First-trimester Aspiration Abortion

Andrea Jackson, MD, MAS
Assistant Professor of Obstetrics, Gynecology and Reproductive Sciences
University of California, San Francisco
Learning Objectives

• Epidemiology of 1st trimester abortion in the United States
• Safety of 1st trimester abortion
• How to perform suction aspiration
Epidemiology of 1st Trimester Abortion in the United States
Incidence of Abortion

• Abortion is one of the most common surgical procedures in the US
• 1.21 million abortions per year in US
• By age 45, ~1/3 of all US women will have had an abortion
Most abortions occur in the first trimester.
Abortion Safety... in Perspective

Mortality, per 100,000 women:

- Aspiration abortion in 1\textsuperscript{st} Trimester........0.7
- Penicillin.................................................................2.0
- Term Pregnancy.......................................................11.8
Techniques of Aspiration Abortion in the 1st Trimester
Overview of Aspiration Abortion in the 1st Trimester

• Manual uterine aspiration (MUA)

• Electric uterine aspiration (EUA)
MUA versus EUA: which is better?

- Manual v. electric: no difference - complication (2.5% vs. 2.1%)\(^1\), pain, provider or pt. satisfaction\(^2,3\)

<table>
<thead>
<tr>
<th></th>
<th>EUA in OR</th>
<th>MUA in ER</th>
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<tbody>
<tr>
<td>Wait time (↓52%)</td>
<td>7.14 hrs</td>
<td>3.45 hrs</td>
</tr>
<tr>
<td>Procedure time</td>
<td>33 min</td>
<td>19 min</td>
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<tr>
<td>Total cost (↓41%)</td>
<td>$1,404</td>
<td>$827</td>
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</tbody>
</table>

\(^1\)Goldberg 2004 Ob Gyn; \(^2\)Dean, Contraception 2003; \(^3\)Edelman A. Ob Gyn 2001;184:1564; \(^4\)Blumenthal 1992 IJOG; \(^5\)Raush Fertil Steril 2012.
Basic Steps for Aspiration Abortion

- Counseling
- History, physical exam, confirmation of IUP
- Medication
- Positioning, clean cervix, para-cervical block
- Cervical dilation
- Aspiration
- Evaluation of products
- Observation, contraception, Rhogam
Sharp curettage should no longer be used for abortion.

- Increased risk for major **complications**
- **Slower** procedure
- More **blood loss**
Antibiotics for Prevention of Infection

• Infection after induced abortion is low, 1%
• Doxycycline
  – Inexpensive, rarely cause allergic reactions
• Our practice
  – Doxycycline 100mg, then 100mg 12 hours later
  – Azithromycin 1gm
Cervical Preparation

- Preoperative preparation
  - Misoprostol, osmotic cervical dilators
  - 3-4 hours pre-procedure
- WHO
  - Cervical priming for all women younger than 18 years old
  - Nulliparous women >9 weeks
  - All women >12 weeks
Summary

• Majority of abortions occur in the first trimester
• Complications from first trimester abortion are rare
• Abortion with sharp curettage should not be performed
• Aspiration abortion is a simple, safe procedure