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Factors associated with immediate abortion complication

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Abstract

To identify factors associated with increased risk of immediate complications from induced abortion. Retrospective analysis of a provincial database. All Ontario general hospitals in which abortions are performed and all free-standing abortion clinics in Ontario. Women in Ontario aged 15 to 44 years who underwent an induced abortion in the province (without concurrent sterilization) between Jan. 1, 1992, and Dec. 31, 1993. Recording of complications at the time of the procedure, gestational age, type of procedure, place of

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abortion (hospital or clinic), and patient's age, parity and history of previous abortion (spontaneous or induced). During the study period 83 469 abortions were performed that met our inclusion criteria. Immediate complications were reported in 571 cases (0.7%). Multivariate logistic regression analysis revealed that, after other variables were controlled for, the patient's age, parity and history of previous abortions (spontaneous or induced) were not significant risk factors for immediate complications; however, gestational age, method of abortion and place of abortion were significant risk factors ($p < 0.001$). The odds ratio (OR) for having a complication from abortion was 1.3 (95% confidence interval [CI] 1.02 to 1.63) between 9 and 12 weeks, compared with having one after abortion at 9 weeks or earlier, and increased to 3.3 (95% CI 2.23 to 5.00) after abortion between 17 and 20 weeks. Compared with surgical dilatation and curettage (D&C), instillation of saline and instillation of prostaglandins were more likely to be associated with immediate complications (OR 24.0, 95% CI 13.22 to 43.70, and OR 11.7, 95% CI 6.43 to 21.18, respectively), whereas both suction D&C and insertion of a laminaria tent were less likely to be associated with immediate complications (OR 0.4, 95% CI 0.26 to 0.67, and OR 0.3, 95% CI 0.19 to 0.52, respectively). Compared with women who had an abortion in a free-standing clinic, the risk for immediate complications was greater among those who had an abortion in a hospital, especially a teaching hospital (OR 1.9, 95% CI 1.38 to 2.58), a nonteaching hospital with 200 to 399 acute care beds (OR 3.1, 95% CI 2.27 to 4.21) and a nonteaching hospital with fewer than 200 acute care beds (OR 5.9, 95% CI 4.04 to 8.64). The risk of immediate complications from induced abortion is very low. Unlike in previous studies, the woman's age, parity and history of previous spontaneous or induced abortions were not found to be risk factors. However, advancing gestational age and procedures involving instillation of saline or prostaglandins were predictive factors of immediate complications.

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... The vast majority of women who have a properly performed induced abortion will not suffer any long term effects on their general or reproductive health [29]. In modern times, the risk of death 华中科技大学 博士学位论文 9 from a safe, induced abortion is lower than from an injection of penicillin [30] or carrying a pregnancy to term [31]. All of the available evidence indicates that surgically induced abortion, especially in early pregnancy, is a low-risk surgical procedure [32] [33] [34]. Abortion is an impressively safe procedure in countries where it is legal, accessible, and performed under modern medical conditions. ...

... The risk of complications increases with operator inexperience and gestational age and depends on the method chosen [33] [42]. ...

Termination of Pregnancy Effects on Subsequent Pregnancy Outcomes among Advanced Maternal Age...

[Thesis](#)

Jun 2013

● Omaima Zubair

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... Level of evidence: Very low). (Table 3) The complication rate of D&E is less than 1% before 16 weeks, [25][26] [27] 1% between 16 and 20 weeks, 1.5% over 20 weeks, increasing by 1% per week thereafter. [25][26][27] Mortality has decreased over time to 0.65 in 100 000. ...

... (Table 3) The complication rate of D&E is less than 1% before 16 weeks, [25][26][27] 1% between 16 and 20 weeks, 1.5% over 20 weeks, increasing by 1% per week thereafter. [25][26] [27] Mortality has decreased over time to 0.65 in 100 000. 28 The mortality rates for D&E were 2.5 times lower than those for MA, but this difference is not statistically significant. ...

No. 360-Induced Abortion: Surgical Abortion and Second Trimester Medical Methods

[Article](#)

Jun 2018

Dustin Costescu · ● Edith Raphaëlle Guilbert

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... Most of them relied on hospital data to trace the medical sequelae of abortion and therefore only examined the immediate postoperative period, typically the first 24 h. Because the patients were not followed up for longer period, complications that may have emerged later often have been omitted [23]. ...

... In a study by Ferris and colleagues [23] that examined post-abortion complications in Canadian (Ontario) abortion clinics via retrospective analyses of a provincial database of 83,469 abortions, the odds ratio for abortion complications was 1.3 (95% CI 1.02-1.63) between 9 and 12 weeks of gestation compared to the complications that occurred at <9 weeks and increased dramatically with further increase in gestational age. ...

Effects of gestational age and the mode of surgical abortion on postabortion hemorrhage and fever:...

Article [Full-text available](#)

Dec 2017 · [BMC Wom Health](#)

● Ekaterine Pestvenidze · ● Nino Lomia · ● Nino Berdzuli · ● Babill Stray-Pedersen

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... 18,19 Abortion care settings with less-experienced physicians have in some studies had higher rates of complications than those with only fully trained physicians. 20, 21 We carried out a prospective observational study in the clinical practices of 4 family medicine residency training programs and a general family medicine private office and training site to assess effectiveness and complication rates for first-trimester abortion care. Our aims were to determine success rates, to identify the nature and severity of adverse outcomes and complications encountered in family medicine practices, and to assess the ability to manage complications on site. ...

... 18 In contrast to previous studies, we found no evidence that either less-experienced physicians or the presence of physicians learning abortion techniques is associated with higher complication rates. 19, 20, 43 Our findings are important because they suggest that family physicians, following protocols and supervised by family medicine faculty who have completed training as described above, can safely learn and perform first-trimester abortions as part of family medicine outpatient care. Complications are also associated with less experience in settings that provide abortions after 12 weeks' gestation, which is beyond the limit of the present study and accounts for less than 10% of abortion care in the United States. ...

Early Abortion in Family Medicine: Clinical Outcomes

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Nov 2009 · [Ann Fam Med](#)

● Ian M Bennett · Margaret Baylson · Karin Kalkstein ·
Joan Fleischman

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... Women with unintended pregnancy of advanced gestation, and those with an abnormal pregnancy, are a small proportion of those seeking abortion services, but a significant proportion of those seeking service with the POS line (Figure 3). In Canada more than 90 percent of abortions occur before 12 weeks and fewer than 3% beyond 16 weeks [4, 14] as compared to the proportion of callers to POS with nearly 30% beyond 16-week gestation. The POS expertise in achieving access for women led to a high level of trust among local health system administrators and local health service providers. ...

Access to Complex Abortion Care Service and Planning Improved through a Toll-Free Telephone Resource Line

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Feb 2014

Barbara Hestrin · Royce Dueck · ● Wendy V. Norman

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... Factors associated with a higher risk of complications included procedures involving instillation of saline or prostaglandins and an advanced gestational age of greater than 20 weeks.
1 Uterine rupture can occur during pregnancy, during labor, postpartum, or after uterine instrumentation. Rupture most commonly occurs in the anterior lower uterine segment, including prior cesarean delivery scar sites. 2 Uterine perforation rates with surgical pregnancy termination range between 0.07% and 1.2%. ...

Sonographic Diagnosis of Extruded Fetal Parts From Uterine Perforation in the Retroperitoneal Pelvis After...

Article

Dec 2009 · [J Ultrasound Med](#)

Mandip Gakhal · Howard M Levy





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... The findings in this report indicate the majority of women obtaining abortions do so early in gestation (≤ 8 weeks), when the risks for complications are lowest (59)(60) (61) (62). Among the areas that reported gestational age data every year during 2005-2014, the percentage of abortions performed at ≤ 8 weeks' gestation increased 2%. ...

Abortion Surveillance - United States, 2014

[Article](#)

Nov 2018

 Tara C Jatlaoui ·  Jill Shah ·  Michele G Mandel ·  Karen Pazol

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... These infection rates are comparable to those reported by Niinimäki et al. 15 (1.7% of inpatient or outpatient hospital records); in contrast, Ferris et al. 16 in Ontario reported a post-operative infection rate of 4.7% (using clinic and hospital records), and Penney 8 in the United Kingdom reported infection rates of 4.6% to 6.8% using hospital and primary care follow-up reports. Among over 500 Chlamydia-positive women who received metronidazole but did not receive a specific anti-chlamydial agent at the time of the abortion, only one was known to have required admission for treatment of postoperative infection. ...

Metronidazole Prophylaxis Before Surgical Abortion: Retrospective Review of 51 330 Cases

[Article](#)

Jul 2012

 Wendy V. Norman

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... Abortion is known as a main cause of maternal mortality, life threatening complications such as hemorrhage, fever, and infection on one hand, and psychological disorders such as regret, guilt, smoking, alcoholism, self-destructive behaviors, and even suicide on the other(6 , 7, 8). ...

Psychological Consequences of Abortion among the Post Abortion Care Seeking Women in Tehran

[Article](#) [Full-text available](#)

Mar 2011

● Abolghasem Pourreza · ● Aziz Batebi

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... Abnormal early pregnancies have often been terminated by abortion, either spontaneously or with medical assistance [1e5]. Although the majority of them are uneventful [2], some may be complicated by a life-threatening situation, especially the occurrence of massive post-abortion hemorrhage (PAH) [4, 6] . Clinical experience in the management of PAH is limited, but the strategy used is often similar to the stepwise approach used in the management of postpartum hemorrhage (PPH), beginning with physiological attempts (massage and compression), then medication, and finally more invasive surgical interventions or radiologically invasive interventions (uterine artery embolization), such as defect repair, excision, pelvic vessel ligation, hysterotomy, or even hysterectomy [7, 8]. ...

Double-balloon cervical ripening catheter works well as an intrauterine balloon tamponade in post-abortion...

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Sep 2012

Kuan-Hao Tsui · Li-Te Lin · ● Ken Yu · ● Peng-Hui Peter Wang

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... are the provider's inexperience, an abnormal uterine cavity and/or an anteverted or retroverted uterus [13,1617 18 19. In addition, adolescents have a higher risk for cervical laceration because they usually have small, physiologically immature cervixes that are difficult to dilate202122. ...

Continuous controllable balloon dilation: A novel approach for cervix dilation

[Article](#) [Full-text available](#)Oct 2012 · [TRIALS](#)

Slobodan Arsenijevic · Gordana Vukcevic-Globarevic · ● Vladislav Volarevic · Branislav Jeremic

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... With an induced pregnancy termination rate of 19.7 per thousand women of reproductive age, New

Zealand joins the United States and the United Kingdom among the countries with high induced pregnancy termination rates [1,2]. Although TOP is a safe procedure when conducted under hygienic conditions by a trained provider, the risk for clinical complications increases with gestational age 34 5 6 . Studies in the USA and Denmark found that abortion-related mortality increases exponentially with additional weeks of gestation, and women who have an induced abortion in their second trimester are significantly more likely to die of related causes compared to women who had the procedure before or at 8 weeks [3]. ...

Ladies in waiting: The timeliness of first trimester services in New Zealand

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Jul 2010 · [Reprod Health](#)

● Martha Silva · ● Rob Mcneill · ● Toni Ashton

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... en 1972 le taux de décès était à 4,1 pour 100 000, (Koonin LM et al. 1997- Bartlett LA et al ., 2004). En Grande-Bretagne, les statistiques entre 1985 et 1996 retrouvent 9 décès après IVG (selon les Rapports sur des enquêtes confidentielles sur les décès maternels au Royaume-Uni : 1985-1987) et zéro décès sur 83 469 IVG Au Canada entre 1992et 1993 . (Ferris LE, et al., 1996 . En France, les complications et les décès suite aux IVG ont considérablement chuté depuis la légalisation de l'avortement, l'avortement médicalisé est une procédure extrêmement sûre. (Grimes DA, Creinin MD., 2004). ...

Profil Épidémiologique Des Avortements Provoqués Au Maroc (1992/2014)

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May 2018

● Amiar Latifa · ● Soumaia Hmimou · ● Abdelmajid Soulaymani · ● Abdelrhani Mokhtari

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... The findings in this report indicate the majority of women obtaining abortions do so early in gestation (≤ 8 weeks), when the risks for complications are lowest (59)(60) (61) (62). Among the areas that reported gestational age data every year during 2005-2014, the percentage of abortions performed at ≤ 8 weeks' gestation increased 6%. ...

Abortion Surveillance — United States, 2014

[Article](#)

Nov 2017

Jill Shah · Tara C Jatlaoui · Michele G Mandel · Karen Pazol

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... Rapid access to abortion care is important to reduce distress and complications associated with procedures undertaken at higher gestations. 2, 3 The Government's sexual health strategy states that no woman should wait longer than 3 weeks from the first appointment with the referring doctor to the procedure, 4 a standard supported by professional guidelines. 5 It is recognised that secondary care services are struggling to meet this target, but less is known about what scope exists to improve the primary care of women requiring abortion. ...

The Pathway to Induced Abortion: Women's Experiences and General Practitioner Attitudes

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Feb 2006 · J FAM PLAN REPROD H

Sarah Finnie · Robbie Foy · Jean Mather

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... The findings in this report indicate women are obtaining abortions earlier in gestation, when the risks for complications are lowest (51)(52) (53) (54). Among the areas that reported data every year during 2004-2013, the percentage of abortions performed at ≤8 weeks' gestation increased 4%. ...

Abortion Surveillance — United States, 2013

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Operative termination of pregnancy between 12 and 14 weeks'gestation: Influence of the operator's experience

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Jul 2005

Martin Koskas · Mehdi Jerbi · J. Boccara · Bruno Carbonne

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Incarceration of the appendix complicating a uterine perforation following surgical abortion: CT aspects

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A Dignac · S. Novellas · M. Fournol · P. Chevallier

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Young age and termination of pregnancy during the second trimester are risk factors for repeat second-...

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Apr 2010 · [Am J Obstet Gynecol](#)

Maarit Mentula · Maarit Niinimäki · Satu Suhonen · Oskari Heikinheimo

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Immediate complications of surgical abortion

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May 2006

C. Soulat · M. Gelly

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Cervical dilation before first-trimester surgical abortion (<14 weeks' gestation). SFP Guideline 20071

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Short-term complications after surgically induced abortions: A register-based study of 56 117 abortions

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● Weijin Zhou · ● Gunnar Lauge Nielsen · Margrethe Møller · ● Jørn Olsen

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May 2002 · [SOC SCI MED](#)

● Aya Goto · ● Seiji Yasumura · ● Michael R. Reich · Akira Fukao

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Particularités techniques de l'IVG instrumentale entre 12 et 14 semaines d'aménorrhée

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Medical abortion from 12 through 14 weeks' gestation: A retrospective study with 126 patients

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● Andreea A Creanga · Denise J Jamieson · Karen Pazol · Suzanne B Zane

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Apr 2006

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Platelet reactivity of aspirin and Clopidogrel in coronary artery disease patients with or without d...

July 2016

Suharjono · E.D. Wahyudi · A. Yunita · [...] ·  Bambang Zulkarnain

Background: Antiplatelet combination Aspirin (ASA) and Clopidogrel (CPG) has become part of therapeutic standard in patients with coronary artery disease (CAD). Thus, a decline in antiplatelet response due to platelet functional problem may be occurred among CAD patients with diabetes mellitus (DM). Objective: To evaluate ASA platelet reactivity (Aspirin Reactivity Unit=ARU) and CPG (Platelet ... [\[Show full abstract\]](#)

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Uncontrolled Hypertension In A Group Of Hypertensive Patients In Erbil ... [الدم ضغط عليه مسيطر](#)

January 2013

Bushra Baker Khidder · Kameran Hassan · M B B Ch · Directorate

الدراسة هذه في الدم ضغط ارتفاع با المصابين من مريض و اربيل مدينة في التعليمي رزكاري المستشفى في الخارجية للعيادات المراجعين. الا من الدراسة 400 هذه تمديد وتم سنة نيسان من ول 2011 الى 31 من آذار 2012. خاص استبيان باستعمال وذلك المرضى مع المباشرة المقابلة طريق عن البحث هذا في ... [\[Show full abstract\]](#)

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High Court backs limits on protest at abortion clinic

August 1994 · The New York times

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Prevalence of Peripheral Arterial Disease among Adult Patients Attending Outpatient Clinic at a Gene...

May 2016

● Feliciano Chanana Paquissi · Arminda Bimbi Paquissi Cuvinje · Almeida Bailundo Cuvinje

Background. Peripheral arterial disease (PAD) is a common manifestation of atherosclerosis, whose prevalence is increasing worldwide, and is associated with all-cause mortality. However, no study has assessed this disease in Huambo. The aim of this study was to evaluate the prevalence of PAD in patients attending an outpatient clinic at a general hospital in Huambo, South Angola. Methods. A ... [\[Show full abstract\]](#)

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