics to contract uterus & control bleeding • Give broad-spectrum antibiotics If unstable, transport to hospital	0.02 – 0.07% Goldberg 2004 Goldman 2004 Hakim-Elahi 1990 Westfall 1998

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

Delayed Complications	Clinical Presentation	Management Options	Occurrence Rate*
Hematometra	<p>Immediate:</p> <ul style="list-style-type: none"> • Minutes to hours post-ab • Severe pelvic pain • Rectal pressure • No post-procedural bleeding • +/- hypotension, vasovagal • US with large amount of blood in uterus <p>Delayed:</p> <ul style="list-style-type: none"> • Days to weeks post-ab • Pelvic pressure or cramping • +/- low grade fever 	<p>Prompt uterine aspiration of blood offers immediate relief</p> <p>Uterotonic medications following reaspiration:</p> <ul style="list-style-type: none"> • Methergine 0.2 mg IM • Misoprostol 800 mcg 	<p>0.1 – 2.2 %</p> <p>Bennett 2009 Goldberg 2004 Goldman 2004</p>
Incomplete Abortion (Residual nonviable tissue)	<p>At time of aspiration:</p> <ul style="list-style-type: none"> • inadequate POC or <p>Days to weeks after:</p> <ul style="list-style-type: none"> • pelvic pain • abnormal bleeding • pregnancy symptoms • enlarged or boggy uterus on exam <p>US shows persistent IUP or intrauterine debris</p>	<p>Follow serial hCGs if any doubt that aspiration was complete</p> <p>Offer misoprostol or reaspiration to empty uterus</p> <p>Reaspiration preferred if</p> <ul style="list-style-type: none"> • signs of infection • hemorrhage • severe pain • significant anemia 	<p>0.2 – 4.4%</p> <p>Bennett 2009 Goldberg 2004 Goldman 2004 Maclsaac 2000 Warriner 2006 Westfall 1998 Healing 2007</p>
Postabortal endometritis (PID)	<p>Presentation:</p> <ul style="list-style-type: none"> • Pelvic pain • Fever • Tenderness • Purulent discharge • Elevated WBC 	<p>Diagnose:</p> <ul style="list-style-type: none"> • US for retained POC / debris • May need reaspiration • Wet mount • Test for GC/CT <p>Treat:</p> <ul style="list-style-type: none"> • Antibiotics (CDC PID regimen) 	<p>0.09-2.6%</p> <p>Bennett 2009 Goldberg 2004 Goldman 2004 Paul 2002 Westfall 1998</p>
Continuing Pregnancy	<p>Presentation:</p> <ul style="list-style-type: none"> • Ongoing pregnancy symptoms • Enlarging uterus <p>Risk factors:</p> <ul style="list-style-type: none"> • Uterine anomalies/fibroids • Operator inexperience • Missed multiple gestation 	<p>If suspect inadequate POCs at time of procedure, consider:</p> <ul style="list-style-type: none"> • US • serial hCGs • ectopic precautions as needed <p>Counsel patient & reaspirate as appropriate</p>	<p>0.4 – 2/3%</p> <p>Bennett 2009 Goldman 2004 Maclsaac 2000 Westfall 1998</p>
Missed Ectopic Pregnancy	<p>Suspect if inadequate POC at time of aspiration.</p> <p>Possible late signs/symptoms:</p> <ul style="list-style-type: none"> • Pelvic pain or shoulder pain • Syncope or shock 	<p>Transport to hospital if:</p> <ul style="list-style-type: none"> • concern for rupture • clinically unstable <p>Methotrexate vs. surgical tx</p>	<p>0.0 – 0.3% (Scant data)</p> <p>Bennett 2009</p>

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

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.

What is the differential diagnosis?

What would you do next?

2. You have just completed an aspiration abortion for a 19-year-old woman at six weeks gestation. She had reported intermittent episodes of bleeding on three occasions during the past week, but did not have any severe cramping or clotting. Her pre-procedure ultrasound was performed one week ago, with a gestational sac identified, but no yolk sac or embryonic pole. Her 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.

What is the differential diagnosis?

What would you do next?

3. You are performing an abortion on a nulliparous 16-year-old at seven weeks gestation. You notice that her cervix is very small and it is hard to pick 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 reinsert 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. (Adapted from Surgical Abortion Education Curriculum, PPNYC)

What should you do now?

4. You are inserting the cannula for a procedure on a woman 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. (Adapted from Surgical Abortion Education Curriculum, PPNYC)

What is the differential diagnosis?

What should you do now?

How might you have anticipated, and prevented this problem?

5. You are starting an aspiration on a patient with an anembryonic gestation at 8w5d. She has a history of one abortion with post-procedure hemorrhage requiring transfusion. The MVA quickly fills up with blood when opened. 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.

What do you suspect?

What can you do now?

EXERCISE 5.2

Purpose: To practice managing problems and complications 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. She complains of severe cramping and rectal pressure. She has had minimal bleeding and 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?

2. A 21-year-old female comes to your office for follow-up after an abortion two weeks ago at another facility, and still has some symptoms of pregnancy including breast tenderness and bloating in her abdomen. Medications include birth control pills. She has had intercourse regularly for the past six days. Vital signs normal; afebrile. Pelvic exam normal except 8-week size uterus. High sensitivity 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 an ultrasound showed moderate debris?

If she is not pregnant, how can you explain her positive urine pregnancy test and breast tenderness?

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- Achilles SL, Reeves MF; Society of Family Planning. Prevention of infection after induced abortion: release date October 2010: SFP guideline 20102. Contraception. 2011 Apr;83(4):295-309. <http://goo.gl/6yfam>
- Bennett, I, Baylson, M., Kalkstein, K., Gillespie, G., Bellamy, S., Fleischman, J., (2009) Early Abortion in Family Medicine: Clinical Outcomes. Annals of Family Medicine 7(6) 527-533. <http://goo.gl/8cdqA>
- Edwards J, Carson SA. New technologies permit safe abortion at less than six weeks' gestation and provide timely detection of ectopic pregnancy. Am J Obstet Gynecol 1997;176:1101-1106. <http://goo.gl/YhXeN>
- Goldberg AB, Dean G, Kang M, Youssof S, Darney PD (2004). Manual versus electric vacuum aspiration for early first-trimester abortion: A controlled study of complication rates. Obstetrics & Gynecology, 103: 101-107. <http://goo.gl/sZqDc>
- Goldman MB, Occhiuto JS, Peterson LE, Zapka JG, Palmer RH. (2004). Physician Assistants as providers of surgically induced abortion services. Am J Public Health, 94: 1352-1357. <http://goo.gl/do5YQ>
- Hakim-Elahi, E., Tovell, H., & Burnhill, M. S. (1990). Complications of first-trimester abortion: a report of 170,000 cases. Obstet Gynecol, 76, 129-135. <http://goo.gl/bvWqJ>
- Healing Arts & Institutions, Sec 2 Definitions, in West's California Jurisprudence 3d. 2007. Thomas West, Danvers MA, p 205
- Lundh C, Meirik O, Nygren K-G. Vaginal cleansing at vacuum aspiration abortion does not reduce the risk of post-operative infection. Acta Obstet Gynecol Scand 1983;62:275-277. <http://goo.gl/RMPj6>
- MacIsaac L, Darney P. Early surgical abortion: An alternative to and backup for medical abortion. Am J Obstet Gynecology, 183: S76-S83. 2000. <http://goo.gl/zi1eN>
- O'Connell K, Jones HE, Simon M, Saporta V, Paul M, Lichtenberg ES; National Abortion Federation Members. First-trimester surgical abortion practices: a survey of National Abortion Federation members. Contraception. 2009 May;79(5):385-92. <http://goo.gl/l0GJG>
- Paul M, Lackie E, Mitchell C, Rogers A, Fox M. Is pathology examination useful after early surgical abortion? Obstet Gynecol Apr. 2002;99(4):567-71. <http://goo.gl/CQ0F9>
- Paul ME, Mitchell CM, Rogers AJ, Fox MC, Lackie EG. (2002). Early surgical abortion: efficacy and safety. American Journal of Obstetrics & Gynecology, 187(2):407-11. <http://goo.gl/sl1mA>
- Pazol K, Zane SB, Parker WY, Hall LR, Berg C, Cook DA; Centers for Disease Control and Prevention (CDC). Abortion surveillance--United States, 2008. MMWR Surveill Summ. 2011 Nov 25;60(15):1-41. <http://goo.gl/1X8VY>
- PRCH, ARHP. Manual Vacuum Aspiration. New York, NY. 2000.
- Sawaya GF, Grady D, Kerlikowske K et al. Antibiotics at time of induced abortion: the case for universal prophylaxis based on a meta-analysis. Obstet Gynecol 1996;87:884-890. <http://goo.gl/xMUwU>
- Taylor D, Drey EA, Fischer RL, Gatter M, Sheehan K, Waldman J, et al. Standardizing early aspiration abortion complication definitions and tracking. Contraception. 82(2):206-7. <http://goo.gl/m3B9L>
- Varli IH, Lindelius A, Bergström M. Is preoperative vaginal cleansing necessary for control of infection after first trimester vacuum curettage? Acta Obstet Gynecol Scand. 2005 Jul;84(7):650-3. <http://goo.gl/e2Lbw>
- Warriner IK, Meirik O, Hoffman M, Morroni C, Harries J, My Huong NT, Vy ND, Seuc AH (2006). Rates of complication in first-trimester manual vacuum aspiration abortion done by doctors and mid-level providers in South Africa and Vietnam. Lancet 2006 Dec 2;368(9551):1965-72. <http://goo.gl/xOb0c>
- Westfall JM, Sophocles A, Burggraf H, Ellis S. Manual vacuum aspiration for first-trimester abortion. Arch Fam Med 1998;7:559-562. <http://goo.gl/8vSMB>
- WHO 2nd Edition Safe Abortion Technical and Policy Guidelines, June 2012.

6. *AFTERCARE AND CONTRACEPTION*

This chapter will help you to provide routine aftercare and contraception following first trimester uterine aspiration.

CHAPTER LEARNING OBJECTIVES

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

- Appropriately prescribe post-procedure medications.
- Provide post-procedure counseling, including instructions about home care, warning signs for complications, and emergency contact information.
- Describe post-aspiration contraceptive options and contraindications to specific methods.

READINGS / RESOURCES

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 14: Contraception and surgical abortion aftercare
- Useful handouts for physicians and patients:
 - Reproductive Health Access Project: www.reproductiveaccess.org
 - RHEDI: <http://rhedi.org/patients.php>
- Related Chapter Content:
 - Chapter 5: Delayed post-procedure complications
 - Chapter 7: Medication abortion follow-up visit
 - Chapter 8: Early pregnancy loss follow-up visit

SUMMARY POINTS

SKILL

- Providing women with instructions for home care, medications, contraception, warning signs for complications, and emergency contact information may help minimize patient stress, phone calls, and the need for a routine follow-up appointment following aspiration.
- A critical component of abortion care involves contraceptive counseling, method selection, and timing of initiation.

SAFETY

- Be familiar with the medical eligibility criteria for safely initiating contraceptive methods for women with medical conditions.

ROLE

- Women with a history of abortion remain at risk for unintended pregnancy; 47% of procedures are repeat procedures.
- Starting contraception on the day of uterine aspiration increases initiation and adherence to the method.
- Most women are candidates for long acting reversible contraceptives (LARC, including IUDs and implants), which are highly effective, can be placed the day of aspiration, have no estrogen, and users have lower rates of repeat abortion.
- Offer to dispense or prescribe emergency contraception to all women following aspiration, since they are more likely to use it with ready access.
- You play an important role in empowering a patient to find a contraceptive method that really works for her, ensuring that there are no contraindications, answering questions, and dispelling contraceptive myths.

ROUTINE POST-ABORTION CARE

Care of women 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, surveillance for immediate and delayed complications, as well as observation and support related to analgesia administered. 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.
- absence of excessive 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:

- additional antibiotics (depending on prophylactic regimen).
- NSAIDs for prn use.
- uterotonics as needed, particularly with advancing gestations > 12 weeks.
- preferred contraceptive or prescription, including emergency contraception.

Most women 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 woman should not drive and should be discharged to the care of a person who will escort her 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 after uterine aspiration, there are minimal data to support routine use (Grossman 2004). Most women can be given aftercare instructions and a phone number to call with concerns, in lieu of in-person follow-up visit, but specific indications for one include:

- suspected incomplete abortion or ongoing pregnancy.
- concern for ectopic pregnancy.
- additional contraceptive reinforcement.
- IUD string check.
- psychosocial concerns.

Staff should also assess the need for further psychosocial counseling on the day of the procedure. Some clinics offer routine telephone follow-up as an additional option.

WHAT TO EXPECT AFTER A UTERINE ASPIRATION

Adapted from RHAP & RHEDI MVA AFTER-CARE INSTRUCTIONS

Following an abortion or uterine aspiration, your patient will likely feel fine when she goes home. She can usually go back to her regular activities by the next day. She can take a shower as soon as she wants. She can eat normally, and her nausea should go away within a day.

Are there things she should not do? Yes. For one week, avoid placing anything vaginally (except for the vaginal ring). To be safe, avoid tampon use, douching, and sex.

WHAT TO EXPECT

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

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

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

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

She should call us 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: Give her a 24-hour contact number. If she has any questions, thinks something is going wrong, or thinks she is having an emergency, she should call the contact number; assure her a call back within 10-15 minutes. Acknowledge that this may be a tough time for her, so if she forgets something or is worried, she should not hesitate to call. **If indicated, give her a follow-up visit.**

PREGNANCY PREVENTION

A woman can get pregnant before her period returns. If she initiates a birth control method the day of aspiration and abstains from intercourse for one week, she does not need a back up method of contraception. She should start using the method today if possible. If she has sex without protection, emphasize that she can use Emergency Contraception (EC) to decrease her chance of another pregnancy.

PSYCHOSOCIAL SUPPORT

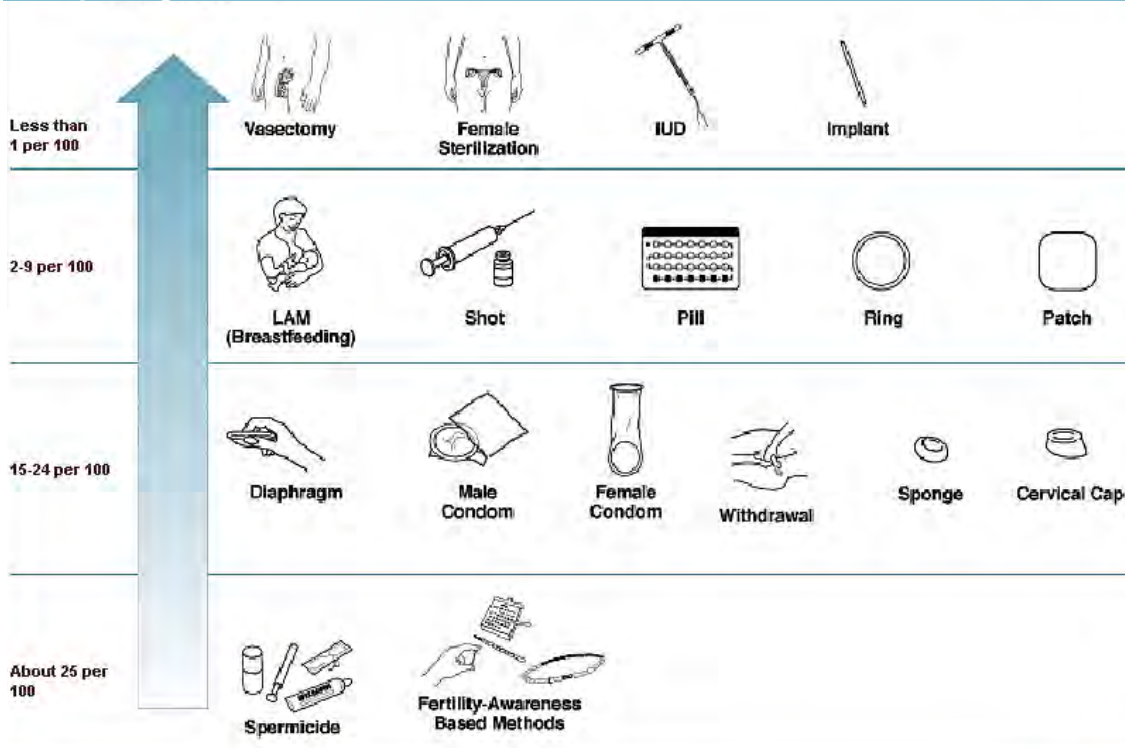
Studies have shown that quality of life measures and mood improve in the month following surgical aspiration. Repeated studies since the 1980's have concluded that abortion does not pose a hazard to women's mental health, although some women may experience worsening depression or other psychiatric disorders. Many providers routinely provide information about an available national hotline that addresses the emotional health and wellbeing of women and men following abortion (www.exhaleprovoice.org or 866-4EXHALE). Providers should identify women who may benefit from further counseling or referral.

CONTRACEPTIVE CARE

Tips for Effective Contraceptive Counseling

- Start with broad goals: “When, if ever, do you want to have (more) children?”
- Be patient centered: “What are you looking for in a birth control method?”
- Introduce methods by tiers of effectiveness (LARC > hormonal > barrier).
- Refer to typical use failure rates (not perfect use).
- Emphasize positive side effects (less bleeding, acne, or remembering).
- Ask “Do you want to have a period each month?”
- Screen for medical eligibility (using US Medical Eligibility Criteria).
- Acknowledge common challenges (remembering, appointments, supplies).
- Dispel common myths (i.e. “IUDs cause infertility”).

Comparing Effectiveness of Birth Control Methods chart



Source: WHO, 2007

CURRENT EVIDENCE BASED DEVELOPMENTS IN CONTRACEPTION

Simplified screening prior to prescribing hormonal contraception (Stewart 2001)

- Medical History to screen for contraindications to estrogen or progestin.
- Exam components required for specific method initiation:
 - Combined hormonal methods: Blood Pressure
 - DMPA: Weight/BMI
 - IUD or diaphragm: Pelvic exam +/- STI screening (at placement)
- Not required:
 - Pap test, pelvic, lung, heart, and breast exam
 - Hemoglobin and routine lab tests
 - STI risk assessment and testing; consider in women ≤ 25 or high risk.

Evidence for prescribing or dispensing a full year of hormonal contraception

- Office protocols should minimize barriers for appointments, supplies, and refills.
- Providing (or prescribing) a year's supply lowers cost, improves continuation, and improves prevention (Foster 2006).

Pap screening guidelines (2012 USPSTF, ACS / ASCCP)

- Pap every 3 yrs beginning at age 21, or 3 yrs after initiation of vaginal sex.
- Women 30 – 65: Pap and HPV co-testing every 5 yrs or Pap alone every 3 yrs.
- Women > 65 with adequate prior screening and no risks should not be screened.
- Post-hysterectomy for benign reasons & no hx high grade lesions, need no paps.
- Women who have received the HPV vaccine still need regular cervical screening.

Long Acting Reversible Contraceptive (LARC) methods should be first line

- LARC methods are highly effective, have few contraindications, have highest continuation and acceptability of reversible methods.
- Rapidly reversible upon removal and can be used privately.
- Most cost-effective reversible methods after 1-2 years of use.
- Once financial barriers removed and LARC methods introduced to all potential participants as a first-line contraceptive option:
 - 70% chose LARC (vs. 6% national average, NSFG; Kittur 2011).
 - LARC continuation 86% vs. OCP 55% at 1 year (Piepart 2011).

Revised evidence-based IUD eligibility

- Nulliparous women and women <25—USMEC Category 2.
- No association of IUD with increased risk of infertility.
- No restriction for past history of PID, STIs, or ectopic pregnancy.
- No restriction for women with HIV or AIDS (stable on ARVs)— Category 2.
- Consider LNG-IUS to treat menorrhagia and dysmenorrhea.

Considerations for Post-Abortion IUD

- Immediate post-aspiration IUD studies show:
 - Improved use at 6 months after immediate placement in 1st & 2nd trimesters.
 - Decreased rates of repeat abortions.
 - No significant increase in complications: expulsion, perforation, and/or PID.
 - Avoid placement in active cervicitis, PID or immediately post septic abortion.
- Post-Medication Abortion IUDs (Shimoni 2011, Betstadt 2011).
 - Slightly more expulsions after both immediate and delayed insertion (4-12%).
 - May be due to uterine debris; more studies forthcoming.
- For review of how to insert each of the IUDs, follow the links below:
 - http://www.mirena-us.com/hcp/hcp_center/live_placement_video.jsp
 - <http://hcp.paragard.com/insertion-training/insertion-process-video>

Initiating Quick Start:

- Post-abortion procedure:
 - All methods can be started on day of procedure.
- Post medication abortion:
 - Pill-patch-ring can be started after bleeding from misoprostol.
 - DMPA, IUC, implant can be given at follow-up visit (preferably within 5 days).
- Routine care:
 - Start hormonal method on appointment day any time of month.
 - After confirming negative pregnancy test.
 - Unprotected sex within 5 days: give EC; start hormonal method < 24 hrs.
 - Back-up method for 7 days if Quick Start after cycle day 5.
 - Repeat pregnancy test if no withdrawal bleed.
- Impact:
 - Improved compliance, no increase abnormal bleeding, no teratogenicity.

Evidence to reduce or eliminate withdrawal bleeding with extended contraception

- Safe, acceptable, and as efficacious as monthly cyclic regimens (Nelson 2007).
- Various monophasic OC formulations or vaginal ring can be used.

Emergency contraception (EC):

- Effectiveness of EC Types: Cu-T IUD > Ellipristal > LNG EC.
- LNG EC now available over-the-counter for anyone ≥ 17.
- There are no medical contraindications to EC use.
- There is no physiologic reason to limit the frequency of EC use.
- EC is NOT an abortifacient.
- Evidence shows advanced prescription increases use.
- Comprehensive resource available at <http://ec.princeton.edu>

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 [who.int/reproductivehealth/publications/family_planning/9789241563888/en/index.html](http://www.who.int/reproductivehealth/publications/family_planning/9789241563888/en/index.html)

cdc.gov/mmwr/preview/mmwrhtml/rr59e0528a1.htm?s_cid=rr59e0528a1_e
cdc.gov/mmwr/preview/mmwrhtml/mm6026a3.htm?s_cid=mm6026a3_w

Condition	Qualifier for condition	Estrogen/ progestin: pill, patch, ring	Progestin- only: pill	Progestin- only: injection	Progestin- only: implant	Progestin IUD	Copper IUD
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	3	3
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

Condition	Qualifier for condition	Estrogen/ progestin: pill, patch, ring	Progestin- only: pill	Progestin- only: injection	Progestin- only: implant	Progestin IUD	Copper IUD
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	Vaginitis	1	1	1	1	2	2
	Very high risk	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
Condition	Qualifier for condition	Estrogen/ progestin: pill, patch, ring	Progestin- only: pill	Progestin- only: injection	Progestin- only: implant	Progestin IUD	Copper IUD

CONTRACEPTIVE OPTIONS

Adapted from: Contraceptive Technology—20th Edition, NY: Ardent Media, 2011. Trussell J. Contraception 2011.

Method	Failure Rate*	Advantages	Possible Disadvantages	Patient Counseling Tips and Times to Remember
TOP TIER: Highly effective for contraception, but not effective STI protection				
Sterilization 1. Vasectomy (male) 2. Tubal sterilization (female)	1. 0.15% 2. 0.50%	<ul style="list-style-type: none"> ▪ Permanent protection against pregnancy ▪ No lasting side effects ▪ No effect on sexual pleasure ▪ Permits spontaneous sexual activity ▪ Protects women whose health would be seriously threatened by pregnancy ▪ Varying techniques: <ol style="list-style-type: none"> 1. Scalpel vs. no-scalpel vasectomy 2. Laparoscopic, abdominal, hysteroscopic trans-vaginal (Essure) 	<ul style="list-style-type: none"> ▪ Risks of minor surgery ▪ Possible later regret, not easily reversible ▪ Consider offering other non-surgical long term methods ▪ Rarely, tubes reopen, allowing pregnancy to occur 1. Vasectomy: <ul style="list-style-type: none"> ▪ Follow-up sperm count necessary ▪ Temporary scrotal tenderness, bruising, or swelling ▪ Proximal testicular infection or thrombus ▪ Transient sperm granuloma 2. Tubal sterilization: <ul style="list-style-type: none"> ▪ Very rare injury to blood vessels or bowel ▪ Pregnancies that rarely occur are more likely to be ectopic 	<ul style="list-style-type: none"> ▪ Sterilization may be performed at any time ▪ Nothing to remember
Progestin-only single rod Implant: (Nexplanon)	0.05%	<ul style="list-style-type: none"> ▪ Effective up to 3 years ▪ Acceptable for use in breastfeeding women ▪ Can be used by women unable to tolerate estrogens ▪ May have light menses or amenorrhea ▪ Decreased dysmenorrhea ▪ Decreased risk of endometrial and ovarian cancer ▪ Lessens mood variability, headaches, breast tenderness, and nausea ▪ Cost effective ▪ Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> ▪ Irregular menstrual patterns (bleeding patterns experienced in the first 3 months of use are likely to be the patterns that will persist throughout use) ▪ May have amenorrhea, weight gain, hair changes, depression, skin rash, change in sex drive 	<ul style="list-style-type: none"> ▪ Must be inserted by a clinician who has attended a company/FDA-required implant training ▪ May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) ▪ Nothing to remember
IUD: LNG-IUS (Mirena)	0.2%	<ul style="list-style-type: none"> ▪ FDA approved for 5 years; Effective up to 7 years ▪ Reduces menstrual bleeding 80% and less dysmenorrhea ▪ Amenorrhea in 20% at 1 year; 60% at 5 years ▪ Decreased ectopic risk ▪ PID risk reduction ▪ Cost-effective ▪ Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> ▪ Metrorrhagia increased in first few months ▪ Amenorrhea ▪ Increased risk of pelvic infection in first 20 days after insertion (then risk decreased from baseline in several studies) ▪ May not be used for emergency contraception after unprotected sex (see ParaGard) ▪ Rare perforation or expulsion 	<ul style="list-style-type: none"> ▪ Must be inserted by a clinician ▪ May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) ▪ Remember string check monthly
IUD: Cu-T380a (ParaGard)	0.8%	<ul style="list-style-type: none"> ▪ FDA approved for 10 years; Effective up to 12 years ▪ Non-hormonal ▪ Decreased ectopic risk ▪ Most effective emergency contraception to 5 days after unprotected sex ▪ Cost-effective ▪ Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> ▪ May cause metrorrhagia, dysmenorrhea, and menorrhagia in first few months ▪ Increased risk of pelvic infection in first 20 days after insertion (then risk returns to baseline) ▪ Rare perforation or expulsion 	<ul style="list-style-type: none"> ▪ Must be inserted by a clinician ▪ Begin any day of cycle, day of abortion, or at follow-up visit ▪ Remember string check monthly

*Percentage of women experiencing an unintended pregnancy within the first year of typical use

Method	Failure Rate*	Advantages	Possible Disadvantages	Patient Counseling Tips and Times to Remember
MIDDLE TIER: Moderately effective for contraception, but not effective STI prevention				
Continuous Breastfeeding Lactational Amenorrhea	6.0%	<ul style="list-style-type: none"> No medical or hormonal side effects Infants: best nutrition, decreases infections, allergies, asthma Increases mother-child bonding Requires no supplies or medical supervision 	<ul style="list-style-type: none"> May be difficult to exclusively breastfeed Not an effective post-abortion method Only effective for six months post delivery 	<ul style="list-style-type: none"> Remember contraceptive start: <ol style="list-style-type: none"> 1) as menstruation resumes 2) frequency of breastfeeds is reduced or discontinued, or 3) 6 months post delivery
Progestin-only Injectable: (Depo-Provera)	6.0%	<ul style="list-style-type: none"> Injection interval 12 weeks, with 4 week grace period Acceptable for use in breastfeeding women & adolescents May have light menses or amenorrhea Decreased dysmenorrhea Can be used by women unable to tolerate estrogens Decreased risk of endometrial and ovarian cancer Lessens mood variability, HAs, breast tenderness, nausea 	<ul style="list-style-type: none"> Spotting or amenorrhea May cause suppressed fertility as ovulation may be delayed for up to 9-10 months after last shot May cause weight gain or loss (if 5% of wt in <6 mos, likely to continue on method), hair changes, depression, rash, Side effects for up to 6 months after discontinuing method 	<ul style="list-style-type: none"> Clinician must administer May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) Remember shot every 12-16 wks
Vaginal Ring (NuvaRing)	9.0%	<ul style="list-style-type: none"> Effective for 1 month No daily pill Acceptable for use in adolescents Non-contraceptive advantages similar to COC Decreased risk of endometrial and ovarian cancer Does not require fitting by a clinician or the use of spermicide Permits spontaneous sexual activity Decreased risk of endometrial and ovarian cancer Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> May have increased vaginal discharge, irritation, or infection Cannot use with a diaphragm or cervical cap as a backup method (condoms advised) Temporary irregular menses May cause spotting, weight gain or loss, breast tenderness, headache, dizziness, nausea, or changes in mood Rare but adverse health risks, including blood clots, heart attack, or stroke—increased risk for smokers >35 	<ul style="list-style-type: none"> New ring is inserted vaginally for 3 wks, followed by ring-free week May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) Remember once monthly
Patch (Ortho Evra)	9.0%	<ul style="list-style-type: none"> Effective for 1 month if changed weekly as directed No daily pill Non-contraceptive advantages similar to COC Acceptable for use in adolescents Permits spontaneous sexual activity Non-contraceptive advantages similar to COC Decreased risk of endometrial and ovarian cancer Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> Wearers may be exposed to 60% more estrogen than typical OCP (35 mcg EE); may increase serious side effects May not be as effective for women who weigh >198 pounds Temporary irregular menses Skin reaction at the site of application May cause spotting, weight gain or loss, breast tenderness, headache, dizziness, nausea, or changes in mood Rare but adverse health risks, including blood clots, heart attack, or stroke—increased risk for smokers >35 	<ul style="list-style-type: none"> A new patch is worn each week for three weeks, followed by a patch-free week May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) Remember to change weekly
Combined Oral Contraception	9.0%	<ul style="list-style-type: none"> Predictable shorter periods Decreased menstrual flow, dysmenorrhea, anemia, Lessens premenstrual symptoms, menstrual migraines, dysmenorrhea in endometriosis, and menopausal symptoms Reduces risk of ovarian and endometrial cancers, PID, non-cancerous growths of the breasts, ovarian cysts, osteoporosis Decreased ectopic risk Improves acne Minimal weight gain or loss Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> Pill must be taken daily Temporary irregular menses May cause spotting, weight gain or loss, breast tenderness, headache, dizziness, nausea, fatigue or changes in mood Rare but adverse health risks, including blood clots, heart attack, or stroke—increased risk for smokers >35 	<ul style="list-style-type: none"> May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) Remember daily pill 28 to 31 times a month
Progestin Only Oral Contraception	9.0%	<ul style="list-style-type: none"> Acceptable for use in breastfeeding women Can be used by women unable to tolerate estrogens Decreased menstrual flow and dysmenorrhea Minimal weight gain or loss Decreased risk of endometrial and ovarian cancer Stable hemoglobin in iron deficiency anemia Lessens mood swings Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> Pill must be taken at same time each day to reduce risk of pregnancy and spotting Irregular menses or amenorrhea May cause spotting, weight gain or loss, breast tenderness, headache, dizziness, nausea, abdominal pain, or fatigue 	<ul style="list-style-type: none"> May begin day of abortion, at follow-up visit or any day of cycle (use backup for 7 days if starting >5 days after abortion or after cycle began) Remember daily pill 28 to 31 times a month

*Percentage of women experiencing an unintended pregnancy within the first year of typical use

Method	Failure Rate*	Advantages	Possible Disadvantages	Patient Counseling Tips and Times to Remember
LOWER TIER: BARRIER METHODS: Less effective but help protect against STIs (degree of protection varies by method)				
Male Condom	15.0%	<ul style="list-style-type: none"> Easy to buy over the counter (non-prescription) Helps protect against many STIs, including HIV Can be put on as part of foreplay May help relieve early ejaculation 	<ul style="list-style-type: none"> Latex allergies: polyurethane available but less effective May irritate skin May diminish penile sensations Can break or slip off during sex 	<ul style="list-style-type: none"> Requires consistent use and partner cooperation Remember every time you have sex
Diaphragm	16.0%	<ul style="list-style-type: none"> Can last several years Costs very little to use Can be left in place for 24 hours 	<ul style="list-style-type: none"> Allergies to latex or spermicide Should not be used during vaginal bleeding or infection Increases risk of bladder infection Not effective protection against STIs/HIV, condoms recommended to reduce risk 	<ul style="list-style-type: none"> Must be fitted by a clinician Must be properly inserted Must be used with spermicide Remember every time you have sex
Female Condom (Reality)	21.0%	<ul style="list-style-type: none"> Easy to buy over the counter (non-prescription) Helps protect against many STIs, including HIV Can be put in as part of sex play May help relieve early ejaculation 	<ul style="list-style-type: none"> May be noisy May be hard to insert May irritate skin May slip out of place during sex 	<ul style="list-style-type: none"> Requires consistent use and partner cooperation Remember every time you have sex
Cervical Cap (Femcap) 1. Parous 2. Nulliparous	1. 40.0% 2. 20.0%	<ul style="list-style-type: none"> Can last several years Costs very little to use Can be left in place for 48 hours 	<ul style="list-style-type: none"> Allergies to latex or spermicide Should not be used during vaginal bleeding or infection Efficacy decreases significantly in parous users Not effective protection against STIs/HIV, condoms recommended to reduce risk 	<ul style="list-style-type: none"> Must be fitted by a clinician Must be properly inserted Must be used with spermicide Remember every time you have sex
BOTTOM TIER FAMILY PLANNING METHODS				
Periodic Abstinence	25.0%	<ul style="list-style-type: none"> Eliminates pregnancy risk No medical or hormonal side effects 	<ul style="list-style-type: none"> Many people find it difficult to abstain from sex for long periods of time Many people fail to use protection when abstinence ends 	<ul style="list-style-type: none"> Should begin immediately post-abortion Nothing to remember until sex resumes
Withdrawal	27.0%	<ul style="list-style-type: none"> Can be used in conjunction with consistent condom use for nearly 100% effectiveness Can be used if no other method is available or desirable, but not recommended 	<ul style="list-style-type: none"> Requires a trusted male partner with significant self-control, previous withdrawal experience Not for men with premature ejaculation Not recommended for teenagers 	<ul style="list-style-type: none"> Remember every time you have sex
Spermicides (Nonoxynol-9)	29.0%	<ul style="list-style-type: none"> Easy to buy over the counter (non-prescription) Can be put in as part of sex play Comes in many forms: cream, gel, foam and inserts 	<ul style="list-style-type: none"> May irritate vagina or penis Can be messy Using NO-9 many times a day may increase risk of HIV Should never be used for anal sex 	<ul style="list-style-type: none"> Remember every time you have sex
No Method	85%	<ul style="list-style-type: none"> High pregnancy rate for those attempting pregnancy 	<ul style="list-style-type: none"> High pregnancy rate for those trying to avoid pregnancy 	

*Percentage of women experiencing an unintended pregnancy within the first year of typical use

Method	Failure Rate**	Advantages	Possible Disadvantages	Patient Counseling Tips and Times to Remember
EMERGENCY CONTRACEPTION				
IUD (Copper T380A or ParaGard)	<99% to 5 days (Wu)	<ul style="list-style-type: none"> Most effective EC, plus long acting reversible method Effective up to 10-12 years Non-hormonal Decreased ectopic risk Cost-effective Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> May cause metrorrhagia, dysmenorrhea, and menorrhagia in first few months Increased risk of pelvic infection in first 20 days after insertion (then risk returns to baseline) Rare perforation or expulsion Does not protect against STIs 	<ul style="list-style-type: none"> Within 5 days of midcycle UPIC; used when EC and long-term contraception desired; almost 100% efficacy
Ulipristal EC Ella (30mg)	94% to 120h	<ul style="list-style-type: none"> Effectiveness does not decline between 72h and 120h More effective than LNG EC, particularly for obese women No medical contraindications to EC use No physiologic reason to limit frequency of EC use 	<ul style="list-style-type: none"> Only available by Rx regardless of age Contraindications: Pregnancy and breastfeeding 12% experience nausea; if vomiting occurs within 3h of taking Ella, consider repeating dose Menses may occur earlier or later than expected by a few days; and subsequent menstrual flow likely to be prolonged 	<ul style="list-style-type: none"> Take ASAP within 120h of UPIC
Levonorgestrel EC (Plan B, 1 Step, or Next-Choice)	88% to 72 hrs and 75% to 120 hours	<ul style="list-style-type: none"> No medical contraindications to EC use No physiologic reason to limit frequency of EC use Lowers risk of pregnancy if taken within 72 hours, more effective sooner taken (data supports up to 120 hours) after unprotected sex or contraceptive error Available over the counter to anyone ≥17 Fewer side effects than daily COC No teratogenicity if already pregnant May be purchased by males Standard of care following sexual assault State insurances may cover prescription cost Rapid return to fertility after discontinuing method 	<ul style="list-style-type: none"> May cause N/V, change in next menses, headache, dizziness, breast tenderness, abdominal pain, or fatigue Regarding bleeding, hastens the onset of the subsequent menses; increases the chance that the subsequent menses prolonged; rarely causes intermenstrual bleeding Least effective EC option, esp in obese women Expensive for some women Requires prescription for women ≤17 	<ul style="list-style-type: none"> Take 2 doses at same time (Plan B), or 12 hours apart Remember to take as soon as possible after unprotected sex (up to 120 hours, preferably within 72h)
Progestin Only Pills (Norethindrone 0.35mg)	95% to 24h	<ul style="list-style-type: none"> No medical contraindications to EC use No physiologic reason to limit frequency of EC use 	<ul style="list-style-type: none"> Only available by Rx regardless of age 23% experience nausea and 6% vomit If vomiting occurs 30min after taking EC, repeat dose not necessary 	<ul style="list-style-type: none"> Use as soon as possible within 120h after intercourse. Take 40 pills at once OR take 20 pills now and 20 pills 12 h later
Combined Oral Contraceptives (varies)	74%	<ul style="list-style-type: none"> No medical contraindications to EC use No physiologic reason to limit frequency of EC use 	<ul style="list-style-type: none"> Only available by Rx regardless of age Side effects: ~50% of women experience nausea and 20% vomit 	<ul style="list-style-type: none"> Use as soon as possible within 120h after intercourse Suggested: give biological equivalent of > 100mcg E2 and 1mg norgestrel now; repeat in 12 h.

** Percentage reduction in pregnancy rate for a single use of emergency contraception.

EXERCISES: AFTERCARE & CONTRACEPTION

EXERCISE 6.1

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

1. A patient has had nausea and vomiting throughout her pregnancy. How long will it take for her 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?

EXERCISE 6.2

Purpose: To understand recent evidence based contraceptive developments, indications, precautions, and use.

1. 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 39-year old who would like male condoms only.
 - d. A 29-year old with migraine headaches with aura who wants the pill.
 - e. A 20-year old nulliparous woman with a history of Chlamydia at age 15, who wants an IUD.
 - f. A 28-year old female with vaginitis who wants emergency contraception (for unprotected intercourse within 5 days) and long-acting contraception.
 - g. A 25-year old with SLE who is interested in the ring.
 - h. A 31-year old who takes anti-seizure medications who wants the pill.
 - i. A 27-year old who wants a combined hormonal method, but doesn't want a monthly period.

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- Bednarek PH et al. Immediate versus delayed IUD insertion after uterine aspiration. *N Engl J Med* 2011 Jun 9; 364:2208. <http://goo.gl/xDQb5>
- Cremer, M et al. Immediate vs. delayed post-abortion copper T 380A IUD insertion in cases over 12 weeks of gestation. *Contraception* 2011; 83:522–527. <http://goo.gl/rROfO>
- Edelman AB, Gallo MF, Jensen JT, Nichols MD, Schulz KF, Grimes DA. Continuous or extended cycle vs. cyclic use of combined oral contraceptives for contraception. *Cochrane Database Syst Rev.* 2005 Jul 20(3):CD004695. <http://goo.gl/yvDV2>
- Foster DG, Parvataneni R, de Bocanegra HT, Lewis C, Bradsberry M, Darney P. Number of oral contraceptive pill packages dispensed, method continuation, and costs. *Obstet Gynecol.* 2006 Nov;108(5):1107-14. <http://goo.gl/jLmVF>
- Glasier A, Cameron ST, Blithe D, Scherrer B, Mathe H, Levy D, Gainer E and A Ulmann. Can we identify women at risk of pregnancy despite using emergency contraception? Data from randomized trials of ulipristal acetate and levonorgestrel. *Contraception* 2011; 84:363–367. <http://goo.gl/MOV2a>
- Grimes D, Lopez LM, Schultz KF, Stanwood NL. Immediate post-abortion insertion of intrauterine devices. *Cochrane Database Syst Rev.* 2010:CD000111. <http://goo.gl/cHKYR>
- Grossman D. Routine follow-up visits after first trimester induced abortion. *Obstet Gynecol.* 2004 April: 103(4): 738-745. <http://goo.gl/gOIsI>
- Hatcher RA, Trussell J, Stewart FH, Nelson AL, Cates W, Guest F, Kowal D. *Contraceptive Technology.* 20th ed. 2008. New York: Ardent Media.
- Hohmann HL, Reeves MF, Chen BA, Perriera LK, Hayes, JL, and MD Creinin. Immediate versus delayed insertion of the levonorgestrel-releasing intrauterine device following dilation and evacuation: a randomized controlled trial. *Contraception* 2012; 85: 240–245. <http://goo.gl/kNeyz>
- Hubacher D, Lara-Ricalde R, Taylor DJ, et al. Use of copper intrauterine devices and the risk of tubal infertility among nulligravid women. *New England Journal of Medicine.* 2001;345,561-7. <http://goo.gl/zixGM>
- Kittur ND, Secura GM, Peipert JF, Madden T, Finer LB, Allsworth JE. Comparison of contraceptive use between the Contraceptive CHOICE Project, state, national data. *Contraception.* 2011 May; 83(5):479-85. <http://goo.gl/vi4I7>
- Martino, JL, Vermund SH. Vaginal Douching: Evidence for Risks or Benefits to Women's Health *Epidemiologic Reviews* 24:109-124 (2002). <http://goo.gl/OBHmR>
- Nelson AL. Communicating with Patients about Extended-cycle and Continuous Use of Oral Contraceptives. *J Womens Health (Larchmt).* 2007 May;16(4):463-70. <http://goo.gl/yOm0T>
- Paul M, Lichtenberg ES, Borgatta L, Grimes DA, Stubblefield PG and MD Creinin, eds. *Management of Unintended and Abnormal Pregnancy: Comprehensive Abortion Care.* Wiley-Blackwell, 2009.
- ParaGard [package insert]. Pomona, NY: Duramed Pharmaceuticals, Inc; 2006.
- Peipert JF, Zhao Q, Allsworth JE, Petrosky E, Madden T, Eisenberg D, Secura G. Continuation and satisfaction of reversible contraception. *Obstet Gynecol.* 2011 May;117(5):1105-13. <http://goo.gl/0TEyv>
- Schafer JE, Osborne LM, Davis AR, Westhoff C. Acceptability and satisfaction using Quick Start with contraceptive vaginal ring versus an oral contraceptive. *Contraception.* 2006 May;73(5):488-92. <http://goo.gl/3Xh9W>
- Shimoni N, Davis A, Ramos ME, Rosario L, Westhoff C. Timing of copper intrauterine device insertion after medical abortion: a randomized controlled trial. *Obstet Gynecol.* 2011 Sep;118(3):623-8. <http://goo.gl/GPXEU>
- Stewart FH, Harper CC, Ellertson CE, Grimes DA, Sawaya GF, Trussell J. Clinical breast and pelvic examination requirements for hormonal contraception. *JAMA.* 2001; 285:2232-2239. <http://goo.gl/ym656>

Trussell J. Contraceptive failure in the United States. *Contraception*. 2011 May;83(5):397-404.
<http://goo.gl/astOr>

Westhoff C, Morroni C, Kerns J, Murphy PA et al. Bleeding patterns after immediate vs. conventional oral contraceptive initiation: a randomized, controlled trial. *Fertil Steril* 2003 Feb;79(2):322-329.
<http://goo.gl/Vpn76>

Wu S, Godfrey E, Wojdyla D, Dong J, Cong J, Wang C, von Hertzen H. Copper T380A intrauterine device for emergency contraception: a prospective, multicentre, cohort clinical trial. *BJOG* 2010;117:1205–1210.
<http://goo.gl/l50s5>

7. MEDICATION ABORTION

Medication abortion (or medical abortion*) 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:
 - Pertinent history and physical exam.
 - Laboratory evaluation and sonogram as needed.
- Counsel patients effectively throughout the process, including:
 - The range of what to expect during the medication abortion.
 - Differences between expected side effects and complications.
 - The indications for intervention with a uterine aspiration.
- Describe differences between the FDA approved and evidence based mifepristone/misoprostol regimens.
- Assess concerns and completion of medication abortion.
- Assess and manage common complications.

READING / RESOURCES

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 9: Medical abortion in early pregnancy
- Early Options: A Provider's Guide to Medical Abortion. Online (NAF 2010)
http://www.prochoice.org/education/cme/online_cme
- Helpful handouts for providers and patients:
 - http://www.reproductiveaccess.org/med_ab/menu.htm
 - <http://rhedi.org/patients.php>
- The mifepristone manufacturer has a helpful website and an on-call network (<http://www.earlyoptionpill.com>; 1-877-432-7596)

* Note: We have adopted the term "Medication abortion" instead of the common term "Medical Abortion" because this adjusted modifier may more accurately represent use of the family of effective drug-based methods that can terminate an unwanted pregnancy. The former modifier was easily confused with "medical" necessity, or physician-only based practices, for example. For a complete discussion, see Weitz et al. "Medical" and "surgical" abortion: rethinking the modifiers. Contraception 2004 Jan;69(1):77-8.

SUMMARY POINTS

SKILL

- Medication abortion (MAB) is technically simple. Most of what you learn involves thorough counseling and follow-up assessment.
- Mifepristone 200 mg followed by misoprostol 800 mcg buccally or vaginally is effective for gestational age to 63 days.
- Medication abortion accounted for 25% of U.S. abortions < 9 weeks in 2008.
- Ten percent of U.S. providers offer only medication abortion (Jones 2011).

SAFETY

- Medication abortion is quite safe.
- Most of the process occurs outside of the office.
 - Provide patients a number to contact you with questions or concerns.
 - Give your patients a list of “warning signs” that warrant a call or visit
 - Be able to provide aspiration or a back-up group that can.
- Mifepristone regimens do not effectively treat ectopic pregnancy.
- Complications can include delayed bleeding that may require treatment or aspiration several weeks after the abortion.

ROLE

- Your confidence providing medication abortion will grow quickly as you:
 - Gain experience monitoring side effects and assessing completion.
 - Listen to your patients’ success stories.
 - Discuss your questions with more experienced colleagues.
- By offering early medication abortion to your patients, you are playing an important role in expanding access for women.

COMPARISON OF MIFEPRISTONE REGIMENS

Adapted from RHEDI , The Reproductive Health Access Project, NYC and
National Abortion Federation Protocol for Mifepristone/Misoprostol in Early Abortion Updated March 2009

The FDA approved mifepristone with misoprostol for medication abortion in 2000, using a specific regimen based on evidence collected through 1996. Since then, ongoing studies have delineated regimens with optimized convenience, efficacy, and side effects, thereby creating revised and improved evidence-based regimens.

Day 1 = Day of Mifepristone Administration

Factor	FDA-Approved Regimen Based on evidence up to 1998	Evidence-Based Regimens Based on evidence up to 2012	
	Oral Miso	Vaginal Miso	Buccal Miso
Gestational Age Limit	49 days	Up to 63 days	Up to 63 days
Mifepristone Dose	600 mg orally	200 mg orally	200 mg orally
Misoprostol Dose and Route of Administration	400 mcg orally	800 mcg vaginally	800 mcg buccally
Timing of Misoprostol Administration	48 hours after mifepristone	0 - 72 hours after mifepristone	24-48 hours after mifepristone
Place of Misoprostol Administration	Clinician's Office	Home	Home
Follow-Up Visit	Day 14	Day 2 -14	Day 2-14
Cost	Higher	Lower	Lower
Minimum Number of Office Visits	3	2	2
Success Rate	92%	93-98%	95-98.5%
Core References	Peyron 1993, Spitz 1998	Ashok 1998, Schaff 1999, Von Hertzon 2003, Creinin 2004, Creinin 2007, Goel 2011	Middleton 2005, Fjerstad 2006, Winikoff 2008

Efficacy and acceptability to 70 days (10 weeks) has been demonstrated with sublingual misoprostol dosing by preliminary international data not shown above (Attia 2011).

Internationally, particularly in countries with restrictive abortion laws, misoprostol has been used alone for early abortion. Most studies show a range of results between 65% and 93% with multiple doses in pregnancies up to 63 days gestation (Gynuity 2003).

More information about regimens is available at:

<http://gynuity.org/resources/info/misoprostol-for-early-abortion/>.

MIFEPRISTONE ABORTION: STEP BY STEP

Adapted from RHAP and RHEDI

FIRST OFFICE VISIT - DAY 1

Determine Patient Eligibility:

1. Confirm pregnancy and determine gestational age.
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. Discuss pregnancy options and early abortion options (medication vs. aspiration) (see page 23 in Chapter 2). Address patient's concerns.
4. Confirm confidential phone number and transportation access for follow-up.
5. Discuss the safety of medication abortion and review risks (see table):
 - Continued pregnancy (<1%) - complete with aspiration or misoprostol.
 - Heavy or prolonged bleeding (1-2%) - uterine aspiration may be required.
 - Endometritis (<1%) and very rare risk of atypical infection.
 - Potential misoprostol teratogenicity (associated w/ increased congenital deformities, Möbius syndrome) - once taken, must complete abortion.
6. Review and sign required consents and agreements:
 - Manufacturers_Patient Agreement and Medication Guide
 - http://www.earlyoptionpill.com/section/health_professionals/support_materials1
 - Evidence-based Agreement or consent
 - Comparing FDA approved regimen with evidenced-based options.
 - Alternatively use a comprehensive document that includes information from all above. Sample at http://rhedi.org/med_ab/patient_agreement.php.
7. Give and review use and effects of all medications:
 - Administer mifepristone: one 200 mg tablet by mouth in office.
 - Help patient choose optimal time for home use of misoprostol.
 - Buccal: place four 200 mcg tablets between gum and cheek for 30 minutes. Swallow any remaining fragments after 30 minutes.
 - Vaginal: wash hands before placing four 200 mcg tablets as high as possible in the vagina (may lie down for 30 mins to retain).
 - Take NSAIDs, opioids, anti-emetics, and prophylactic antibiotics as recommended by provider. NSAIDs help decrease the amount of bleeding.
 - Give Rh(D)-IG (50 mcg dose IM) within 72 hours of mifepristone if indicated.
 - Patient should expect bleeding / cramping, heaviest within 4-6 hours after misoprostol.
 - Average duration of bleeding 2 weeks (range 1-69 days in U.S. studies; NAF 2010 online CME); clinically significant drop in hemoglobin is rare.

- Cramping/pain occurs in > 90% of women, varies in intensity, usually peaks after misoprostol dose, and is typically improved by NSAIDs +/- opioids.
 - Nausea, vomiting, diarrhea, low grade fever, chills and myalgias are common side effects of misoprostol, and usually resolve within 6 hrs of use.
8. Review plans for initiating post-abortion contraception:
 - Avoid intercourse 1-2 weeks or until bleeding subsides, or use condoms.
 - IUDs: Place at follow-up visit. May have slight increased risk of expulsion.
 - Injection, Implant: Provide at follow up visit, ideally 1-5 days after misoprostol.
 - Hormonal contraceptives: Initiate within 5 days of misoprostol.
 - Barrier methods: at any time.
 - Sterilization: Sign consents and refer.
 - Offer emergency contraception for future need.

Laboratory Tests:

9. Rh status (from lab, donor card, or patient chart).
10. Hemoglobin or Hematocrit.
11. Chlamydia/gonorrhea screen (as indicated).
12. Baseline quantitative hCG level (if using hCG follow up).

Additional Home Instructions

13. Discuss how and when to reach provider on call, especially if the patient has:
 - No bleeding within 24 hours of misoprostol (2nd dose may be indicated).
 - Soaked 2 or more maxi-pads for 2 or more consecutive hours.
 - Unmanageable pain despite taking analgesics prescribed.
 - Sustained fever >100.4° F or onset of fever in the days after misoprostol.
 - Abdominal pain, “feeling sick”, weakness, nausea, vomiting or diarrhea.
 - > 12 hours after taking misoprostol
 - Intends to go to an ER. Facilitating her visit may reduce unnecessary D&C.

SECOND OFFICE VISIT – UP TO DAY 14

1. Alternatives to a follow-up visit are being evaluated, including phone follow-up.
2. Confirm completion of the abortion with history (bleeding and cramping), plus:
 - Decreasing hCG levels by 50% in 48 hours or by 80% in 7 days after mifepristone.

OR

 - Absent gestational sac on repeat ultrasound examination. Residual debris is normal after MAB & requires no intervention.
3. Review all test results with patient.
4. Review and initiate contraception.
5. Review how to contact clinic in case of uncommon delayed bleeding (heavy or persistent) warranting treatment.

ULTRASOUND WITH MEDICATION ABORTION

COMPLETE ABORTION

The absence of the gestational sac and the presence of intrauterine debris are typical after successful medication abortion.



Image courtesy of the National Abortion Federation

PERSISTENT GESTATIONAL SAC AFTER MEDICATION ABORTION

Transvaginal sonogram showing the presence of an empty gestational sac. A persistent gestational sac indicates an incomplete abortion. Management options include waiting for spontaneous completion, administering a repeat dose of misoprostol, or performing an aspiration procedure.



Image courtesy of the National Abortion Federation

ULTRASOUND AS NEEDED INDICATIONS

Indications for sonography before and after medication abortion are below. Many clinical guidelines do not require routine ultrasound.

Pre-Abortion	Post-Abortion
<ul style="list-style-type: none"> • EGA > 8 wk by LMP • Size / date discrepancy • Provider uncertainty with exam • Uncertain LMP (or no menses after delivery, abortion, depo, etc) • Adnexal mass or pain • History of previous ectopic pregnancy or current symptoms or signs consistent with possible ectopic pregnancy 	<ul style="list-style-type: none"> • History not consistent with successful medication abortion (no bleeding or cramping) • Woman still feels pregnant • Serum hCG not declining appropriately (i.e. < 50% drop from baseline by 48 hours after mifepristone or < 80% after 1 week) • Provider uncertainty with history

MANAGING MEDICATION ABORTION COMPLICATIONS

Complications	Clinical Presentation	Management Options	Occurrence Rate*
Excessive Bleeding	<ul style="list-style-type: none"> Heavy or prolonged vaginal bleeding, Hgb drop > 2%, orthostatic hypotension. May result from retained pregnancy tissue & often presents 2-5 weeks after mifepristone 	<ul style="list-style-type: none"> Repeat miso (if patient stable) Oral FeSO₄ 	
		<ul style="list-style-type: none"> Uterine aspiration (rarely emergent) 	0.4-2.6%**
		<ul style="list-style-type: none"> Blood transfusion 	< 0.3%**
Incomplete Abortion	<ul style="list-style-type: none"> Retained gestational sac or tissue (found on f/u US or by inappropriate decline in hCG; rate varies by study & GA) Prolonged cramping/pain and/or bleeding 	<ul style="list-style-type: none"> Expectant management Repeat misoprostol Uterine aspiration 	2-8%
Continuing Pregnancy	<ul style="list-style-type: none"> Ongoing viable IUP (growing gestational sac or cardiac activity on US, or rising hCG) 	<ul style="list-style-type: none"> Uterine aspiration Repeat misoprostol (30% efficacy) 	≤ 1.1%
Endometritis	<ul style="list-style-type: none"> Typical endometritis: fever (>12 hrs after misoprostol), pelvic/abdominal pain, vaginal discharge w/ odor, uterine/adnexal tenderness Atypical endometritis: very rare but severe/fatal, 2-7 days after MAB with nausea, diarrhea, pain, malaise; afebrile, tachycardia, hypotension; high WBC & Hct; Clostridium sordelii & perfringens mediated toxic shock syndrome 	<ul style="list-style-type: none"> Follow CDC guidelines for antibiotic tx Uterine aspiration if retained tissue present Immediate hospitalization & aggressive treatment 	0.9% < 10 case reports by CDC***
Ectopic Pregnancy	<ul style="list-style-type: none"> Pelvic/abdominal pain, shoulder pain, tachycardia/hypotension Minimal bleeding or inappropriate decline in hCG after misoprostol 	<ul style="list-style-type: none"> Treat or refer as appropriate 	0.67% (in study of GA < 6 weeks)**

*NAF: Management of Unintended and Abnormal Pregnancy (Paul et al, Wiley-Blackwell, 2009, Chapter 9).

NAF online CME 2010: Early Options: A Provider's Guide to Medical Abortion. * Meites E, NEJM, 2010.

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. How do the medications work?
3. What are my chances of needing an aspiration abortion?
4. How will I know if I'm bleeding too much?
5. Will I see "the baby" when it comes out?

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. A) 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?
B) I took the misoprostol 30 hours ago and passed the pregnancy 24 hours ago, but now my temperature is 101.5.
2. I used the medication vaginally, but I think one of those pills just fell into the toilet (or vomited if using buccal or oral misoprostol). What should I do?
3. 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?

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. Her exam reveals a barely enlarged uterus, and her hCG level is 782 mIU/ml. She takes mifepristone 200 mg followed 24 hours later by buccal or vaginal misoprostol 800 mcg. She has moderate bleeding and cramping during the next several hours. She returns on Day 4. Her exam is essentially unchanged, and her hCG level is 5530 mIU/ml.

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- Aldape MJ, AE Bryant, and DL Stevens. Clostridium sordellii infection: Epidemiology, clinical findings, and current perspectives on diagnosis and treatment. *Clinical Infectious Diseases* 2006;43:1436-1446. <http://goo.gl/0K6XK>
- Ashok, PW, Penney GC, Flett GMM, Templeton, A. An effective Regimen for Early Medical Abortion: A Report of 200 Consecutive Cases. *Hum Reprod* 1998;13:2962-2965. <http://goo.gl/XWLvH>
- Attia MB, et al. The Extended Gestational Age Medical Abortion Study. Oral Abstracts, *Contraception* 84 (2011) 302-336. [Chap7-6-30-12.docx](#)
- Beal M. Update on Medication Abortion. *Journal of Midwifery and Women's Health* 2007;52(1):23-30. <http://goo.gl/Xs8Sb>
- Creinin MD, Danielsson KG. Medical abortion in early pregnancy. In: Paul M, Lichtenberg ES, Borgatta L, Grimes DA, Stubblefield PG, Creinin MD, eds. *Management of Unintended and Abnormal Pregnancy*. West Sussex, UK: Wiley-Blackwell; 2009: 111-134.
- Creinin MD, Fox MC, Teal S, Chen A, Schaff EA, Meyn LA; MOD Study Trial Group. A randomized comparison of misoprostol 6 to 8 hours versus 24 hours after mifepristone for abortion. *Obstet Gynecol* 2004 May;103(5 Pt 1):851-859. <http://goo.gl/EnwDD>
- Creinin MD, Schreiber CA, Bednarek P, Lintu H, Wagner MS, Meyn LA. Mifepristone and misoprostol administered simultaneously versus 24 hours apart for abortion: a randomized controlled trial. *Obstet Gynecol*. 2007 Apr;109(4):885-94. <http://goo.gl/UWAie>
- Davis A, Westhoff C, De Nonno L. Bleeding patterns after early abortion with mifepristone and misoprostol or manual vacuum aspiration. *J Am Med Womens Assoc* 2000;55(3 Suppl):141-4. <http://goo.gl/RAZWK>
- Fjerstad M, Trussell J, Lichtenberg ES, Sivin I, Cullins V. Severity of infection following the introduction of new infection control measures for medical abortion. *Contraception*. 2011 Apr;83(4):330-5. <http://goo.gl/PXlnh>
- Fjerstad M, Trussell J, Sivin I, Lichtenberg ES, Cullins V. Rates of serious infection after changes in regimens for medical abortion. *N Engl J Med*. 2009 Jul 9;361(2):145-51. <http://goo.gl/mTg5f>
- Goel A, Mittal S, Taneja BK, Singal N, Attri S. Simultaneous administration of mifepristone and misoprostol for early termination of pregnancy. *Arch Gynecol Obstet*. 2011 Jun;283(6):1409-13. <http://goo.gl/r5Qdq>
- Greene M. Fatal infections associated with mifepristone induced abortion. *New England Journal of Medicine* 2005;353(22):2317-8. <http://goo.gl/DYZBV>
- Gynuity Health Projects. Consensus Statement: Instructions for Use – Abortion Induction with Misoprostol in Pregnancies through 9 Weeks LMP. Expert Meeting. July 2003. Washington DC. <http://goo.gl/2lBi7>
- Jones RK, Kooistra K. Abortion incidence and Access to services in the US, 2008. *Perspectives on Sexual and Reproductive Health*, 2011, 43(1): 41-50. <http://goo.gl/Q4D4N>
- Kruse B, Poppema S, Creinin MD, Paul M. Management of side effects and complications in medical abortion. *Am J Obstet Gynecol* 2000 Aug;183(2 Suppl):S65-75. Review. <http://goo.gl/M1NyP>
- Kulier R, Kapp N, Gülmezoglu AM, Hofmeyr GJ, Cheng L, Campana A. Medical methods for first trimester abortion. *Cochrane Database Syst Rev*. 2011 Nov 9;11:CD002855. <http://goo.gl/pwzZj>
- Meites E, Zane S, Gould C; C. sordellii Investigators. Fatal Clostridium sordellii infections after medical abortions. *N Engl J Med*. 2010 Sep 30;363(14):1382-3. <http://goo.gl/ptOFB>

Middleton T, Schaff E, Fielding SL, Scahill M, Shannon C, Westheimer E, et al. Randomized trial of mifepristone and misoprostol for abortion through 56 days of LMP. *Contraception* 2005;72:328-332. <http://goo.gl/hGXes>

NAF online CME 2010: Early Options: A Provider's Guide to Medical Abortion. <http://goo.gl/QcZQ9>

National Abortion Federation Clinical Policy Guidelines 2011. <http://goo.gl/fYyVE>

Peyron R, Aubeny E, Targosz V, Silvestre L, Renault M, Elkik F, Leclerc P, Ulmann A, Baulieu EE. Early termination of pregnancy with mifepristone (RU 486) and the orally active prostaglandin misoprostol. *N. Engl. J. Med.* 1993 May 27;328(21):1509-13. <http://goo.gl/Ahhrm>

Schaff EA, Eisinger SH, Stadalius LS, Franks P, Gore BZ, Poppema S. Low-dose mifepristone 200 mg and vaginal misoprostol for abortion. *Contraception* 1999 Jan;59(1):1-6. <http://goo.gl/jzk3F>

Schaff EA, Fielding SL, Eisinger SH, Stadalius LS, Fuller L. Low-dose mifepristone followed by vaginal misoprostol at 48 hours for abortion up to 63 days. *Contraception* 2000 Jan;61(1):41-6. <http://goo.gl/ykupw>

Schaff EA, Fielding SL, Westhoff C. Randomized trial of oral versus vaginal misoprostol 2 days after mifepristone 200 mg for abortion up to 63 days of pregnancy. *Contraception* 2002 Oct;66(4):247-250. Erratum in: *Contraception* 2002 Dec;66(6):481. <http://goo.gl/LMcUJ>

Shannon C, Brothers LP, Philip NM, Winikoff B. Ectopic pregnancy and medical abortion. *Obstet Gynecol* 2004 Jul;104(1):161-7. <http://goo.gl/px9qP>

Spitz IM, Bardin CW, Benton L, Robbins A. Early pregnancy termination with mifepristone and misoprostol in the United States. *N Engl J Med* 1998 Apr; 338: 1241-7. <http://goo.gl/zqfMA>

Weitz TA, Foster A, Ellertson C, Grossman D, Stewart FH. "Medical" and "surgical" abortion: Rethinking the modifiers. *Contraception* 2004; 69: 77-78. <http://goo.gl/SzzEk>

Winikoff B, Dzuba IG, Creinin MD, Crowden WA, Goldberg AB, Gonzales J, Howe M, Moskowitz J, Prine L, Shannon CS. Two distinct oral routes of misoprostol in mifepristone medical abortion. A randomized controlled trial. *Obstet Gynecol* 2008 Dec;112(6) 1303-10. <http://goo.gl/d7iy7>

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 either expectant, medication, or aspiration management. These options are recognized as being both safe and effective, while also providing more choices for women.

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 vs. early pregnancy loss, including changes in hCGs.
- 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

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Chapter 16: Pregnancy loss
- Websites:
 - <http://www.abortionaccess.org/miscarriage-management-resources>
- Prine LW, MacNaughton H. Office management of early pregnancy loss. Am Fam Physician. 2011 Jul 1;84(1):75-82. <http://goo.gl/LQMe5>
- Related Chapter Content
 - Chapter 3: Evaluation Before Uterine Aspiration

SUMMARY POINTS

SKILL

- Actively listen and use open-ended questions when counseling a woman with possible pregnancy loss, to help her cope with the uncertainties inherent in the process.

SAFETY

- Early pregnancy loss can be managed safely and effectively with expectant care, medications, or uterine aspiration.
- Expectant management has an unpredictable time course, with more bleeding than aspiration, but no increased risk for infection.
- Medication management with misoprostol is safe, effective, and avoids risks associated with aspiration. However, there can be medication side effects and the process takes longer than uterine aspiration.
- Compared with dilation and curettage in the operating room, uterine aspiration is the preferred procedure for early pregnancy loss, because it is equally safe, faster to perform, more cost-effective, and amenable to use in an office setting.

ROLE

- Women often have strong preferences for management, thus a shared decision-making approach to choosing a treatment option can be useful and patient-centered.
- One of our roles as primary care providers is to provide our patients as many treatment options as possible to minimize getting referred out, traveling, and losing continuity with the provider they know.

INTRODUCTION

Early pregnancy loss (EPL), often referred to as miscarriage or spontaneous abortion, includes all non-viable pregnancies in the first trimester. EPL is common, occurring among 15-20% of clinically recognized pregnancies (Griebel 2005, Prine 2011), and responsible in one review for as many as three quarters of all night-time emergency gynecologic interventions (McKee 1992). In the past, dilation and curettage was performed primarily in the operating room. Now management of EPL commonly occurs in the primary care setting, which is recognized as being both safe and effective, while also providing more choices for women.

Women 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. Evidence suggests nearly one half of all EPLs are the result of major genetic anomalies, while other factors such as environment, maternal age, exposures, and immunologic factors are also implicated (Prine 2011).

It is important to use precise language when talking with colleagues about a patient's clinical presentation. 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 a <i>demise</i> , often discovered by ultrasonography. The woman may be asymptomatic or have a history of bleeding. The cervix is closed.	Anembryonic gestation or demise (see below).
Anembryonic Gestation	Trophoblast development without an associated embryo or yolk sac. Formerly called "blighted ovum".	Enlarged gestational sac, MSD 20 mm, without yolk sac or fetal pole.
Embryonic or Fetal Demise	Loss of viability of a developing embryo or fetus.	Embryonic or fetal pole, CRL 5 mm, with no cardiac activity, or no interval growth > 1 week.
Threatened Abortion	The cervix is closed with uterine bleeding but without passage of gestational tissue. Pregnancy viable at time of presentation and she 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 contractions. 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.	Heterogenous or echogenic material along endometrial strip or in cervical canal.
Complete Abortion	The pregnancy tissue has expelled completely.	Empty uterus, with possible endometrial thickening.

Adapted from RHAP website and Prine, 2011.

COUNSELING TIPS FOR EARLY PREGNANCY LOSS

Primary care providers are often the first to evaluate women with threatened abortion and EPL. As the diagnosis is often initially unclear, counseling in this setting is a unique challenge. Approach a woman presenting with vaginal bleeding or a possible EPL with sensitivity to her 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.”*
 - 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.
- Provide results once the early pregnancy loss is diagnosed, giving her some time to process; follow up with open-ended questions to assess if the pregnancy is desired.
- A woman with an undesired pregnancy may benefit emotionally from knowing the pregnancy is non-viable. While a woman with a desired pregnancy can be watched conservatively until the diagnosis is confirmed, reassuring her that no interventions are proven to prevent first trimester loss.
- Normalize emotions by referring to the way others might feel in a similar situation.
- Explicitly address feelings of guilt; reassure her that there is no evidence that something she might have done (e.g., coitus, heavy lifting, bumping her abdomen, stress, etc.) caused the pregnancy loss.
- Assure that you will be available to her through the process, and answer questions as they arise. Ask her if she has a support person who can come to the visit. Provide additional counseling resources as needed.
- The patient should be informed and counseled about recurrent risks. If treatable risk factors or suspected etiologies are present, they should be addressed, as appropriate, in a non-judgmental way.
- Take time to assess her specific needs and diagnosis, preferably when she is fully clothed and seated. The presence of a support person can be helpful.
- Studies show that some women experience depressive symptoms following the loss of a pregnancy, while others do not. Follow-up visits with the primary care provider reduce the incidence of adverse psychological outcomes after EPL. In addition to offering such follow-up, it may be helpful for a woman who is particularly bereaved to hear about anniversary phenomena, to role-play discussion of the loss with family and friends, or to prepare for future events such as the birth of a friend’s baby.

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, back or pelvic pain.
- Passing of tissue from the vagina.
- Loss of pregnancy related symptoms (breast tenderness, nausea).
- Constitutional symptoms such as fever or malaise.

Evaluation should include a physical examination, ultrasound, and/or quantitative hCGs. Serial hCGs are most helpful when nothing is seen on US, and can generally be abandoned after US confirms IUP / EPL.

Your physical exam will help assess the woman's status and offer diagnostic clues.

- Vital signs (including assessment of orthostatics).
- Abdominal examination (to rule out other causes for symptoms).
- Vaginal examination (for bleeding, cervical dilatation, tenderness).
- Tissue examination (for clot vs. pregnancy tissue).

Definitive diagnosis of EPL can be made by one of the following:

1. US confirmation of anembryonic gestation or embryonic/fetal demise
2. Absence of previously seen IUP on US after clinical history consistent with EPL
3. Declining hCGs and clinical history consistent with EPL in absence of IUP on US
4. Tissue examination confirming membranes and villi expelled or removed from uterus

In all patients presenting with first trimester bleeding, ectopic pregnancy should be ruled out. Ectopic pregnancies often present with vaginal spotting, frequently occurring at 6-8 weeks gestation. Due to the inappropriate implantation of an ectopic pregnancy, levels of hCG can be insufficient to support the corpus luteum, causing declining levels of pregnancy hormones and sloughing of the endometrial lining. In addition to vaginal bleeding, other signs and symptoms of ectopic pregnancy include abdominal pain, referred shoulder pain, and syncope.

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

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

MANAGEMENT OPTIONS FOR EPL

A small proportion of women who present with EPL will need urgent intervention – including those with hemodynamic instability or 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.
- Medical management with misoprostol +/- mifepristone.
- Aspiration in an outpatient or inpatient setting.

Research shows women have strong preferences for choosing treatment for EPL, and have greater satisfaction when treated according to their preference (Sotiriadis 2005, Wieringa-de Waard 2004, Wallace 2010). Each of these options are safe and effective, thus the choice of management should be in line with a woman's preferences for treatment. You may find shared decision-making is suited for EPL management options counseling.

Begin by reviewing all management options, including anticipated advantages, disadvantages, and outcomes, as discussed in the Step-by-Step Approach outlined below. Then elicit patient priorities and preferences (possibly using the checklist below). Using the patient's own priorities for management and the clinical situation, make treatment recommendations and agree upon a treatment plan.

Patient Treatment Priorities for Miscarriage

Having a miscarriage is extremely difficult for most women. 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 <ul style="list-style-type: none">■ 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 <ul style="list-style-type: none">■ 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 <ul style="list-style-type: none">■ Lowest risk of complications■ Avoid invasive procedure■ Avoid medications with side effects■ Avoid going to sleep in case of a surgical procedure■ Want to be asleep in case of a surgical procedure■ Avoid seeing the pregnancy tissue	Symptoms of Pain and Bleeding <ul style="list-style-type: none">■ Least amount of pain possible■ Experience symptoms of bleeding and cramping in private■ Least amount of bleeding Past Abortion or Miscarriage (if applicable) <ul style="list-style-type: none">■ Different treatment from previous■ Similar treatment to previous

Courtesy of R. Wallace. See Wallace 2010 for further information.

EXPECTANT MANAGEMENT

Clinically stable patients may choose to wait for the natural process of EPL. “Watchful waiting” may avoid medical intervention and the attendant side effects or complications. Expectant management is safe and effective, although studies show a wide range of success rates, partly due to variability in defining endpoints and the type of EPL. Women with incomplete abortion are more likely to complete the process without further intervention, due to physiologic changes leading to spontaneous expulsion of pregnancy tissue (i.e. placental degeneration, necrosis, decidual sloughing). Those women with an anembryonic gestation or embryonic demise, in whom these processes may be less advanced, are more likely to require additional intervention. You can counsel women about their chance of success depending upon the type of pregnancy loss (see table below) and the amount of time she is willing to wait until completion.

Allowed to proceed on its own, an EPL can take days to weeks to complete, but a woman can be managed expectantly up to 6 weeks if she remains stable. Many clinicians provide phone access between visits and reassess their patients every 1-2 weeks. Some women may become tired of waiting and choose another option.

Success rates of expectant management based on type of pregnancy loss			
	Day 7 (%)	Day 14 (%)	Day 46 (%)
Incomplete miscarriage	50	70-85	90
Anembryonic gestation	25	50-55	65
Embryonic demise	30	35-60	75
All types of EPL	40	60-70	80

Casikar 2010, Luise 2002. (Numbers have been rounded)

While there are no significant differences in bleeding or infection among treatment options (Sotiridias 2005), a trend toward increased bleeding is noted with expectant over medication management.

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 (800mcg vaginally or buccally) has been effective and safe in treating EPL. Some studies show higher levels of bleeding and follow-up with misoprostol compared to aspiration (Zhang 2005, Davis 2007), so women with severe anemia may be best managed with aspiration.

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 (Schreiber 2005, Nielsen 1999; Gronlund 2002) but large scale trials are needed. Although the regimen may cost more, there may be savings associated with fewer follow-up visits. Dosing and timing is similar to evidence-based regimens for medication abortion (See Chapter 7).

STEP BY STEP APPROACH TO EXPECTANT MANAGEMENT OR MANAGEMENT WITH MISOPROSTOL

PATIENT PRESENTS TO OFFICE (Day 1)

1. Rule out contraindications

- Suspected ectopic pregnancy
- Hemodynamic instability or infection
- Bleeding disorder or taking anticoagulants
- An IUD in place (must be removed)
- Uterine size greater than 12 weeks GA
- Allergy to misoprostol or other prostaglandins

2. Lab testing

- Pregnancy test
- Rh (administer Rh immune globulin if negative)
- Hemoglobin / hematocrit (if vaginal bleeding)
- STD risk assessment / testing per CDC Guidelines

3. Sonography as indicated

4. Counseling and Informed Consent

- Discuss the risks, benefits and alternatives.
- Assure phone access to discuss clinical or emergency care.
- For gestational ages > 9 weeks, warn of possibility of viewing fetal parts with expelled tissue.
- Review and contrast expected side effects with warning signs for adverse events.
- BLEEDING: For those using misoprostol, usually heavy within a few hours after using medication, followed by menstrual-like bleeding for 7-14 days. Women choosing expectant management may have a longer wait before onset of heavy bleeding. Intermittent spotting may last until the next menses. Have patient contact you if she:
 - Saturates 2 or more maxi-pads an hour for 2 or more consecutive hours.
 - Experiences lightheadedness, dizziness, or fainting after days of heavy, or weeks of continuous, bleeding.
- FEVER AND/OR CHILLS: Patients using misoprostol can have a low-grade fever (<100.4) or transient chills for up to 24 hours. Recommend antipyretics for fever during this time period. Counsel patient to contact you if:
 - Fever or chills persist beyond 24 hours after misoprostol administration, as this may indicate infection.
 - There is any fever in those choosing expectant management.
- ABDOMINAL CRAMPING: Pain may be stronger than a typical period. Offer patients a prescription for NSAIDs plus a mild opioid for pain relief at initial visit.
- SIDE EFFECTS SPECIFIC TO MISOPROSTOL:
 - DIARRHEA – Patients may have diarrhea that can last up to 24 hours.
 - NAUSEA/VOMITING –Some providers provide anti-emetics expectantly or OTC information.

5. Establish follow-up and instructions

- Answer all patient questions, and reiterate how the patient can contact you.
- Review plans for the follow-up visit at 2-14 days.
- Many clinicians discourage vaginal intercourse, tampons or douching for 1-2 weeks or until bleeding has stopped; there is little data to support this.
- Assess the patient's social support, coping strategies and emotional state, and offer support as appropriate.
- Make a contraceptive plan if appropriate. If prevention of pregnancy is desired, contraception should be initiated promptly.

FOLLOW-UP VISIT (Day 7-14) Use the following criteria to assess successful treatment:

- History: Reported history of cramping, bleeding with or without clots or tissue (POC) with:
 - Diminishing bleeding; No ongoing pregnancy symptoms
- Physical exam if diagnosis remains unclear
 - Uterus firm and smaller than pregnancy size
 - VS (check orthostatics if excessive bleeding)
- Serial hCG levels (in all women without a prior confirmed IUP)
- Serial hCG or US (in cases where Hx and physical are not consistent with a completed EPL)
 - Decline in hCG levels > 50% in 2 days suggests completed EPL.
 - On US, evaluate presence or absence of the gestational sac. A thickened endometrial stripe is typical after successful management, and without ongoing bleeding should not indicate the need for aspiration.

If initial management is unsuccessful:

- Clinically stable patients may consider another dose of misoprostol and a 2nd follow-up visit, or opt for aspiration. Many providers dispense a 2nd misoprostol dose, to be taken after phone follow-up if no bleeding has occurred.
- Higher success rates are achieved with follow-up of at least 7 – 14 days to allow completion (Gynuity 2004).
- Uterine aspiration is recommended if there are signs of clinical instability or infection.

If initial management was successful:

- Confirm contraceptive plans and offer emergency contraception if pregnancy is not desired.
- She can try to get pregnant when ready. Discuss future fertility plans and address concerns, as appropriate.
- Offer support and referral for additional counseling if needed.

UTERINE ASPIRATION FOR MISCARRIAGE MANAGEMENT

Uterine aspiration offers the quickest management for the resolution of EPL; there is no evidence that sharp curettage confers additional benefit. Patients may choose aspiration because it is quick, because the clinical team will be with them for the entire process, or to avoid side effects of medications used for management. As with aspiration abortion, MVA for EPL can be performed in most outpatient settings including primary care settings for uncomplicated patients. See Chapter 5 for MVA steps.

COMPARISON OF MANAGEMENT OPTIONS FOR EPL

	Advantages	Disadvantages	Estimated Rates of Success
Expectant Management	<ul style="list-style-type: none"> • Non-invasive • Body naturally expels non-viable pregnancy • Avoids anesthesia and surgery risks 	<ul style="list-style-type: none"> • Unpredictable outcome and timeframe • Process can last days to weeks • Can have prolonged bleeding and cramping • Despite waiting, may still require intervention. 	All types of EPL: <ul style="list-style-type: none"> • Day 7: 40% • Day 14: 60-70% • Day 46: 80% <i>(Luise 2002, Casikar 2010)</i>
Medical Management (With misoprostol)	<ul style="list-style-type: none"> • Non-invasive • Safe • Highly effective • Avoids anesthesia and surgery risks • Highly cost-effective 	<ul style="list-style-type: none"> • May cause heavier or longer bleeding than aspiration • May cause short-term gastrointestinal & other side effects • May still need uterine aspiration. 	<ul style="list-style-type: none"> • 81-93% <i>(Day 8 post-treatment Zhang 2005)</i>
Office-based Aspiration	<ul style="list-style-type: none"> • Predictable • Offers fastest resolution • Less time / bleeding than expectant or medication • Low probability of needing further treatment (<5%) • Improved patient access, continuity and privacy • Less patient & staff time • Resource / cost savings • Pain control with local plus oral or IV meds 	<ul style="list-style-type: none"> • Rare risks of invasive procedure • Less pain control options in some settings 	<ul style="list-style-type: none"> • 97-100%
Operating Room Aspiration	<ul style="list-style-type: none"> • Can be asleep • Predictable • Less time / bleeding than expectant or medication • Low risk (<5% of needing further treatment) 	<ul style="list-style-type: none"> • More cost, time, exams than office-based procedures • Rare risks associated with invasive procedure and general anesthesia • May be more bleeding complications under general anesthesia than in office-based procedures 	<ul style="list-style-type: none"> • 97-100%

EXERCISES: MANAGEMENT OF EARLY PREGNANCY LOSS

EXERCISE 8.1

Purpose: To practice management of challenging situations in early pregnancy loss.

1. A 25-year old woman you have been seeing for 5 years presents for an urgent visit. Her only 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 heavy bleeding, up to a pad every hour. Her urine hCG is positive.
 - a. How would you proceed with 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 with her?

2. The same woman comes in one year later. She had a termination following the previous threatened abortion, and never restarted her OCPs. She recently began a new relationship, and has intermittently been using condoms. 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 counsel her while waiting for results? How would you answer her if she asks, "*Was this miscarriage my fault?*"

 - c. What information would you provide about how this 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?

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 get pregnant. It has been 6 weeks since her LMP, and she has been spotting for 6 days without passage of tissue, and is having no pain. She is tearful and distraught. Her urine hCG is positive.
 - a. Does the patient need an ultrasound in this case? How would you assess her without the use of ultrasound?
 - b. On examination, you find a closed cervical os, no gestational tissue, a nontender uterus about 6 weeks' 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. A 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. How would you discuss her final diagnosis with her? What kind of support may be of use to her?

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

- Barnhart K. Ectopic Pregnancy. *N Engl J Med* 2009;361:379-387. <http://goo.gl/3bb42>
- Barnhart K, et al. Decline of serum hCG and spontaneous complete abortion: defining the normal curve. *Obstet Gynecol* 2004;104:975-981. <http://goo.gl/FyRzn>
- Barnhart K et al. Hormone pattern after misoprostol administration for a nonviable first-trimester gestation. *Fertil Steril* 2004;81:1099-105. <http://goo.gl/jTC9o>
- Casikar I, Bignardi T, Riemke J, Alhamdan D, Condous G. Expectant management of spontaneous first-trimester miscarriage: prospective validation of the '2-week rule'. *Ultrasound Obstet Gynecol*. 2010 Feb;35(2):223-7. <http://goo.gl/iBzyW>
- Consensus Statement: Instructions for Use — Misoprostol for Treatment of Incomplete Abortion and Miscarriage. Expert Meeting on Misoprostol sponsored by Reproductive Health Technologies Project and Gynuity Health Projects. June 9, 2004. New York, NY. <http://goo.gl/F4BcM>
- Davis AR, Hendlish SK, Westhoff C, et al. Bleeding patterns after misoprostol vs. surgical treatment of early pregnancy failure: results from a randomized trial. *Am J Obstet Gynecol* 2007 Jan;196(1):31.e1-7. <http://goo.gl/Pb9s4>
- Griebel CR, Halvorsen S, Golemon TB, Day AA. Management of spontaneous abortion. *Am Fam Physician* 2005; 72:1243-50. <http://goo.gl/uq1wp>
- Gronlund L, Gronlund AL, Clevin L, Anderson B, Palmgren N, Lidegaard O. Spontaneous abortion: expectant management, medical treatment or surgical evacuation. *Acta Obstet Gynecol Scand* 2002; 81:781-2. <http://goo.gl/XTOul>
- Luise C, Jermy K, May C, Costello G, Collins WP, Bourne TH. Outcome of expectant management of spontaneous first trimester miscarriage: observational study. *BMJ*. 2002 Apr 13;324(7342):873-5. <http://goo.gl/UDjIO>
- McKee M, Priest P, Ginzler M, Black N. Can out of hours operating in gynecology be reduced? *Arch Emerg Med* 1992 Sept; 9:290-8. <http://goo.gl/nbSTW>
- Nielsen S, Hahlin M, Platz-Christensen JJ. Randomised trial comparing expectant with medical management for first trimester miscarriages. *British Journal Obstet Gynaecol* 1999; 106: 804-7. <http://goo.gl/ZyEjg>
- Prine LW, MacNaughton H. Office management of early pregnancy loss. *Am Fam Physician*. 2011 Jul 1;84(1):75-82. <http://goo.gl/59rOy>
- Schreiber CA, Creinin MD, Reeves MF, Harwood BJ. Mifepristone and misoprostol for the treatment of early pregnancy failure: a pilot clinical trial. *Contraception*: 76 2006: 458-62. <http://goo.gl/xt05N>
- Sotiriadis A, Makrydimas G, Papatheodorou S, Ioannidis J. Expectant, Medical or surgical management of first-trimester miscarriage: a meta-analysis. *Obstet & Gynecol* 2005 May; 105(5):1104-13. <http://goo.gl/3ej4P>
- Wallace RR, Goodman S, Freedman LR, Dalton VK, Harris LH. Counseling women with early pregnancy failure: utilizing evidence, preserving preference. *Patient Educ Couns*. 2010 Dec;81(3):454-61. <http://goo.gl/PZq40>
- Wieringa-de Waard M, Vos J, Bonsel GJ, Bindels PJ, Ankum WM. Management of miscarriage: a randomized controlled trial of expectant management versus surgical evacuation. *Hum Reprod* 2002;17:2445-50. <http://goo.gl/QOWtL>
- Zhang J, Gilles J, Barnhart K, Creinin M, Westhoff C, Frederick M. A comparison of medical management with misoprostol and surgical management for early pregnancy failure. *NEJM* 2005 Aug; 353(8):761-9. <http://goo.gl/XfMVl>

9. BEYOND TRAINING: BECOMING A PROVIDER

This chapter is designed to aid clinicians who desire to gain advanced training and become a provider in their post-residency 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-residency 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

- National Abortion Federation (NAF). Management of Unintended and Abnormal Pregnancy (Paul M. et al, Wiley-Blackwell, 2009)
 - Appendix: Resources for Abortion Providers
- Reproductive Health Access Project: www.reproductiveaccess.org
- Reproductive Health Education in Family Medicine: <http://www.rhedi.org>
- Related Chapter Content:
 - Chapter 11: Becoming a Trainer
 - Chapter 12: 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.
- Clinical experience is easier to attain during residency when your credentialing and malpractice are covered.
- Both training availability and procedural volume are positively correlated with future abortion 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

- Following routine abortion training, most family medicine graduates surveyed considered comprehensive reproductive services as important to include in their ideal practice, but many faced barriers to incorporating these services.
- Be patient and persistent as the process of integrating skills may take time.
- Use established local and national networks to build a collaborative community, find answers to medical and administrative questions, and learn best practices.
- Do not underestimate your impact as a leader in providing pregnancy options counseling, evidence-based contraceptive information, services, timely referrals, and handling of follow-up issues to the women you serve.

BUILDING AND MAINTAINING YOUR SKILLS

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

GAINING CLINICAL COMPETENCY

Speak with your reproductive health faculty to get estimates of what it takes to achieve competency in the services you hope to provide after residency. The number of procedures needed to reach competency will vary. The easiest time to gain procedural experience and advanced training is during residency, when both credentialing and malpractice are covered. Due to the challenges with these issues after residency, access to 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. When a specific practice is looking for providers, they may be more likely to make a commitment to credential you and cover your malpractice. In either case, persistence is usually essential.

Important aspects of clinical competence include patient safety, patient comfort and rapport, speed, procedural completeness, and the ability to detect and manage problems as they arise. All of these will improve with procedural experience and exposure to more complex cases, although there is no magic number of cases required for competency. Advanced skills include complication management, diagnostic and intra-operative ultrasound, and procedures with advancing gestational age.

Studies show that both training availability and procedural volume are positively correlated with future abortion provision, regardless of previous intention to provide (Goodman 2012, Steinauer 2008, Landy 2001). Some data suggest that those motivated to find post-residency training opportunities were more likely to provide abortions than those training during it.

BUILDING YOUR CAPACITY FOR CLINIC FLOW AND PROBLEM SOLVING

In a busy clinic, there are multiple competing priorities, including patient support and safety, clinic flow, dynamics with staff, and sometimes training. With experience, you can increase your capability to manage and prioritize these issues as they arise. Some of these suggestions apply more to a high-volume setting than a primary care setting.

- As you gain experience, learn ways to streamline your clinical technique.
- Minimize interruptions for supplies by preparing what you need for a case before you walk in the room, and again before you place the speculum.
- Track the time for procedures, room turnover, teaching, and patient wait times.
- Continue to refine clinic flow so that the next patient is ready when you are.
- Try having staff prepare the set-up for the next patient while recovering a patient.
- Try assigning a staff member to track clinic progress, as a Flow Facilitator. Many settings have found this to be cost-effective way to improve patient care.

BUILDING A STRONG KNOWLEDGE BASE

In order to develop expertise and keep up with current evidence, consider the following opportunities:

- Sign up with one of the national listservs to participate in ongoing discussions. Membership requires recommendation by a current participant for security reasons.
- Complete supplementary readings suggested in each Workbook Chapter.
- Stay abreast of medical journals such as *Contraception* or the *Journal of Women's Health*.
- Consider attending one of the annual reproductive health conferences hosted by one of the professional organizations dedicated to advancing new standards in reproductive health care. Such organizations include:
 - Association of Reproductive Health Professionals
 - Society of Family Planning
 - National Abortion Federation
 - Society of Teachers in Family Medicine - Group on Abortion

MENTORING

Make sure you have tapped into opportunities for mentoring in your own residency and beyond. As you come to the completion of your training, take steps to connect with the larger community of providers integrating reproductive health into primary care.

- Your faculty can give you practice ideas, put you in contact with providers where you are going, or serve as a reference for you.
- Chapter questions are meant to stimulate ideas for practice opportunities and interview strategies.
- RHEDI can connect you with a residency program that offers abortion training.
- The Reproductive Health Access Project can link interested graduating residents with a mentor in their destination area.

EARLY LEADERSHIP OPPORTUNITIES

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

- Work with faculty to help lead didactic, experiential or hands-on sessions for incoming residents, such as values clarification or papaya workshop.
- Speak at a regional or national meeting of Medical Students for Choice.
- Work with faculty to undertake expansion of reproductive health services in your residency clinics. Successful projects have included protocols for emergency contraceptive access, management of early pregnancy loss in outpatient settings, and integration of medication abortion into individual clinics.
- Help to document the successes and obstacles encountered with attempts to integrate these services in your residency.
- Collaborate on a research project, conference presentation, or article via the network of family medicine educators in reproductive health.
- Become a physician advocate (Earnest 2010) on reproductive issues through:
 - Your state or national chapter of your professional organization (AAFP).
 - Becoming active with Physicians for Reproductive Choice and Health.
 - Letters to your editor or representative.
 - Participating in social media messaging.

FELLOWSHIP TRAINING OPPORTUNITIES

There are various fellowship opportunities to consider for those interested in additional academic training after residency.

The Fellowship in Family Planning

This fellowship accepts applicants from both Family Medicine and Obstetrics and Gynecology, and has fellowship sites throughout the U.S. Fellows are provided with specialized training in research, teaching, and clinical skills in contraception and abortion over two years. More information can be found online at <http://www.familyplanningfellowship.org/>.

The Falencki Fellowship in Reproductive Health Care and Advocacy

This fellowship provides Family Physicians with further training in reproductive health care and advocacy. Fellows are provided with clinical, teaching and leadership skills over one year. More information can be found at http://www.reproductiveaccess.org/tam/falencki_fellowship.htm.

The Leadership Training Academy

This program, administered by Physicians for Reproductive Choice and Health, provides physicians with training in advocacy, leadership and communication skills to make them effective advocates in reproductive health care. The training consists of webinars and in-person meetings over 8 months. More information can be found at <http://prch.org/programs-leadership-training-academy>.

Maternal Child Health Fellowships

There are a number of fellowships in Maternal Child Health that are available to Family Physicians. Further training in full spectrum reproductive health care is available through some of these fellowships. Specifically ask about inclusion of abortion training. More information can be found online and directly from fellowship directors.

STRATEGIES FOR INTERVIEWING

When you are considering where to work after residency, here are a few tips to use while interviewing to evaluate whether you can offer reproductive health services in the future. When you network or interview in different practice settings, you may want to ask the following questions:

- What is the scope of practice (specifically reproductive health care)? For example, do they already provide prenatal and obstetric services? What are the patient demographics? What is the mix of reproductive-aged women?
- What is the range of contraceptive services accessible to patients, and are there any challenges patients have getting access to long-acting reversible contraceptives? What are the barriers, e.g. insurance limitations?
- How do they manage prenatal care, early pregnancy loss, and /or genetically indicated abortion referrals? These questions will help you to better understand their feelings about reproductive health and abortion, and their referral systems

- It is helpful to know the political climate in the area by talking to other regional reproductive health providers before approaching a new job site directly.
- If you think it is appropriate, consider letting them know that you have special training in abortion care, advocacy, counseling, 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. If they seem interested, follow up with these questions:
 - Do they encourage staff training?
 - What arrangements do they have for hospital or OB / GYN back up?
 - Do they already provide 24-hour call?
- Talk about the importance of continuity of care to your patients and practice. Share a success story from your training—a patient who was able to be seen by her own doctor and how comfortable she 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, but it may give you additional insight into the practice setting. You can use these strategies to identify how the practice responds to women's reproductive health needs generally and to undesired pregnancies specifically.

CONSIDERING PRACTICE OPPORTUNITIES

In which setting(s) 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 choose to join a setting where reproductive health services are either already integrated or are the main focus of the practice. Or if services are not yet integrated, you can have the excitement and challenge of pioneering them at the 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.

INTEGRATING CONTRACEPTIVE METHODS INTO PRACTICE

To provide the full range of contraceptive options to your patients, consider whether your future practice environment offers all long acting reversible methods of contraception (IUDs and contraceptive implants). These are core skills to acquire during residency training, and can often be gained during abortion training. For privileges to insert and remove the contraceptive implant, it is necessary to take a training class offered by the pharmaceutical company: <http://www.nexplanon-usa.com/en/hcp/learn-about-it/request-training/index.asp>. 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.

JOINING EXISTING CLINICAL SERVICES

Consider becoming a contract doctor 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. You can work as a contract doctor in your own community or fly into other parts of the country that lack abortion providers. Talk with your contacts about the regional needs where you are going, and level of experience suggested to apply. Mentors and national programs (including RHEDI at info@rhedi.org) have many contacts at high-volume sites around the country, and can be reached for assistance being connected. 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 back-up to allow you to feel more comfortable as a new provider.

JOINING RESIDENCY FACULTY

One way to build on your training is to work in a residency 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. Learning the steps that your residency 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. RHEDI has contacts at many residencies around the country, and can be reached at info@rhedi.org for assistance being connected with the appropriate people and sites.

BECOMING A TRAINER

Consider becoming a trainer in your own residency or 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 technology. More detailed information is available in Chapter 12.

INTEGRATING MANAGEMENT OF EARLY PREGNANCY LOSS

Options for managing early pregnancy loss - including expectant, medication, and aspiration management - can be integrated into one's outpatient clinic setting or even into an ER. 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 Office Practice Chapter for step-by-step planning).

Because miscarriage management does not involve a viable pregnancy, it 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 early pregnancy loss 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.

INITIAL CONSIDERATIONS FOR INTEGRATING ABORTION SERVICES

Depending on the support in your practice environment, it may be a rapid or slow process to integrate abortion services. Once you have started in your new setting, take the time to identify the key stakeholders and consider what their interests may be. You may want to undertake a needs assessment of services in the area. You may want to anticipate questions from the key stakeholders such as the need, other local providers, cost, coverage, and malpractice.

Consider ahead of time the multiple reasons to offer abortion care—to broaden the services you offer to women, to offer additional training and skills to the staff (which positively affects retention), and perhaps to provide a cost savings by offering medication abortion or getting aspiration abortions out of the operating room. Consider organizations that provide technical assistance to help initiate new services.

When setting up reproductive health services, it is important to get staff involved very early. Clinicians who want to add abortion services to their health center's practice often wonder how to discuss this subject with staff and colleagues whose views on abortion are unknown. It is useful to bring up the subject in the context of a case discussion, in which one of your patient's, for example, is having difficulty obtaining services elsewhere. You could also begin by conducting an educational session on unintended pregnancy that incorporates values clarification and fielding questions or concerns staff may have about being involved.

Medication abortion may be more easily incorporated into a practice than aspiration abortion, and you may already have the resources available at your facility. To have the medications on-site, you must register with and get mifepristone from the pharmaceutical company. Templates for counseling and documentation are available at <http://www.reproductivehealthaccess.org>.

It will be important to familiarize yourself with the reporting, funding, legal climate, and requirements in the state where you will practice. For the most current information, see State Policies in Brief at <http://www.guttmacher.org>.

ADDRESSING BARRIERS TO PRACTICE INTEGRATION

Following routine abortion training, most family medicine graduates considered comprehensive reproductive services as important to include in their ideal practice, but many faced barriers to incorporating these services (Goodman 2012). Commonly reported deterrents include lack of authority or time to implement services, restrictions from clinics / hospitals, medical liability coverage, staff resistance, and strength of competing practice interests.

Post-residency practice restrictions, both formally and informally imposed by employers, have been associated with decreased odds of provision among obstetrician-gynecologists (Freidman 2010).

Obtaining affordable malpractice coverage is a challenge in every area of medicine, and abortion services in particular. Insurance companies often “bundle” medication or aspiration abortion with general obstetrical coverage, in spite of much lower complication rates (Dehlendorf 2010). If your insurance specifically excludes abortion services, some

“add-on” or “wrap-around” policies are available and may have already been purchased for other areas of care not covered (hospital medicine or obstetrics). For malpractice options, their advantages, and disadvantages, please see Chapter 13 on Office Practice.

If security questions arise, it may be helpful to remind staff or administrators of the security issues (such as patients with substance abuse, mental health, or domestic violence) and systems already in place. Services integrated into a primary care setting are also much less likely to draw the attention of protesters.

Be patient and persistent, as the process may take some time. Keep returning to your core beliefs about the importance of caring for your patients.

BEYOND TRAINING

There is a proud, egalitarian, and cooperative history of women's health care which informs the training process around abortion. This movement has vastly changed the delivery of women's reproductive health care and had many other effects on the medical establishment 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 different fields of medicine, but also between clinicians, staff, and activists. Effective training in reproductive health is an incredibly important goal to achieve, but is also just the beginning. We hope this workbook has given you the knowledge and enthusiasm to join with us as providers and to expand women's access to these essential healthcare services.

EXERCISES: BEYOND TRAINING

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 family medicine 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?

EXERCISE 9.2

1. Managing stigma: the decision to disclose
(Adapted from The Providers Share Workshop, authors Jane Hassinger, Lisa Martin, Michelle Debbink, Meghan Eagan-Torkko, Emily Youatt, Lisa H. Harris, 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 for family members. The difficulties of disclosure can result in anxiety, fatigue, and acceptance of an obscured professional identity. The challenges of disclosure are likely to appear across the lifespan of any provider. Disclosure decisions may include:



- Degree of disclosure- “Do I say I work in women’s health or abortion care?”
- Context - “Do I tell my siblings if my parents will be uncomfortable?”, “Do I tell my partner’s co-workers what I do?”
- Developmental timing - “When should I tell my kids what I do?”, “Or parents of my kid’s friends?”
- Relative cost and benefits - “Will this disclosure cost me this friendship?”, “If I don’t disclose, will the relationship be less intimate?”
- Value of ongoing disclosure – “Should I actively discuss or let it recede into the background?”

Below is an exercise to help providers to:

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

Exercise instructions-

1. In column 1, select 1-2 relationships in which issues of disclosure arise.
2. In column 2, consider “now”, or a different time in your life.
3. In column 3, note important details about the relationship itself / its context.
4. In column 4, explore risks / benefits of disclosure (to you, the relationship, or hopes for the relationship).
5. In column 5, explore risks / benefits of non-disclosure.
6. (Optional) Where on the disclosure spectrum does your decision fall?
7. (Optional) Discuss, make a possible disclosure plan, and role-play.

Relationship	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. They live a plane ride away, but are very close with my family. I have 2 young children. We rely on their assistance with childcare.	Loss of relationship would be a loss to kids, loss of family support – time, attention, & financial. Marriage strain. Could undermine my work. Could have consequences in their community.	Possibility they accept. Relief from tension of worry about management of silence, “accidental outing”. Ease marriage tension. 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 tenuous peace in family. Continued reliance on them for caretaking of kids. Preserve innocent relationships between grandparents and children.	*  D ND
							 D ND

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

- Additional Issues for reflection or discussion include:
 1. Do you have all the information you need?
 2. What do you ideally want people to know about your work?
 3. What sort of assurances do you need from the people to whom you disclose?
 4. What part of disclosure / non-disclosure is the hardest for you?
 5. Do any of your situations involve forced disclosures, or “being outed”?

[Click here for the Teaching Points to these Exercises](#)

REFERENCES

Dehlendorf CE, Grumbach K. Medical liability insurance as a barrier to the provision of abortion services in family medicine. *Am J Public Health*. 2008 Oct;98(10):1770-4. Comment in *Am J Public Health*. 2009 Jun;99(6):967-8; author reply 968. <http://goo.gl/OHTd2>

Earnest MA, Wong SL, Federico, SG. Perspective: Physician Advocacy: What Is It and How Do We Do It? *Acad Med*. 2010; 85:63–67. <http://goo.gl/aXDui>

Freedman L. *Willing and Unable: Doctors' Constraints in Abortion Care*. Nashville, TN: Vanderbilt University Press; 2010.

Freedman L, Landy U, Darney P, Steinauer J. Obstacles to the integration of abortion into obstetrics and gynecology practice. *Perspect Sex Reprod Health*. 2010 Sep;42(3):146-51. <http://goo.gl/AJ3io>

Goodman S; Gordon R; Eckhardt C; Osborn S; Grossman D; Spiedel JJ. Beyond training: Making change stick. *Contraception* (editorial), 2009 May; 79(5):331-3. <http://goo.gl/fzJiQ>

Goodman S, et al. A long-term evaluation of a required reproductive health training rotation with opt-out provisions for family medicine residents. *Family Medicine*, 2012 (in press).

Harris LH, Debbink M, Martin L, Hassinger J. Dynamics of stigma in abortion work: Findings from a pilot study of the Providers Share Workshop. *Social Science & Medicine* 73 (2011) 1062-1070. <http://goo.gl/72MqU>

Hassinger J, Martin L, Debbink M, Eagan-Torkko M, Youatt E, Harris LH. *The Providers Share Workshop: Managing stigma: the decision to disclose*. 2012.

Landy U, Steinauer J. How available is abortion training? *Fam Plann Perspect*. 2001 Mar-Apr;33(2):88-9. <http://goo.gl/LFn1v>

Northnagle M; Prine L, Goodman S. Benefits of comprehensive reproductive health education in family medicine residency. *Family Medicine*, 2008 Mar; 40(3):204-7. <http://goo.gl/BZ1es>

Prine L. Medical abortion in family practice. *J Am Board Family Practice* 2003 Jul-Aug;16(4):290-5. <http://goo.gl/NISqZ>

Prine L. Integrating medical abortion into a residency practice. *Family Med*. 2003 Jul-Aug;35(7):469-71. <http://goo.gl/80EK2>

Steinauer J, Landy U, Filippone H, Laube D, Darney P, Jackson R. Predictors of abortion provision among practicing obstetrician-gynecologists: a national survey. *Am J Obstet Gynecol*. 2008 Jan;198(1):39 e1-6. <http://goo.gl/xGCle>

10. TEACHING POINTS

The teaching points presented here are designed for an in-depth reference and review of Chapters 1 - 9 Exercises for learners.

For maximal learning, we recommend discussing the Exercises initially before consulting the Teaching Points (i.e. 1:1 with faculty or in small groups). Residencies and individual learners can decide whether it is more advantageous to distribute the Teaching Points with the Workbook, or at the end of the training rotation.

CHAPTERS

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 – Aftercare and Contraception

Chapter 7 – Early Medication Abortion

Chapter 8 – Management of Early Pregnancy Loss

Chapter 9 – Beyond Training: Becoming a Provider

CHAPTER 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:

- Everyone will have different thoughts, and there is no right or wrong answer.
- Patients have the right to make decisions for themselves and to receive medical care that supports 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 is the best decision for each patient without walking in her shoes. Imagine what might be going on in her life to explain her behavior.

EXERCISE 1.1: Challenging Cases in Medicine (Optional)

Purpose: This exercise allows us to confirm that our reactions as providers can get in the way or harm a patient-doctor relationship, and at times, compromise care of the patient.

Consider a time you observed another medical provider react (based on his/her pre-existing judgments or assumptions) toward a patient in a way that negatively impacted that relationship. How did this affect the patient care?

EXERCISE 1.2: General Feelings about Pregnancy Options

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

In general, how do you feel about your patients choosing abortion, adoption, or parenthood? Are you challenged to accept a patient's decision in the following circumstances?

Were you surprised by any of your reactions? How have your life experiences contributed to your feelings about patients choosing abortion?

- 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. For example, do you feel differently changing 'if the woman is not financially able to care for a child' to 'not financially able and feels like she must return to her abusive partner for financial support if she has a baby? What if her partner has previously abused her two small children?
- If you feel differently about a scenario for choosing abortion or adoption or parenthood, why do you think this is the case? What experiences in your own life have shaped your perspectives on these different choices?

EXERCISE 1.3: Gestational Age and Abortion

Purpose: For some people, the acceptability of abortion is dependent upon the stage of pregnancy at which an abortion might take place. The following exercise is designed to help you clarify whether your beliefs are influenced by the gestational age of the 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, looking at products of conception (POC), physical risk to the woman, her lack of access to services, what it feels like doing the procedure as a provider, or other perceived ethical concerns? Notably, post-viability abortions are rare.
 - 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?
 - Would you feel differently if there were no other abortion services accessible to the patient? What kind of patient hardship would motivate you to offer services?
 - Each provider is different and needs to find his or her own comfort level.

EXERCISE 1.4: *Your Feelings about Women's Reasons*

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

How would you feel about referring or providing an abortion for a woman who:

1. is ambivalent about having an abortion but whose partner wants her to terminate the pregnancy

- While this decision is obviously important for both partners, it is the woman's legal right to make the final choice. In addition, she is the one who bears the risks of pregnancy and the ultimate responsibility for the child.

2. wishes to obtain an abortion because she is carrying a female fetus

- Sex selection brings up complicated ethical and cultural issues. It might be helpful to ask her if there are medical or cultural reasons that support her preference (i.e. sex-linked genetic conditions, or family pressure to have a male child). Discussing these with her may help you better understand her position and decide your comfort or need to refer.

3. has had many previous abortions

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

4. indicates that she does not want any birth control method to use in the future

- Women often wish to avoid sex after abortion. Help the patient assess her situation and whether abstinence is a likely reality for her. You may tell her you have heard this perspective from women you have seen back later with unintended pregnancy. Proactive planning is an important form of self-care, however, it is also important to avoid coercing a patient into choosing a method she does not want. Discuss birth control options, and what has or has not worked for her in the past. At a minimum, give condoms and emergency contraception, and recommend she return if her situation changes or offer a scheduled follow-up visit to discuss it further. Advanced provision of emergency contraception has been shown to increase its use by 2 - 4 times without changing the use of other forms of contraception (Trussell 2004).

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 her.

EXERCISE 1.5: Abortion access and choosing to provide abortion.

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, and how your decision to offer options counseling, referrals, or services might influence the accessibility of abortion.

1. What is your reaction to the following accounts?

- The current political atmosphere threatens safe access to abortion services, grounded in the landmark *Roe* decision.
- The Turnaway Study (UCSF Bixby Center for Global Reproductive Health), concluded that the biggest barriers to women getting wanted abortions are late discovery of pregnancy, being young, poor or uninsured, and not being able to travel to a facility that provides the abortion.
- What are the public health implications if legislation continues to pass that restricts or limits abortion access? Do these accounts influence your decisions around counseling, referrals, or services you would offer?

2. As you embark on this training, 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 2011).
- Utilize faculty support during this rotation to discuss whether you share a sense of burden or stigma.

[Click here to return to the chapter Exercises](#)

CHAPTER 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. How would you approach this?**
 - Our role is to listen, support, and ask questions that will help a woman come to a decision about this pregnancy, although not necessarily at this visit.
 - Before doing the test, consider asking what result she hopes for. Once giving the result, wait for her to respond. These questions may help your patient:
 - “How do you feel about this result?”
 - “What would it be like for you to have a child at this time?”
 - “Are you aware of all your options?”
 - A woman may have strong feelings one-way or the other, and may not need full options counseling.
 - If she needs more time, consider having her imagine her life now and a few years from now if she continues or ends this pregnancy, and how she will feel about her decision in each circumstance, or referring her to the online Pregnancy Options Workbook at <http://www.pregnancyoptions.info>.
- 2. When you ask a patient what questions she has, she wants to know if an abortion will affect her ability to have children in the future. How would you respond?**
 - Uncomplicated vacuum aspiration in the first trimester has been shown to have no effect on a woman’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.
- 3. A woman 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.
- It can be a good parenting decision to decide not to parent.
- Birth mothers commonly feel sadness about relinquishing a child, even though it might be the best decision for all involved.
- A birth mother can think of adoption as a way to select parents for her baby, as opposed to giving her baby to adoptive parents.
- Introduce differences between open and closed adoptions, and give referrals as appropriate. Please see the Adoption Facts Section in Chapter 1.

4. **Your 15-year-old patient is excited when the home pregnancy test comes back positive. She has not told her parents yet because she thinks they will be angry. Her boyfriend wants her to have the baby, and says he will find a job to support them. How would you respond?**

Assure her that your job is to help her determine the best decision for her, separating out her own desires from her parents' or boyfriend's wishes. You can ask her to:

- Imagine her goals for the future (school, work, and relationships), and how each option would affect these.
- Evaluate the pros and cons of each option.

To help her explore the question of involving her parents in the decision, you may:

- Ask her what she imagines her parents saying, and how she might respond.
- Explore having the discussion with her parents sooner than later, as they will find out eventually.
- Additionally, many states have parental notification or consent laws.

Help her do more reality testing around the prospect of parenting:

- How might she manage this financially, logistically, and emotionally?
- Who is around to help her with parenting?
- Provide appropriate referrals for assistance programs.

5. **(Optional) Consider the following responses to a common patient statement, in terms of the doors opened or closed within the conversation, or what it allows or disallows in further conversation. Which do you think is most 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: You can check to see whether the patient is sure about her decision.
- What it disallows: Asking this question right after she says she is feeling sad, guilty or grief stricken can imply that you are uncomfortable with the patient's emotions or that somehow her 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: You are 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 she talk about her 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.

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.

- 1. As you enter the exam room you hear the patient’s partner criticizing her for “acting stupid” and telling her angrily to “just shut up.” He is looking at the wall and ignores your efforts to introduce yourself.**
 - It is essential to talk to the patient without her partner present.
 - Explain that you routinely do an exam with the patient alone and have him go out to the waiting room.
 - Ask her about the tension you observed and how she is feeling about her 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 unwillingness to make eye contact is not. Consider asking, “*What do those tears mean?*” Is she fearful? Unresolved? Is she feeling pressured into her decision? It is hard to assess what is going on if you can’t make eye contact. You may add something like, “*I can’t proceed unless I understand where you are coming from, and that you want this procedure.*”

3. Before you begin an exam or procedure, the patient asks, “Is this going to hurt?”

- Each woman is different, but most women tolerate this procedure pretty well.
- Some women have little pain. Some women feel cramping or pain, but the procedure is usually quick.
- 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 be as gentle as I can, and we can talk to you during the procedure.
- It’s helpful to give a role to the patient’s partner, by helping her breathe, holding her hand, and reassuring her.

4. The patient is a 14-year-old rape survivor who is 7 weeks pregnant. Every time you attempt to insert the speculum, she raises her hips off the table.

- Offer, *“This is not your fault. It’s not uncommon for women / teens in your situation to have a hard time”*.
- Offer her choices so she can think about what is best for her, and be more empowered after a very disempowering experience.
- Offer her to practice a Kegel during the exam to relax perineal muscles.
- Offer her to focus on relaxing or pushing her hips downward into the table.
- Use gentle touch.
- Suggest that if she is able to hold still, the procedure will be safer for her.
- If still unable to relax, she may need more medication, or conscious sedation.
- Consider the possibility that she needs a referral for general anesthesia.
- 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. She asks, “Can I see what it looks like?” How would your response differ if the patient was at 12 weeks gestation?

- Before 9 weeks it is difficult to locate fetal parts, and it can be very therapeutic for a patient to see the pregnancy tissue, particularly if she perceives the pregnancy as “a formed baby” (often the impression from the protestors signs outside the clinic).
- For later gestations, consider asking tactfully what the patient expects to see. Alert her if recognizable parts will be visible, and confirm she wants to see.

[Click here to return to the chapter Exercises](#)

CHAPTER 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, and the reasons why.

- 1. A patient comes to your office requesting pregnancy confirmation and to discuss her options. She is 4 weeks 2 days LMP and states that she had a positive home pregnancy test.**
 - 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 can occur in urine as early as a week after conception or before a missed period. Up to 10% of pregnant women have a negative HSPT at the time of missed menses, due often to delayed ovulation & implantation and to variable hCG concentrations in urine (Paul et al. p.67); furthermore there is variable sensitivity among HSPT assays (Cole 2005).
 - If positive, assess if pregnancy is desired, and proceed with clinical dating. If negative, have patient return in a week for retesting if her period does not start.
- 2. A patient is 6 weeks LMP and requests abortion. Transvaginal ultrasound examination shows no intrauterine gestational sac. The patient has been spotting intermittently but is otherwise asymptomatic.**
 - The differential diagnosis includes that she is not pregnant, has a very early intrauterine pregnancy, a miscarriage, or an ectopic pregnancy.
 - First confirm pregnancy with a HSPT. If negative, she is not pregnant. Address reasons why she may be spotting, and encourage her to return in a week for a repeat HSPT. Start birth control if patient does not desire pregnancy at this time.
 - If the HSPT is positive, review menstrual and contraceptive history to provide better dating. Get serum hCG to clarify the diagnosis. Give ectopic precautions.
 - If the serum hCG is ≥ 2000 mIU/ml with no IUP seen on ultrasound, or she develops significant symptoms of ectopic at any hCG level, refer immediately for evaluation of possible ectopic.
 - If the hCG is < 2000 mIU/ml, consider checking a second hCG level in 2-3 days or seeing her again for another TVUS when the hCG is expected to be above the discriminatory level (hCG ≥ 2000 mIU/ml for TVUS), and give ectopic warnings.

3. A patient made an appointment for a follow-up visit 3 weeks after a first trimester abortion. She started taking oral contraceptive pills the day following the abortion. She has some breast tenderness but otherwise feels well.

- The HSPT can stay positive for 4 to 8 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 make sure that abortion was complete and appropriate POC (products of conception) were noted.
- If she has ongoing symptoms or signs of pregnancy or retained POC, check serial hCGs to assess trend. Repeat US can also be helpful.

EXERCISE 3.2

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

1. Calculate the gestational age in days for the following pregnancies seen on ultrasound:

a. Gestational sac: 6 mm x 7 mm x 5 mm; no yolk sac or embryo present.

- Mean sac diameter (MSD) = $(6 + 7 + 5)/3 = 18/3 = 6\text{mm}$. Then use formula for gestational age (days) = MSD (mm) + 30.
- In this case $6 + 30 = 36\text{ days} = \underline{5\text{ weeks } 1\text{ day}}$.

b. Gestational sac: 18 mm x 16 mm x 16 mm; yolk sac present; embryonic pole length 5 mm.

- Use the embryonic pole length, once visualized, to determine gestational age. The formula for gestational age (days) = embryonic size (mm) + 42.
- In this case $5 + 42 = 47\text{ days} = \underline{6\text{ weeks } 5\text{ days}}$.

2. What is the differential diagnosis of the following ultrasound findings? What steps would you take to clarify the diagnosis?

a. Mean gestational sac diameter 14 mm with no yolk sac or embryo visible.

- A yolk sac may be seen when the gestational sac is 5-10 mm and should be seen by the time the gestational sac has achieved 13mm.
- The most likely diagnosis is early pregnancy loss (anembryonic pregnancy). If the pregnancy is desired, you may use a more conservative cutoff, and re-check ultrasound in 1 week.

b. Embryonic pole length 3 mm with no visible cardiac activity.

- Early pregnancy failure can be diagnosed by lack of embryonic cardiac activity in a 5 mm embryonic pole.
- An embryonic pole length of 3mm corresponds to a 45-day (6w3d) gestation, and though cardiac activity is often present at this point, its absence is not yet diagnostic of early pregnancy loss.
- Discuss with the woman her various pregnancy options. If the pregnancy is desired, she could return in a few days to repeat the ultrasound.

c. A 3 mm x 3 mm central anechoic sac in pregnant patient 6 weeks LMP with history of intermittent right lower quadrant cramping.

- This case indicates likely ectopic pregnancy. By six weeks, or 42 days, the mean sac diameter should be 12mm. 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.

d. Embryonic pole length 7 mm with no visible cardiac activity

- Cardiac activity should be seen by the time the embryonic pole length reaches 5 mm. Normal viable pregnancy is very unlikely in this case. If the pregnancy is desired, explain that this probably represents a non-viable pregnancy and you can repeat the ultrasound in one week, or follow hCG levels to confirm appropriate changes. If the pregnancy is not desired, you can proceed with options including aspiration, medication, or expectant management.

e. Irregular, flattened gestational sac without embryo, cystic changes present in decidua and myometrium resembling “swiss cheese” pattern in patient who is 8 weeks LMP.

- This suggests molar pregnancy. If performing aspiration, send POC for pathologic examination, and obtain baseline serum hCG.
- Early molar pregnancies may appear with homogeneous or mixed-density echoes resembling incomplete abortion or early pregnancy failure on ultrasound. The classic “blizzard” or “snowstorm” appearance of molar pregnancy on ultrasound often is not visible until after 10 weeks gestation.

EXERCISE 3.3

Purpose: To identify pre-procedure conditions that may warrant special management. How would you manage the following case scenarios?

1. A 41-year-old patient presents for abortion at 5 weeks LMP. Pelvic examination reveals an irregular uterus that is 17 weeks in size. Ultrasound examination shows an intrauterine sac consistent with 5 weeks gestation and multiple submucosal uterine fibroids.

- Uterine fibroids may inhibit our ability to complete the procedure, and medication abortion 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 17-year-old patient with a history of severe asthma presents for abortion or early pregnancy loss management at 8 weeks gestation. She was hospitalized three months ago for an asthma exacerbation, and she discontinued oral corticosteroids 4 weeks ago. She uses a steroid inhaler daily. The patient appears comfortable with normal vital signs, but pre-procedure examination reveals wheezes bilaterally.

- Make sure you are able to control moderate asthma before starting an elective procedure.
- Try an albuterol inhaler or nebulized treatment. Recommend asthmatic patients bring inhaler, and also keep in clinic. If inhaler clears her lungs or improves peak flows, continue with procedure. If she doesn't improve, she will need better control of her asthma before proceeding.
- Adrenal suppression can occur when a patient uses prolonged exogenous steroids. However, even if she had still been taking systemic steroids, stress-dose corticosteroid therapy is probably unnecessary for minor procedures under local anesthesia.

3. A 26-year-old patient presents to your office at 7 weeks gestation. She had a chest x-ray and abdominal series after a motor vehicle accident 2 weeks ago. She 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. 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, American College of Radiology)
- 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).

4. You are preparing to perform vacuum 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 exuding from 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). While some providers delay the abortion until treatment is completed, most do not and assure that at least one dose is given. No randomized trials have compared no delay/pre-abortion treatment with delay/post-abortion treatment (Paul p.82).
- CDC guidelines for treatment of cervicitis include:
 - Azithromycin 1 gm single oral dose, or Doxycycline 100 mg orally twice daily for 7 days are the preferred treatments for CT infection.
 - Ceftriaxone 250 mg intramuscular or Cefixime 400 mg oral suspension are the preferred treatments for GC.
- Symptomatic BV at the time of abortion should be treated with metronidazole 500 mg orally twice daily for 7 days. There is insufficient data to recommend that treatment for asymptomatic BV is superior to routine pre-procedure antibiotic prophylaxis (Achilles 2011).

- 5. A 29-year-old woman presents for abortion at 7 weeks gestation. She has a prior history of venous thromboembolism and is currently anticoagulated on warfarin; her INR is in the therapeutic range.**
- There are no definitive studies demonstrating safety of first trimester abortion in outpatient settings for anticoagulated women, nor comparisons of temporarily suspending anticoagulation vs. performing an abortion while anticoagulated.
 - Additional blood loss in anticoagulated women was not clinically significant in a recent small study of anticoagulated women seeking abortion < 12 weeks gestation compared with matched controls (Kaneshiro 2011). A likely explanation is that myometrial contraction is the primary mechanism of hemostasis after abortion.
 - The experience of the provider or appropriate back up systems should be considered along with consultation with a specialist.
- 6. A 38-year-old woman presents for an aspiration abortion 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 she took it today. Consider allowing patient to relax for a while and recheck.
 - For severe hypertension (i.e. >160/110) consider treatment prior to the procedure (beta-blocker or vasodilator) or referral for additional management. A symptomatic patient – with new onset headache or neurologic changes and pressures concerning for malignant hypertension – should be stabilized or referred prior to the procedure.
- 7. A 26-year-old woman with a history of diabetes presents for an abortion at 8 weeks gestation. Her 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 is not a contraindication for an abortion.
 - An assessment is appropriate to determine if she has ketoacidosis (including urine dip for ketones and evaluation of volume status); in which case she should be stabilized or referred prior to the procedure.

[Click here to return to the chapter Exercises](#)

CHAPTER 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 vacuum aspiration?

- 1. A patient states that last year she had an allergic reaction to the local anesthetic that her dentist used.**
 - It is important to distinguish between allergic reaction, side effect, and toxicity.
 - Allergic reactions include itching, hives, bronchospasm, and progression to shock.
 - In this case, the safest alternative may be to avoid local anesthetic.
 - Instead use saline (plain or bacteriostatic), which is somewhat less effective than lidocaine (Chanrachakul 2001, Glantz 2001, Miller 1996).
 - Allergic reactions to lidocaine are extremely rare, and mostly occur from the preservative or epinephrine.
- 2. A patient chooses to have IV pain management due to extreme anxiety. You administer midazolam 1.5 mg and fentanyl 100 mcg. As you dilate the cervix, the patient falls asleep and is not easily arousable. Her 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
89% or less	Initiate oxygen PPV if inadequate spontaneous breathing Consider stepwise, titrated Use of reversal drugs Transfer if persistent

- Hypoventilating 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 LMP has a history of alcohol and heroin abuse, and she states that she “shot up yesterday.” She wants “all the pain medication she can get” 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 she “can feel everything” and “needs more meds.”**
- Opioid tolerance among substance users often requires higher doses of medication to achieve pain control. Recognizing that abortion is painful for many women, that the abortion procedure is brief and that short acting pain medication are typically used, many providers will give women higher doses of medication. However, each provider must determine his/her own comfort level when providing opioid pain medications.
 - Individuals taking substances for addiction (such as buprenorphine (suboxone/ subutex) or methadone) will also raise specific management issues such as caution with use of other IV meds (benzodiazapines), in addition to higher tolerance of opioids. Patients on medications for chronic pain present similar issues.
 - Keep in mind that intoxication can interfere with informed consent, warranting a delay in the procedure. Rapid reversal in chronic users can also provoke withdrawal or seizures.
 - Remember non-opioid forms of pain control and relaxation include breathing and relaxation techniques, visualization methods, so-called “vocal local” or “verbicaine”, and having a support person in the room.

EXERCISE 4.2

Purpose: To become familiar with other medications used in abortion care.
Please answer the following questions.

- 1. At what gestational age range is it acceptable to administer mini-dose RhoGam (50 mcg) rather than full dose RhoGam (300 mcg) to the Rh-negative patient?**
 - A 50-mcg RhoGam dose is standard for pregnancies < 13 weeks gestation.
 - Full dose RhoGam (300 mcg) is recommended beyond that point.

2. In which of the following abortion care situations is administration of Rh(D) immunoglobulin (Rhogam) suggested?

a. Patient has positive anti-D antibody titre

- The woman 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 her blood (t ½ is 24 days).
- In either case, don't give RhoGam.

b. Rh-negative patient received RhoGam 4 weeks ago during evaluation for threatened spontaneous 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 abortion 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.

3. While completing an early vacuum aspiration procedure using local cervical anesthesia only, the patient complains of nausea and “feeling faint.” She is pale and sweating. Her blood pressure is 90/50 and her pulse is 48. How would you manage this patient?

This appears to be a classic vasovagal reaction, with low pulse, hypotension, and sweating. Vasovagal reflex is caused by stimulation of the parasympathic nervous system, and may occur with cervical dilation, fear and other emotions. Hemorrhage, over-medication, and hypoglycemia may also predispose to syncope.

Differential Diagnosis: Vasovagal, hemorrhage, low blood sugar, or an inadvertent intravascular –caine injection (see page 50).

Vasovagal Reflex	Hemorrhage	Low Blood Sugar
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

Vasovagal Management

- a. Airway / Positioning: supine or trendelenberg, head to side if vomiting.
- b. Cool cloth on head or neck.
- c. Sniffing ammonia capsule may help.
- d. Monitoring VS and O₂ saturation.
- e. Prolonged vasovagal, consider:
 - Atropine
 - Oxygen
 - IV Fluids
 - Record events, copy record, and transfer as needed.
- f. Evaluation for other potential causes (hemorrhage, hypoglycemia, etc.)

4. **After completing an uncomplicated vacuum aspiration abortion, the patient states that she forgot to mention that she is allergic to latex. In the recovery room, the patient develops urticaria, pruritis, and becomes acutely short of breath. What is your diagnosis? In addition to supplemental measures such as oxygen administration, what medications might you administer?**

Symptoms suggest an acute allergic reaction. Throat swelling and shock suggests progression to anaphylaxis. Administer epinephrine immediately.

Other things can cause shortness of breath including hyperventilation, asthma, and sedative medications. If the patient were showing significant sedation with respiratory depression, consider reversal agents. Otherwise, it is appropriate to use Benadryl for allergic reactions, and Epinephrine for anaphylaxis.

Benadryl	Allergic Reaction	50 mg (1 ml) IM/IV/PO (PO if mild symptoms only)
Epinephrine 1:1000	Anaphylaxis	0.3 – 0.5 mg (1 mg/ cc) SQ/IM Repeat doses at 5-15 min intervals as necessary

Other steps could include:

- a. Monitoring (VS and O₂ saturation)
- b. Start O₂ therapy.
- c. Positioning
- d. Start IV with 2nd IV line if needed for impending shock.
- e. Record events, copy record
- f. Transfer as needed, alert designated emergency contact.

[Click here to return to the chapter Exercises](#)

CHAPTER 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.

What is the differential diagnosis?

False passage, due to:

- Acute flexion of the uterus.
- Congenital or acquired uterine abnormalities:
 - cervical stenosis from prior cone biopsy.
 - fibroid in the lower uterine segment.
 - mullerian anomaly.
- Error in assessment of uterine position.

What would you do next?

- See dilation tips on p. 61 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 woman at six weeks gestation. She had reported intermittent episodes of bleeding on three occasions during the past week, but did not have any severe cramping or clotting. Her pre-procedure ultrasound was performed one week ago, with a 5mm gestational sac identified, but no yolk sac or embryonic pole. Her 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.

What is the differential diagnosis?

- Spontaneous abortion since last ultrasound.
- Failed aspiration abortion.
- Completed aspiration abortion with "hidden" POC.
- Ectopic pregnancy.

What do you do next?

- An US prior to aspiration might have ruled out an early pregnancy loss since last US, in which case aspiration could have been avoided.
 - Recheck POC, MVA, EVA bottles, tubing, cannula, and strainer. Use magnifier.
 - Repeat US and reaspirate if tissue is still visible, with US guidance as indicated.
 - Consider using different cannula such as smaller rigid curved to follow flexion.
 - Consider ectopic pregnancy in any case without definitive POC.
 - a) Draw serial hCGs and give ectopic precautions.
 - b) 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, the abortion is likely incomplete and there is a risk of ongoing pregnancy.
 - If you see no villi, you can send the specimen to path. "Villi" seen by path requires further confirmation of completion. Provider examination of POC reduces the risk of failed abortion, but routine pathology confers no incremental clinical benefit, and adds extra cost (Paul 2002).
3. **You are performing an abortion on a nulliparous 16-year old at seven weeks gestation. You notice that her cervix is very small and it is hard to pick 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. (Adapted from Surgical Abortion Education Curriculum, PPNYC)**

What should you do now?

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

- Consider pre-treatment with misoprostol in minors (WHO / RCOG).
- Before applying tenaculum to small or flat cervix, inject several cc's of anesthetic to add bulk & facilitate placement.
- Try an atraumatic (Beier) or a second tenaculum on the other lip of the cervix to provide a broader base of support, and 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 5-10cc sterile saline injected intra-cervically), Monsel's solution, and silver nitrate may also be used; sutures are rarely required.
- If unsuccessful, consider 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.

4. You are inserting the cannula for a procedure on a woman 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. (Adapted from Surgical Abortion Education Curriculum, PPNYC)

What is the differential diagnosis?

A probable uterine perforation.

What should you do now?

- Remove cannula. Evaluate her for sharper, more localized pain, VS, bleeding.
- Use US to see if any part of the pregnancy is outside the uterus, abdominal contents are in the uterus, or an enlarging fluid collection is in cul-de-sac.
- If the uterine cavity can be re-identified, an experienced provider may choose to finish the procedure under ultrasound guidance.
- If vacuum had been applied, look at the aspirate for evidence of intra-abdominal contents (i.e. omental fat). If seen, send to pathology and transfer patient.
- If the patient remains asymptomatic for pain or bleeding, consider observation for two hours, give broad-spectrum antibiotic coverage, and give her precautions before discharge.
- Consider uterotonics if bleeding is significant.
- Hospitalization is indicated if:
 - a. the patient is hemodynamically unstable.
 - i. place two large bore IVs, initiate IVF.
 - b. the patient has significant pain.
 - c. there is evidence of large perforation, laceration, expanding hematoma, fetal parts in abdomen, or omentum / viscera in uterus or aspirate.

How might you have anticipated and prevented this problem?

- Use gentle steady pressure during dilation; stop after passing the internal os.
- An os finder or flexible uterine sound helps find the path with less perforation risk.
- Traction on the tenaculum helps straighten uterine flexion. Consider posterior placement for a retro-flexed uterus to help straighten the angle.
- If your dilator passes easily but not the cannula, consider using a smaller cannula or dilating one size higher.
- Do not hesitate to re-check your pelvic exam.
- Use US guidance, if available.
- Also consider a rigid curved cannula to maneuver the angle better.
- Cervical ripening with misoprostol can be helpful.

5. You are starting an aspiration on a patient with an anembryonic gestation at 8w5d. She has a history of one abortion with post-procedure hemorrhage requiring transfusion. The MVA quickly fills up with blood when opened. 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.

What do you suspect?

- From the history this patient has already bled about 200 cc, and is at risk for hemorrhage (defined as 500 cc EBL), given her prior transfusion.
- Risk of bleeding is somewhat higher with pregnancy loss than viable pregnancies.
- Causes of hemorrhage include the 4 T's: tissue (incomplete aspiration), trauma, tone (atony), or thrombin (a bleeding disorder).

What can you do now?

- Direct staff to take VS every 3-5 minutes, reassure patient, record treatments.
- Attempt to evacuate uterus rapidly (switch MVA to EVA if available).
- Use uterotonics:
 - Misoprostol 800-1000 mcg PB/SL/PR
 - Methergine 0.2 mg IM/IC
 - Oxytocin 10 u IM or 10-20 u in IVF or 10 u IVP
 - (Fewer receptors < 16 weeks)
- Have assistant rinse and assess tissue (completeness, molar?).
- Place foley 30cc bulb into uterus and inflate to tamponade (30 - 50 cc of saline).
- If the patient is hemodynamically unstable or ongoing EBL:
 - place two large bore IVs and initiate IVF.
 - proceed with transfer.

EXERCISE 5.2

Purpose: To practice managing problems and complications that may occur after early aspiration abortion.

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. She complains of severe cramping and rectal pressure. She has had minimal bleeding and a mild fever.

What is the differential diagnosis?

Most likely a hematometra.

Which exam and ultrasound findings would support your diagnosis?

Examination reveals large, tense, tender uterus.

Ultrasound shows heterogeneous echo complex consistent with clots.

What are your management recommendations?

While small collections of clot may pass spontaneously or with uterotonics, aspiration is usually required, with or without intraoperative uterotonics. A trial of uterotonics is appropriate if the patient is to be rescheduled for aspiration on another day.

If these symptoms developed just after an abortion, what would you do?

Aspiration is usually required; add uterotonics. Responding may save her an ER trip.

2. **A 21-year-old female comes to your office for follow-up after an abortion two weeks ago at another facility, and still has some symptoms of pregnancy including breast tenderness and bloating in her abdomen. Medications include birth control pills. She has had intercourse regularly for the past six days. Vital signs normal; afebrile. Pelvic exam normal except 8-week size uterus. High sensitivity pregnancy test is positive.**

What is the differential diagnosis?

- A completed abortion in a patient with hormonal contraceptive side effects.
- A failed abortion with an ongoing pregnancy.
- Retained POC.
- Ectopic pregnancy or heterotopic pregnancy with continuing ectopic.
- Mole or partial mole.

How can you rule in or out any of your diagnoses?

- Home pregnancy tests are high sensitivity pregnancy tests (HSPT; positive at 25-50 IU); can remain positive 4 – 8 weeks after abortion.
- Call to see if POC, post-abortion US, or an hCG were checked after the abortion.
- Is serial hCG rising or falling, and at what rate? See discussions in Chapter 3 & 8.
- US can help identify an ongoing pregnancy, remaining debris, or an ectopic. But a negative US is inconclusive and cannot definitively rule out ectopic.
- Exam may be helpful to evaluate uterine size, boggy, or adnexal masses.
- Re-aspiration determines uterine contents: presence of POC, pathologic changes.
- Breast tenderness could be from hormonal contraceptives.
- 8-week size could be due to fibroids, retained debris, or inter-examiner variability.

How might your approach differ if a ultrasound showed moderate debris?

- This suggests retained tissue. Uterine re-aspiration may show evidence of chorionic villi, membranes, or fetal parts.

If she is not pregnant, how can you explain her positive urine pregnancy test and breast tenderness?

- A high sensitivity pregnancy test may still be positive for up to 4 – 8 weeks.
- Breast tenderness may be secondary to the initiation of CHC.

[Click here to return to the chapter Exercises](#)

CHAPTER 6 TEACHING POINTS: AFTERCARE AND CONTRACEPTION

EXERCISE 6.1

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

- 1. A patient has had nausea and vomiting throughout her pregnancy. How long will it take for her to feel better after the abortion?**
 - Nausea is one of the first pregnancy symptoms to subside after an abortion, generally 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 the office 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 hr for >2 hrs) 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?**
 - **Heavy work or exercise**

She may resume normal activity when she feels 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 her body," enjoy the activities that make her feel better, and avoid activities that make her worse.
 - **Resuming vaginal intercourse**

Providers typically advise against vaginal intercourse for 1-2 weeks, or as long as the patient is bleeding. Many patients ignore this advice without a demonstrated ill effect. No data exist suggesting increased infection after intercourse. As ovulation can occur within 8-10 days, initiate contraception promptly after abortion.

EXERCISE 6.2

Purpose: To understand recent evidence based contraceptive developments and medical criteria for use.

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

Classification of Categories for US Medical Eligibility Criteria (USMEC)

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 want the patch.

There are 2 issues to consider:

- Smokers ≥ 35 years old should not be prescribed estrogen-containing contraceptives due to increased risk of stroke and M.I. (USMEC 3-4).
- The patch is less effective in heavier women (30% of failures in 3% of women > 198+ lbs).

This woman could safely use an IUD / IUS, progestin-only, or barrier method.

b. A 19-year old who intends to use abstinence.

- Women often feel they will never have sex again after an abortion.
- Many find it hard to abstain for long periods, or fail to use protection when abstinence ends.
- Typical use failure rate for periodic abstinence is 25% in a year.
- Help her consider if this is an ideal or reality for her.
- Review common obstacles such as:
 - delays to get an appointment.
 - the need to use back-up method for 7 days with many methods.
- Advocate to keep an available method at home to initiate when ready.
 - Remind if it is included in her abortion charges (no extra cost).
 - If she declines, offer condoms and EC.
 - She may benefit from follow-up appointment to re-address.

c. A 39-year old who would like male condoms only.

- Help her clarify her goals for future fertility.
- Typical use failure rate for male condoms is 15% in a year.
- If future child-bearing is not planned soon, discuss more reliable methods.
- If she would like to become pregnant but not immediately or wants STI/ HIV prevention, condoms may be a good option, but also discuss other methods by tiers of effectiveness.

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

Avoid estrogen-containing contraceptives in women with migraines with aura because of an increased stroke risk. Use caution with women with migraines without aura, and consider additional prothrombotic risks (e.g. smoking). These women are best served with an IUD/IUS, progestin-only or barrier method:

- Migraine with aura or focal neurological symptoms any age (USMEC 4).
- ≥35 years old and migraine without aura (USMEC 3).
- <35 years old & migraine without aura (USMEC 2).

Women with non-migraine headaches at any age can use estrogen-containing contraceptives (USMEC 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:

- visual disturbances.
- scintillating scotoma.
- paresthesias (numbness and tingling).
- hemiparesis (weakness or partial paralysis in an extremity).
- dysphasia (slurred speech or inability to speak).

e. A 20-year old nulliparous woman with a history of Chlamydia at age 15, who wants an IUD.

- IUDs are safe and well accepted among nulliparous women.
- USMEC lists IUD category 2 for nulliparous women; benefits outweigh risks.
- Tubal infertility is linked to presence of antibodies to Chlamydia but not to history of IUD use (Hubacher 2001).
- Although nulliparous women have a slightly increased risk of IUD expulsion, they are excellent IUD candidates.

f. A 28-year old female with vaginitis who wants emergency contraception (for unprotected intercourse within 5 days) and long-acting contraception.

- She is an excellent candidate for Cu-T IUD today in clinic.
- Cu-T IUD (Paragard) is >99% effective for EC and long acting contraception.
- Vaginitis is a USMEC 2 for IUD, so should not preclude placement today, although you should initiate treatment as indicated.

g. 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 she is:

- Antiphospholipid antibody positive (USMEC 4 for CHCs, 3 for most methods, 1 for Cu-T IUD).
- Has associated thrombocytopenia (USMEC 3 for DMPA and Cu-T IUD).
- Is taking Immune modulators (USMEC 2 for all methods).

h. A 31-year old who takes anti-seizure medications who 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 USMEC 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 liver enzyme metabolism/ 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) ▪ Ketaconazole (anti-fungal) ▪ Fluconazole (anti-fungal)

i. 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 2006, Nelson 2007).
- Regimens result in fewer scheduled bleeding episodes and fewer menstrual symptoms, particularly headache (Edelman 2006).
- 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, Lybrel, Mono-phasic COCs, and Nuvaring may be used.
- The Patch is not recommended due to concern over increased levels of estrogen.

[Click here to return to the chapter Exercises](#)

CHAPTER 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.
- Although some protocols require a 2nd office visit, others allow serial hCGs (baseline and follow-up) with telephone contact, and clinic visits with you or her primary care provider as needed.
- Same day vaginal misoprostol use also may be considered. Studies reveal only slightly lower efficacy (92%) with misoprostol given simultaneous or 6 hours after mifepristone, compared to 24 hours later (Creinin 2007, 2004).

2. How do the medications work?

- Mifepristone works by stopping the pregnancy from growing.
- Misoprostol, works by stimulating the uterus to contract and empty.

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

- Although true drug failure rate is $\leq 1\%$, aspiration may be needed among 2 to 4% (for ongoing pregnancy, excessive bleeding/cramping, or patient request).
- With continuing viable pregnancy (true drug failure), a 2nd dose of misoprostol is 30% effective, or aspiration can be offered.
- With a persistent gestational sac without evidence of development, she can be offered a 2nd dose of misoprostol or followed for several more weeks if stable.
- In an asymptomatic patient who has echogenic material in the uterus without a sac, no further treatment is necessary.

Proposed Criteria for Aspiration Include:

Emergent

- Excessive active bleeding with orthostatic hypotension or drop in HCT

Non-emergent

- Continuing pregnancy
- Symptomatic Incomplete abortion unresponsive to treatment
- Patient unable to return, with no access to emergency services
- Symptoms unresponsive to medical treatment
- Patient preference

(NAF 2010)

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

- If her bleeding soaks > 2 maxi-pads per hour for > 2 hours), that is more than normal; have her call anytime if she are concerned.
- After misoprostol, bleeding usually starts within 1 to 10 hours (average 4 hours).
- Bleeding can be heavier than a normal period, accompanied by cramps and/or clots. Bleeding usually slows substantially after passing the pregnancy.
- Hypovolemia symptoms warrant immediate evaluation.
- Evaluation for heavy bleeding should include history, orthostatic vital signs, pelvic exam, hemoglobin or hematocrit, and US if available (hCG if US not available).
- Aspiration is recommended for severe hemorrhage or persistent heavy bleeding.
- Blood transfusion is rarely needed (<0.3% of cases).
- The optimal treatment of moderate bleeding is an area of scant data. It is unknown if a 2nd dose of misoprostol, methergine, or a tapered regimen of high-dose OC's is effective, or if any of these treatments is better than time alone.

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

- No. It is unlikely she will see a fetus, since at less than 9 weeks, the embryo or fetus is rarely visible to the naked eye.
- Let the patient know that she may see tissue, blood, and clots.
- If the patient is uncomfortable seeing the pregnancy tissue, she may want to consider an aspiration abortion instead.

EXERCISE 7.2

1. A) 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 medication abortion are temperature elevation, and flu-like symptoms (Kruse 2000). These are usually self-limited, and the body temperature should return to normal within a few hours. Have her check her temperature again in 2-3 hours.

B) 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 > 12 hours after misoprostol warrants an office visit to evaluate for infection. The work-up should include:
 - Questions about pelvic pain, bleeding pattern, 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 antibiotics should be initiated per CDC guidelines; if US shows significant intrauterine debris, uterine aspiration is also indicated.

- **If additional concerns arise for atypical infection (leukocytosis, hypovolemia), further evaluation and aggressive treatment may be warranted. Since 2001 a small number of U.S. deaths have occurred after medication abortion, due to *Clostridium sordelii* and *perfringens* mediated toxic shock syndrome.**
 - These infections were characterized by nonspecific complaints (abdominal or pelvic pain, nausea, diarrhea, malaise); patients presented without fever but with dramatic leukocytosis and hemoconcentration, and progressed to fulminant sepsis.
 - In patients with this presentation, a high index of suspicion and early aggressive treatment are needed.
 - Similar fatal *Clostridial* infections have been reportedly associated with birth, miscarriage, neonatal umbilical infection, trauma, & drug injection (Aldape 2006).
 - No direct evidence links self-administration or route of misoprostol (Beal 2007, Creinin 2009). Most of the cases occurred with vaginal administration of misoprostol.
 - Some groups have revised guidelines to include only buccal, sublingual, and oral administration of misoprostol, while others continue vaginal administration. Others have added CDC recommended STI testing and / or antibiotic prophylaxis.
 - As severe infection following MAB is rare (<1/100,000, Meites 2010), no standard recommendations for antibiotic prophylaxis exist.

2. I used the medication vaginally, but I think one of those pills just fell into the toilet (or vomited if using buccal or oral misoprostol). What should I do?

- If the misoprostol pills were placed vaginally, and a tablet falls out > 30 minutes after insertion, the medicine will have had adequate time to be absorbed into the bloodstream, even if the pill appears undissolved.
- If misoprostol was taken orally or buccally, the same applies. If this occurs < 30 minutes after insertion, she may need to return for a second misoprostol dose if appropriate bleeding has not occurred.

3. 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?

- Few women will pass the pregnancy after mifepristone alone; using misoprostol significantly improves the chance of complete abortion.
- Have her take misoprostol now.
- Many providers counsel women to use the dispensed misoprostol regardless of post-mifepristone bleeding to improve chances of success.

EXERCISE 7.3

- 1. 29 year old G₃P₁₀₁₁ patient requests medication abortion and is 6 weeks by LMP. Her exam reveals a barely enlarged uterus, and her hCG level is 782 mIU/ml. She takes mifepristone 200mg followed 24 hours later by buccal or vaginal misoprostol 800 mcg. She has moderate bleeding and cramping during the next several hours. She returns on day 6. Her exam is essentially unchanged, and her hCG level is 7530 mIU/ml.**
 - This patient's rapidly rising hCG level suggests continuing viable pregnancy, despite her history of bleeding after misoprostol.
 - Treatment options include aspiration or repeat misoprostol (second dose is about 30% effective).

[Click here to return to the chapter Exercises](#)

CHAPTER 8 TEACHING POINTS: MANAGEMENT OF EARLY PREGNANCY LOSS

EXERCISE 8.1

1. A 25-year-old woman you have been seeing for 5 years presents for an urgent visit. Her only 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 heavy bleeding, up to a pad every hour. Her urine hCG is positive.

a. How would you proceed with evaluation?

- Differential diagnosis: Threatened abortion, incomplete abortion, completed early pregnancy loss, and ectopic pregnancy.
- First consider and ensure hemodynamic stability.
- Then assess how the woman feels about the pregnancy.
- The evaluation can proceed with a 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 woman has a previously diagnosed IUP or EPL. Alternatively, serial hCGs can be obtained.
- If the initial value is below the discriminatory zone, serial hCGs can be obtained.
- If ultrasound is non-diagnostic, proceed with a second hCG.
- If the pregnancy is undesired, the woman can choose to proceed directly to uterine aspiration (without waiting for hCG results). This enables the woman to receive treatment without delay, and enables immediate confirmation of IUP vs. ectopic (if membranes and villi are confirmed).

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

- The uncertainty of waiting for results can be stressful. Keep her fully informed of the evaluation process.
- If the pregnancy is desired, inform her that in over 50% of cases of bleeding in the first trimester, the pregnancy continues.
- 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, while exhibiting sensitivity to a woman's 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.

2. The same woman comes in one year later. She had a termination following the previous threatened abortion, and never restarted her OCPs. She recently began a new relationship, and has intermittently been using condoms. 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.
- 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, she 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?”

- Tell her an early pregnancy loss is common, unlikely to occur in subsequent pregnancies, and never 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. Avoid preconceived notions about her previous experience. While she had a termination previously, do not assume that she will feel similarly about this pregnancy.
 - *“How are you feeling about what is happening?”*
 - *“How do you feel about what I have told you?”*

c. What information would you provide about how will this 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, alcohol and caffeine intake and to gain control of chronic medical conditions.
- Following two consecutive EPLs, 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.

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. While data is limited, some clinicians suggest waiting for 1-2 menstrual cycles.
- Offer a follow-up visit for continuity and support.

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 get pregnant. It has been 6 weeks since her last menstrual period, and she has been spotting for 6 days, but is having no pain. She is tearful and distraught. Her urine hCG is positive, her cervical os is closed, and no gestational tissue is evident.

a. Does the patient 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, a non-tender uterus about 6 weeks' gestation in 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 women 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 women experiencing EPL, a decline in hCG level is expected. A decline of >50% in 2 days from last hCG supports a diagnosis of completed EPL.

- c. A 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?**

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 her 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 example:

Initial hCG = 1000

Repeat hCG done on day 2

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.

- d. How would you discuss her final diagnosis with her? What kind of support may be of use to her?**

- As always, using open-ended questions and giving space to grieve is crucial.
- Reminding her that EPL is not her fault may address her unspoken fears.
- She has now had 2 spontaneous abortions, she has a > 70% chance of successful future pregnancy. Further work-up is recommended at this time, as described in Exercise 8.1 question 2c.
- Useful resources for support include her family and community, or counseling resources such as a miscarriage support group.
- You can encourage her to acknowledge her grief with special time or a grieving practice. Set up additional follow-up appointments as needed.

[Click here to return to the chapter Exercises](#)

CHAPTER 9 TEACHING POINTS: BEYOND TRAINING: 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 are offered: clinics (community, non-profit, for profit, independent, chain, residency program continuity sites), outpatient surgical centers, private doctor's offices, and hospitals.
 - A graduate 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 be involved: moonlight at a local clinic, join a practice already offering abortion services, get involved in teaching other providers, or integrate services into your new practice.

- 2. How would you connect with other providers in your region?**
 - Ask your faculty mentors to help introduce you to providers in your new area.
 - Ask for contacts on the listservs (Access or NAFbytes) or sign up to join one of the list-servs by having your current faculty recommend you.
 - Contact Reproductive Health Access Project, NAF, the local Planned Parenthood, or local NARAL chapter to help you make introductions.
 - Look online for other abortion providers.
 - Get on mailing lists of state and local pro-choice groups so you know what is happening in your community.

- 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 on page 114.

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 Title X, 330, or other 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 13, and guides to assist your administrative / billing department are available.
- Title X clinics may provide “as much 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.

EXERCISE 9.2

1. Managing stigma: the decision to disclose

(Adapted from The Providers Share Workshop, authors Jane Hassinger, Lisa Martin, Michelle Debbink, Meghan Eagan-Torkko, Emily Youatt, Lisa H. Harris, 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 be helpful in providing a supportive environment.

[Click here to return to the chapter Exercises](#)