

ABORTION

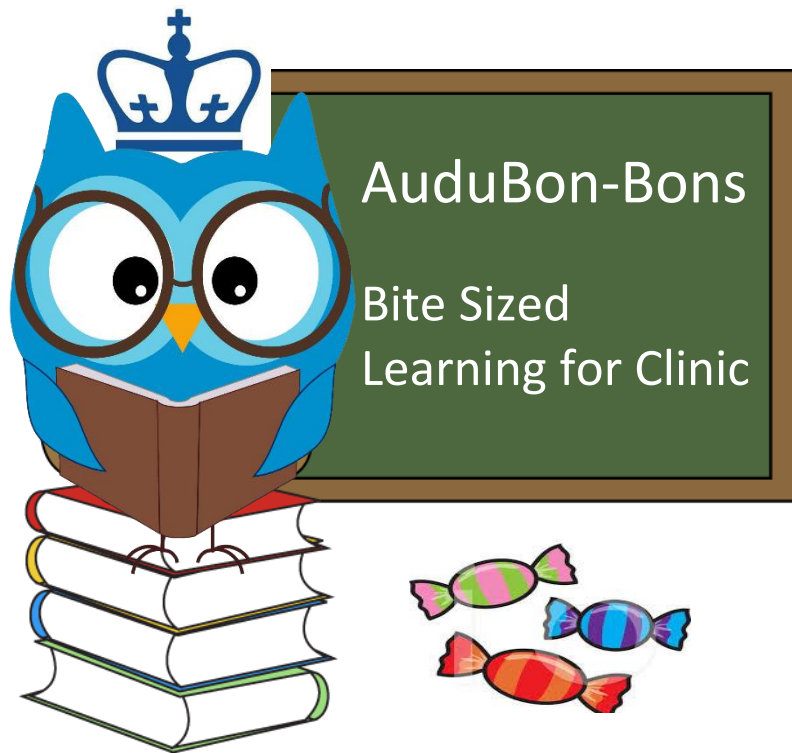
Week 54

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With SDH and .phrase slides by Chloé Altchek, MS4

Reading Assignment:

ACOG Committee Opinion #612, “Abortion Training and Education,” November 2014



LEARNING OBJECTIVES

- Learn pertinent epidemiological details regarding induced abortion in the United States
- Understand currently available options for induced abortion
- Understand the risks/benefits/alternatives for each type of induced abortion



CASE VIGNETTE

Patient is an 18 yo G4 P0030 woman at 8w4d EGA by LMP who presents to clinic with an undesired pregnancy. She reports minimal spotting and cramping 3 weeks ago but is currently asymptomatic.

She states that her partner and family are not supportive of her obtaining an abortion, but she strongly desires termination of pregnancy.



FOCUSED HISTORY

What will be pertinent in her history?

- **POBH:** 3 x VTOP (MVA)
- **PGYNH:** Menarche at 11 yo; regular monthly cycles; denies STIs; using COCs consistently
- **PMH:** Denies
- **PSH:** 3 x MVA
- **FH:** Denies
- **SH:** No toxic habits; unemployed; monogamous relationship; denies IPV; lives with a friend and feels safe
- **Meds:** None
- **All:** NKDA



PERTINENT PHYSICAL EXAM FINDINGS

What will be pertinent in her physical exam?

VS: P 80 BP 90/60 **Wgt:** 80 kg **Hgt:** 166cm **BMI:** 29.0 kg/m²

- **General:** NAD, well-appearing
- **Bedside transabdominal ultrasound:** **CRL c/w 8w0d**, +FHR 150s



BACKGROUND

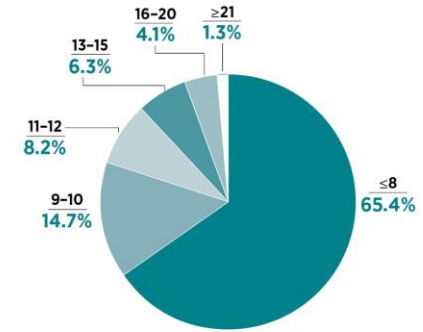
- Abortion is one of the most frequently performed procedures in the United States
 - **24%** of women will have at least 1 abortion by the age of 45
 - 6 in 10 women who have had an abortion have had at least 1 birth
 - US abortion rate: 11.6 abortions per 1000 women aged 15-44
 - 7% decline since 2014
- **51%** of pregnancies are unintended
 - 27% end in birth
 - 24% end in elective abortion



BACKGROUND

WHEN WOMEN HAVE ABORTIONS

In 2016, two-thirds of abortions occurred at eight weeks of pregnancy or earlier, and 88% occurred in the first 12 weeks.



www.guttmacher.org

- **When do the majority of abortions occur?**
 - Within the **1st 12 weeks**
 - Only 4% occur after 16 weeks, and 1.3% after 21 weeks
- **Who has abortions?**
 - **EVERYONE** (2014-39% white, 28% black, 25% Hispanic, 6% Asian/PI, 3% other)
 - 75% of patients are from low-income socioeconomic backgrounds
 - 62% of patients identify with a religious affiliation
 - Women with a college education have the lowest abortion rates and have had the greatest decline in abortion rates since 1994 (30%)
- **Why do women obtain abortions after 16 weeks?**
 - Unaware of pregnancy (71%), difficulty making arrangements for abortion (48%), afraid to tell parents/partner (33%), decision ambivalence (24%), fetal abnormalities unable to be detected earlier in pregnancy (2%)



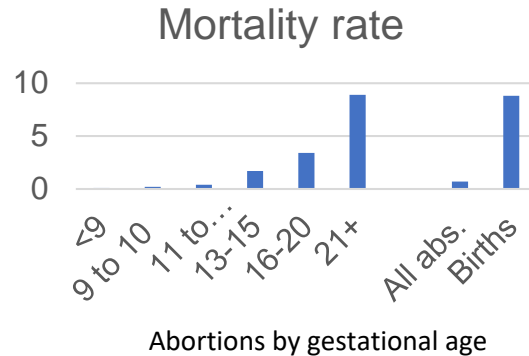
BACKGROUND

- **What is the mortality rate for abortion?**

- **0.69/100,000 abortions**

- **How does abortion-related mortality rate change with increasing gestational age?**

- It increases:



	Mortality rate
Medication abortion	0.41/100,000
<8 weeks GA	0.1/100,000
9-10 weeks GA	0.2/100,000
11-12 weeks GA	0.4/100,000
21+ weeks GA	8.9/100,000

- **How does abortion-related mortality rates compare to mortality rates associated with pregnancies continued to birth?**

- The risk of death when a pregnancy is continued to birth is 12 times as great the risk of death from induced abortion

TAKE HOME POINT: Abortion is one of the safest medical procedures available



First Trimester Medical Abortion

Regimen

- In-office: Mifepristone 200 mg PO
- 24-48 hours later: misoprostol 800 mcg buccally at home
- RTC 1-2 weeks for assessment and provision of contraception

Advantages:

- performed w/o delay
- avoid risks of surgery/anesthesia
- increases availability

Disadvantages

- higher risk of failure
- more bleeding
- more time

Mechanism of action

- Mifepristone: progesterone receptor agonist/antagonist that causes 1) decidual necrosis, 2) separation of placenta, 3) sensitization to prostaglandins, 4) cervical ripening

Contraindications

- Ectopic, severe anemia (<9), on anticoagulation, porphyria, chronic adrenal failure, long-term corticosteroid use, IUD in situ,

First Trimester Surgical Abortion

Advantages

- 99% effective (more than medical abortion)
- less time (15 minutes on average)
- Early termination has less morbidity/mortality than procedures later in gestation

Disadvantages:

- surgical and anesthesia risks

Procedures

- Manual vacuum aspiration (<=10 weeks)
- Electric vacuum aspiration (10+ weeks)

Cervical Preparation

- Generally for patients 10 weeks or greater: misoprostol 600 mcg PV x 1.5 hours prior to procedure (or 400 mcg PV 3 hrs prior)

Anesthesia Options

- Local (paracervical block)
- Moderate Sedation
- General anesthesia

Contraindications

- any surgical contraindications
- uterine anomalies/fibroids

Second Trimester Medical Abortion

Advantages

- Avoid surgical risks
- In patients at risk of having complicated procedures -Allows viewing/holding of fetus
- Allows intact fetus for fetopsy

Disadvantages

- Unpredictable timing
- Increased risk of hemorrhage (0.7% vs 0.1-0.6% in D&E), retained placenta (8% vs < 1%)
- Uterine rupture

Regimen

Box 1: Regimens for Second-Trimester Medical Abortion

- Mifepristone, 200 mg, administered orally, followed in 24–48 hours by
 - Misoprostol, 800 micrograms, administered vaginally, followed by 400 micrograms administered vaginally or sublingually every 3 hours for up to a maximum of five doses.*
 - Misoprostol, 400 micrograms, administered buccally every 3 hours for up to a maximum of five doses also may be used.
- If mifepristone is not available:
 - Misoprostol, 400 micrograms, administered vaginally or sublingually every 3 hours for up to five doses.* Vaginal dosage is superior to sublingual dosage for nulliparous women.
 - A vaginal loading dose of 600–800 micrograms of misoprostol followed by 400 micrograms administered vaginally or sublingually every 3 hours may be more effective.
- If misoprostol is not available:
 - Oxytocin, 20–100 units, infused intravenously over 3 hours, followed by 1 hour without oxytocin to allow diuresis. Oxytocin dosage may be slowly increased to a maximum of 300 units over 3 hours.¹

<https://www.fda.gov/media/72923/download>

Second Trimester Surgical Abortion

Advantages

- Decreased duration of procedure/timing
- Best in conditions requiring an expedited course

Disadvantages

- Surgical/anesthesia risks
- No viewing of remains

Cervical Preparation

- Laminaria (1-2 days) (At CUIMC, 20+ wks, require 2 days of lams, 14-19+6 require 1 days of lams)
- Dilapan
- +/- misoprostol

Procedures

- Dilation and evacuation
- (Hysterotomy/hysterectomy, only with failed attempts at medical IOL/D&E or if these are contraindicated)

Anesthesia options

- Heavy sedation
- General anesthesia
- Regional anesthesia



COMPLICATIONS

- **What are the complications associated with 1st trimester medical abortion and how do you manage them?**
 - **Failure (3-5%)**, increases w/ increasing gestational age, includes both incomplete abortion and true failure (i.e., ongoing pregnancy, which has a lower rate of ~2%)
 - Medical (misoprostol) and surgical management for incomplete Abs
 - Surgical management for ongoing pregnancies
 - **Infection (0.09%)**
 - Rule out retained products of conception with surgical evacuation as indicated
 - Antibiotic treatment
 - Risk factors: cervicitis
- **What are the complications associated with surgical abortion?**
 - Infection (<2%)
 - Incomplete abortion (<2%)
 - Cervical laceration (<1.2%)
 - Uterine perforation (<0.4%)
 - Hemorrhage (<0.3%)
 - Asherman's syndrome (<0.0002%)



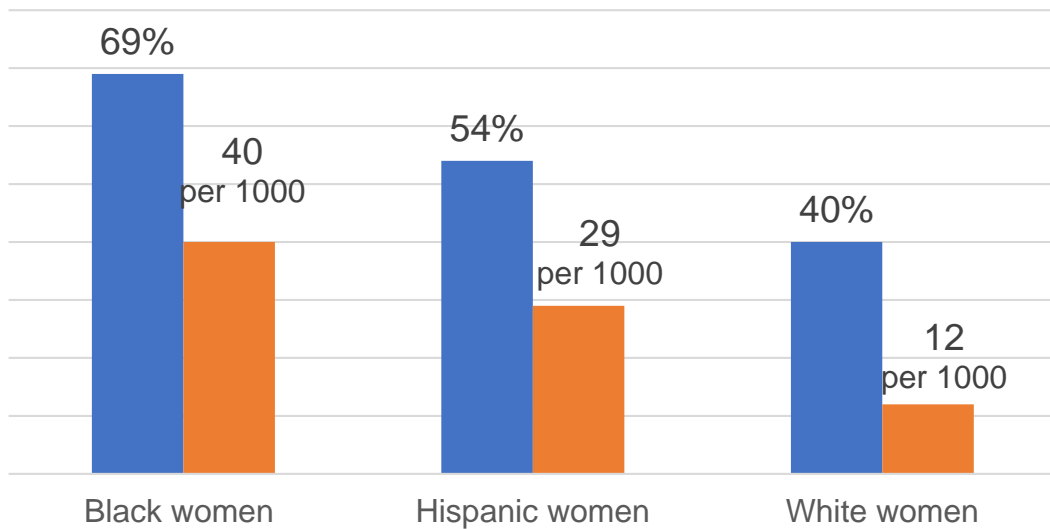
CLINICAL EVALUATION AND MANAGEMENT

- Assess eligibility (i.e., history)
- Confirm pregnancy and gestational age
- Obtain appropriate lab tests (Rh status; GC/CT per CDC recommendations-i.e., not universal)
- Options counseling
 - Assess patient goals/desired experience
 - Discuss gestational age limit (can differ by site, state, etc.)
 - **At CUIMC, the limit (thus far) is 23+6 weeks EGA**
 - Nondirective
 - Informed consent
 - Contraceptive counseling
- Antibiotic prophylaxis (surgical only) = Doxycycline 200 mg PO x 1 pre-operatively
- Procedure
 - Type (med/surg)
 - Setting (inpatient/outpatient)
 - Provision of contraception
 - RhoGAM as indicated (within 72 hours)
- Follow-up
 - Confirm uterine evacuation (esp. with med vtop)
 - Contraception provision (remember, Nexplanon can be provided with mifepristone on day of administration)



SOCIAL DETERMINANTS OF HEALTH

Disparities in rates of abortions and unintended pregnancies



% of pregnancies that are unintended # of abortions per 1000

Disparities in abortion rates mirror rates of unintended pregnancies (which are tied to lower rates in contraception use and higher rates in contraceptive failure).

Abortion insurance coverage in NY state:

- Medicaid covers cost of abortion
- Undocumented or temporary non-immigrants can receive Emergency Medicaid coverage

Consequences of unintended birth:

- increased risk of detrimental prenatal parental behaviors (substance use, lack of prenatal care)
- negative health and social outcomes for both mother and child (underemployment, behavioral issues)

PRO TIP!

Be sure to ask a patient what they are most worried about. Many will have concerns about the fetus feeling pain, or how this will affect their ability to conceive in the future, for example.



EPIC .PHRASE

.BBonAbortionCounseling

Description: Abortion Counseling

@AGE@ @GP@ @ *wk*d by US today who desires termination of pregnancy. The patient's goals and desired experience regarding the pregnancy were elicited. Options including continuing the pregnancy, adoption and termination of pregnancy were discussed. Options for termination were also discussed including ***D&C or medication abortion for GA ≤ 10 wks/***D&E for GA 10w0d-23w6d and the associated risks and gestational age limits of each. Future contraceptive options were also discussed.



CODING AND BILLING

- **ICD-10**
 - **Z33.2**, Encounter for Elective Termination of Pregnancy
- **CPT**
 - **59840**, Dilation and curettage, induced abortion
 - **59841**, Dilation and evacuation, induced abortion



EVIDENCE

- Grimes DA, 2006, Estimation of pregnancy related mortality risk by pregnancy outcome, U.S., 1991-1999. *Am J Obstet Gynecol.* 2006 Jan; 194(1):92-4.
- Bartlett et al. Risk factors for legal induced abortion-related mortality in the United States. *Obstet Gynecol.* 2004 Apr; 103(4): 729-37.
- Jatlaoui TC, Eckhaus L, Mandel MG, et al. Abortion Surveillance — United States, 2016. *MMWR Surveill Summ* 2019;68(No. SS-11):1–41. DOI: [http://dx.doi.org/10.15585/mmwr.ss6811a1external icon](http://dx.doi.org/10.15585/mmwr.ss6811a1external_icon).
- [Jones, et al. Abortion incidence and service availability in the United States, 2017. Guttmacher Institute. 2019 Sept; 1-22.](#)
- National Academies of Sciences, Engineering, and Medicine. 2018. *The Safety and Quality of Abortion Care in the United States*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24950>.
- Steinhauser J. Overview of pregnancy termination. Barbieri R ed. UpToDate. Waltham, MA: UpToDate, Inc. <https://www.uptodate.com/contents/overview-of-pregnancy-termination>, accessed Dec 2019.
- Bartz D et al. First-trimester pregnancy termination: medication abortion. UpToDate. Waltham, MA: UpToDate, Inc. <https://www.uptodate.com/contents/first-trimester-pregnancy-termination-medication-abortion>, accessed Dec 2019.
- Hammond C. Overview of second-trimester pregnancy termination. UpToDate. Waltham, MA: UpToDate, Inc. <https://www.uptodate.com/contents/overview-of-second-trimester-pregnancy-termination>, accessed Dec 2019.
- <https://www.guttmacher.org/fact-sheet/induced-abortion-united-states>
- Medical management of first-trimester abortion. Practice Bulletin No. 143. ACOG. *Obstet Gynecol* 2014; 123:676-92.
- Second-trimester abortion. Practice Bulletin No. 135. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2013;121:1394– 1406.
- Prevention of infection after induced abortion. SFP Clinical Guideline 20102. Society of Family Planning. *Contraception* 2011; 83: 295-309.
- Surgical abortion prior to 7 weeks of gestation. SFP Clinical Guideline 20132. Society of Family planning. *Contraception* 2013; 88: 7-17.
- Dehlendorf C, Harris LH, Weitz TA. Disparities in abortion rates: a public health approach. *Am J Public Health.* 2013;103(10):1772-1779. doi:10.2105/AJPH.2013.301339

