Outpatient Management of Early Pregnancy Loss

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Nothing to Disclose
Session Objectives

• **Define** contemporary terms used to describe EPL

• **Describe** 3 methods of outpatient management of EPL

• **Discuss** perceived benefits of outpatient management of EPL

• **Explore** best practice strategies for providing support to women experiencing EPL

• **Identify** key elements needed to apply patient-centered strategies for EPL management
Early Pregnancy Loss is Common

- 15-30% of All Pregnancies
- 1 million annually in US
- 1 in 4 lifetime risk

Gina, age 22

- LMP 8 weeks ago (definite, normal menses, had an early sono that confirmed IUP)
- + Mild cramping and vaginal bleeding x 2 days
- Exam: Vital signs stable. Speculum: Blood, no tissue, os slightly open
- Ultrasound: Thickened, heterogenous endometrium; no gestational sac
Incomplete

Retained Products of Conception

Davis P C et al. Radiographics 2002;22:803-816
Breaking the news to Gina: what are the key counseling points?
What are Gina’s miscarriage management options?
Management Options for EPL

Do nothing at home: Expectant management
Do something at home: Medication management
Do something in the office: Aspiration Management

Women with first trimester miscarriage should have the choice of expectant management or an intervention (uterine aspiration or misoprostol)

Expectant Management

**Benefits**
- Cost, avoid procedure, “more natural”

**Risks**
- Rare: Infection, hemorrhage
- Failure of miscarriage to resolve

**Contraindications**
- Infection, excessive blood loss
- Patient preference
## Success of Expectant Management

<table>
<thead>
<tr>
<th>Type of Miscarriage</th>
<th>N</th>
<th>Complete Day 7</th>
<th>Complete Day 14</th>
<th>Complete Day 49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete</td>
<td>221</td>
<td>117 (53%)</td>
<td>185 (84%)</td>
<td>201 (91%)</td>
</tr>
<tr>
<td>Missed</td>
<td>138</td>
<td>41 (30%)</td>
<td>81 (59%)</td>
<td>105 (76%)</td>
</tr>
<tr>
<td>Anembryonic</td>
<td>92</td>
<td>23 (25%)</td>
<td>48 (52%)</td>
<td>61 (66%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>451</td>
<td>181 (40%)</td>
<td>314 (70%)</td>
<td>367 (81%)</td>
</tr>
</tbody>
</table>

Patient Instructions for Expectant Management

Soak more than 2 pads in an hour for 2 hours in a row

Sustained temperature $>100.4^\circ F$

Severe pain that does not respond to analgesics
Gina, one week later

- A week later, she says that her bleeding has stopped and she no longer feels pregnant.
- A repeat ultrasound shows a normal endometrium.
Completed Pregnancy Loss

US shows no IUP

Appropriate decrease in B-HCG

Patient’s symptoms
Jennifer, age 27

- Presents for prenatal care
- LMP 10 weeks ago, certain of her dates
- The pregnancy has been uncomplicated except for a small amount of bleeding she had about 3 weeks ago
- No fetal heart tones audible
Embryonic demise

8 week IUP, No cardiac activity

“Embryonic Demise”
Evolving language among clinicians

- Blighted ovum
- Inevitable abortion
- Threatened abortion
- Missed abortion

Suggested contemporary terms

• Based upon pathophysiology of implantation and embryonic development
• Not dependent on clinical exam of cervix
• Combination of patient symptoms correlated with ultrasound findings
Characterizing Pregnancy

EPL → Incomplete Miscarriage → Complete EPL/Miscarriage

Missed Abortion
- “Anembryonic Pregnancy”
- “Embryonic Demise”

Retained Products of Conception

Allison J, Rev Obstet Gyencol 2011
What will you discuss with Jennifer in regards to her miscarriage?

After hearing her options, she decides she does not want treated with instruments, wants it over at a predictable time – decides to take misoprostol.
Medication management of miscarriage

Misoprostol for early pregnancy loss
Misoprostol for Miscarriage

Common Protocol

• 800 mcg vaginally or buccally with repeat in 24 hours if incomplete

Alternative Protocols

• 600 mcg oral, 400 mcg sublingual
• Repeat doses q 24 hours vs. q 3 hours

Zhang et al. NEJM, 2005.
Guidelines for Misoprostol Use for EPL

- Clear diagnosis
- Rule out ectopic pregnancy because medical treatment for ectopic pregnancy differs from miscarriage treatment
- 10 weeks or under by ultrasound
- Testing: Ultrasound, Rh screen, hematocrit, quantitative serum hCG (not always needed if ultrasound diagnosis is definitive)
## Completion of Miscarriage:
Expectant Management versus Misoprostol

<table>
<thead>
<tr>
<th></th>
<th>Expectant Management (%)</th>
<th>Misoprostol (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>By Day 7</td>
<td>By Day 14</td>
</tr>
<tr>
<td>Incomplete</td>
<td>53%</td>
<td>84%</td>
</tr>
<tr>
<td>Embryonic Demise</td>
<td>30%</td>
<td>59%</td>
</tr>
<tr>
<td>Anembryonic Gestation</td>
<td>25%</td>
<td>52%</td>
</tr>
<tr>
<td>Total</td>
<td>40%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Adapted from Prine, L. *Am Fam Physician.* 2011.
Side Effects of Misoprostol

- Bleeding
- Cramping
- Fevers and/or chills
- Nausea and vomiting
- Diarrhea
Patient Instructions: EPL with Misoprostol

- Soak more than 2 pads in an hour for 2 hours in a row
- Sustained temperature $>100.4^\circ F$ ($> 24$ hours after misoprostol)
- Severe pain that does not respond to analgesics
Lisa, age 34

- Definite LMP 9 weeks ago
- Has had intermittent spotting x 1 week
- No pregnancy symptoms
- Exam: Uterus consistent with 6 week exam, os closed
- Ultrasound: Empty sac
Early Pregnancy Loss

“Anembryonic Pregnancy” or “Empty Sac”
What can you tell Lisa about her management options based on the category of miscarriage?
Lisa, continued

- After hearing her options, Lisa decides she would like to have a procedure because she would like this “over with” as soon as possible.
“Surgical” Options

Vacuum aspiration uses flexible or rigid plastic cannula

Sharp curettage (D&C) no longer an acceptable option due to higher complication rates

Cochrane Review 2001 (1)CD001993
Uterine Aspiration

Manual Vacuum Aspirator

Electric Vacuum Aspirator
MVA Instruments and Supplies
Advantages to Office MVA

- Avoid repeated exams that occur in hospital
- Cost
- Avoid cumbersome OR protocols (NPO requirements, discharge criteria)
- Reduced wait time
- Personalized care
- Convenience, privacy, patient autonomy

Resources Available

Protocols, Patient Educations, Supply Lists

• Reproductive Health Access Project (RHAP)

http://www.reproductiveaccess.org/m_m/index.htm

• Reproductive Health Education in Family Medicine (RHEDI)

http://rhedi.org/clinicians.php
Summary

- Management of first trimester pregnancy complications can be done in an outpatient setting.
- Expectant management, medical treatment or aspiration procedure are appropriate with EPL: patient choice is key.
- Education and close follow-up are essential for medical & expectant management.
- Incomplete abortions are more likely to have successful expectant management than delayed pregnancy loss (missed abortions/anembryonic pregnancies.)
11. Forna F, Gulmezoglu AM. Surgical procedures to evacuate incomplete abortion. Cochrane Database Syst Rev. 2001(1);CD001993
Getting in the Door

Strategies for integrating uterine evacuation into restrictive environments

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Linda Prine, MD
Robin Wallace, MD, MAS
Disclosures

• No disclosures for Linda Prine or Robin Wallace

• Deborah VanDerhei
  • Training and education consultant for Danco Laboratories, LLC
Learning Objectives

• Articulate how spontaneous abortion training can provide an entry to implementing uterine evacuation services in anti-choice environments

• Respond to common staff and system (e.g. FQHC) concerns about implementing miscarriage services

• Identify web-based tools and resources for implementing miscarriage management services
Access to quality health care
Training, Education & Advocacy in Miscarriage Management (TEAMM)
SOUTH CAROLINA WELCOMES YOU
Acknowledgements

• Blair G Darney, PhD, MPH
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• Teams we left at home
• Washington State Department of Health
• Anonymous Foundation
Miscarriage Care in a Community Health Center

Linda Prine MD
Providing miscarriage care in primary care is important.

It’s part of the family medicine scope of practice
- OB skills
- Family planning skills

Better for patients
- Pregnancy loss can be traumatic
- Explanations needed
- Options needed

Lowers health care costs
Mainstreaming Women’s Health Care

• Family Planning
  – Procedures: implant insertion, IUD insertion

• Miscarriage
  – Expectant care
  – Medication
  – Aspiration

• Abortion
  – Pill
  – Aspiration
Need to get staff on board

- Surveys – see where everyone is at, let them know that change is coming
- Values clarification exercises
- Champions
- Administrative support
- Education
Sometimes need a “team” to take ownership
Instrument Packs
Two Sinks: Regulatory Barriers
Miscarriage Management

The following documents are available as Word documents (editable and printer-friendly) and in PDF format (non-editable and printer-friendly). Patient education materials are available in multiple languages to distribute to your patients.

Guidelines

Evaluating first trimester bleeding algorithm: 

- Misoprostol for Treatment of Incomplete Abortion and Miscarriage
- Misoprostol for Treatment of Incomplete Abortion and Miscarriage
- Policy and Procedure for MVA for Miscarriage
- Protocol for treatment of Miscarriage with misoprostol

Patient Education Materials

- Miscarriage Management Using Medications
- Miscarriage Management with an Aspiration Procedure
- What are my choices for treating my miscarriage?

Forms

- MVA Consent Form

Teaching & Training Tools

- Curriculum:
  - CORE (Curricula Organizer for Reproductive Health Education)
  - Society of Family Medicine Resource Library

Administrative/Other

- Ipas Start-up Kit for Integrating Manual Vacuum Aspiration (MVA) for Early Pregnancy Loss into Women's Reproductive Health Care Services
- Miscarriage Management Resource Guide by Provide
- MVA Supplies
MVA – the last step?

- **Training**: Easy to adopt if trained in “D&C”
- **Equipment**: MVA syringe ($30 reusable) and suction cannula ($1 each)
- **Ultrasound**: can be used for many purposes, and clearly saves patients many trips to the ER or to radiology
Other barriers

• Administrators: can we bill for this?
• Nursing: will this be bloody?
• Staff: what is the difference between this and abortion?

Answer: this is part of the Patient Centered Medical Home, our patients need this care.
EPL: eLearning for Pregnancy Loss

An innovative web-based approach to learning miscarriage management
EPL – a new online curriculum

• Comprehensive miscarriage management curriculum
  – Video-based
  – Self-directed
  – For trainees and current providers (CME credit)
  – Real video and animation of MVA procedure
eLearning for Pregnancy Loss

• Team of authors
  – Jody Steinauer, UCSF OB-GYN
  – Robin Wallace, UCSF Family & Community Medicine (Dallas)
  – Vanessa Dalton, U.Michigan OB-GYN
  – Felicia Lester, UCSF OB-GYN
  – Madeline Blodgett, project manager

• Advisory Board
EPL: Content Outline

- Six core modules
  - Evaluation and Diagnosis
  - Counseling
  - Expectant + Medication Management
  - Uterine Aspiration
  - Practice Integration
  - Low-resource Settings
Decision-making for Miscarriage Management

- Qualitative research with semi-structured interviews (N=22)
- To describe patient experiences with miscarriage management counseling
- To develop potential interventions to improve counseling for miscarriage management
Research conclusions

- Women want unbiased and comprehensive counseling about options.
- Miscarriage diagnosis is a critical time to initiate discussions of management.
- Women weigh personal priorities to make these decisions.
- Use of a decision aid may offer a systematic counseling approach for a patient-centered decision-making process.
Patient Treatment Priorities for Miscarriage

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.
Learning Module Demonstration