Managing Early Pregnancy Loss: A Preference-sensitive Decision

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Part 1: EPL Diagnosis and Counseling
Objectives

1. To apply evidence-based principles to EPL diagnosis
2. To review the evidence for patient preferences for EPL management
3. To apply evidence-based counseling principles for EPL management options
Early Pregnancy Loss (EPL)

• 1 in 4 women will experience EPL in her lifetime
• 15-20% of clinically recognized pregnancies
• Includes all non-viable pregnancies in first trimester = Miscarriage
EPL Presentation

• Urgent or emergency care visit
  – vaginal bleeding
  – abdominal or pelvic pain or cramping
  – passage of pregnancy tissue from the vagina
  – loss of pregnancy-related symptoms

• Incidental clinical finding
  – Bimanual exam inconsistent with LMP
  – Ultrasound suggestive of EPL
Patient Case: Presentation

Maya is a 26 yo G1P0 presenting to the emergency room.

“I’m 2 months pregnant and I’m bleeding! Am I going to lose the baby?”

How do we care for Maya?
EPL Evaluation: Patient-Centered Approach

• Use open-ended questions and allow for silence.
• Inquire about pregnancy intention.
• Address feelings of guilt.
• Keep patient informed throughout the diagnostic process.
EPL Evaluation:
Open Communication During Diagnosis

“They never said the word ‘miscarriage,’ I did....I felt like I had to drag it out of them....I said....what does that mean? What are the next steps?”
EPL Evaluation: Exam and Diagnostics

• Physical exam
  – Vital signs
  – Abdominal and pelvic exam

• Ultrasound
  – Transvaginal preferred for diagnosis

• Lab
  – Rh factor
  – Hemoglobin or Hematocrit
  – β-hCG when indicated
Patient Case: H&P

• Maya’s sure LMP was 9 weeks ago.
• She had a positive UPT in clinic 2 weeks ago.
• This is a desired pregnancy.
• Her first prenatal care visit is scheduled for next week (she has not had an ultrasound yet this pregnancy).
• Her bleeding is like a “light period” for the past 3 days.
• On exam her cervical os is closed.
• She is Rh-negative.

What can we tell Maya right now?
Bleeding in Early Pregnancy

• Keep the patient informed.
  – Provide reassurance that not all vaginal bleeding & cramping signifies miscarriage, but avoid guarantees that “everything will be all right”...

• What does the bleeding mean?
  – 50% ongoing pregnancy rate with closed cervical os
  – 85% ongoing pregnancy rate with viable IUP on sono
  – 30% of normal pregnancies have vaginal bleeding
EPL – Making the Diagnosis

Clinical diagnosis:
- Spontaneous abortion
  Vaginal bleeding + IUP, <20 wks
  threatened, inevitable, incomplete, complete

Ultrasound diagnosis:
- Anembryonic gestation
  Gestational sac without embryonic pole
- Embryonic demise
  Embryo with no cardiac activity
EPL – Making the Diagnosis

1. Ultrasound confirmation
   - anembryonic gestation
   - embryonic or fetal demise
2. Absence of a previously seen IUP on ultrasound
3. Declining β-hCG levels and a clinical history consistent with EPL
4. Tissue confirmation of an expelled gestational sac
β-hCG Utility in EPL Diagnosis

1. Discriminatory Level
   • Serum β-hCG at which a normal IUP can be visualized on ultrasound
   • Transvaginal threshold = 2000 – 3000 mIU/ml

2. Appropriate decline after EPL completion
   ~ 50% in 48 hours
## Ultrasound Milestones

<table>
<thead>
<tr>
<th>Normal IUP findings</th>
<th>When should you see it?</th>
<th>Abnormality if landmark is absent</th>
</tr>
</thead>
</table>
| **Gestational Sac** | Discriminatory Level β-hCG = 2000-3000 | Completed EPL  
Multiple gestation  
Ectopic pregnancy |
| **Yolk sac**        | MSD > 13-16 mm           | Suspicious for EPL               |
| **Fetal pole**      | MSD ≥ 25mm  
(≥ 21 mm = 99% certainty) | Anembryonic gestation            |
| **Cardiac activity**| CRL ≥ 7mm  
(≥ 5.3 mm = 99% certainty) | Embryonic demise                 |
| **Interval growth** | 1 mm/day  
(over 3-7 days)  | Confirmed EPL                    |

Doubilet, et al, 2013
Anembryonic Gestation

GS 2.53 cm 7w5d
Patient Case: Embryonic Demise

Maya’s ultrasound:

CRL = 10.8mm, EGA = 7 weeks + 3 days
EPL Management

• Four options for the clinically stable patient
  1. Aspiration w/ general/deep sedation (operating room)
  2. Aspiration w/ local/moderate sedation (office-based)
  3. Medication (misoprostol +/- mifepristone)
  4. Expectant care

• All methods are effective, with equivalent safety and patient acceptability = clinical equipoise

NSFG 2004; Chen 2007; Wieringa-de Waard, 2002; Zhang 2005; Trinder 2006
EPL Management: A Preference-Sensitive Decision

- Best choice for management reflects the woman’s values and preferences
- Patients have strong and widely divergent preferences
  - Report higher satisfaction when treated according to patient’s preference

Wieringa-de Waard 2002; Dalton 2006; Smith 2006
EPL Management Practices in the U.S.

- Expectant
- Misoprostol
- Office aspiration
- OR

Adapted from Dalton 2010
EPL Management Options: Patient-centered Counseling

“I think sometimes doctors have you do things or they prescribe things to you that are unnecessary....I like the way it was presented to me...as options, and they were optional, they weren't necessary or required.”
EPL Management: Patient Priorities

- Pain
- Time
- Complications
- Safety
- Bleeding
- Privacy
- Anesthesia
- Past Experience
- Finality
Patient Case: Counseling

- Maya was given her diagnosis of embryonic demise as quickly as possible and she is now ready to discuss treatment options.

How do we counsel her about EPL management?
Shared Decision-Making

1. Provider presents all relevant medical information
2. Patient provides information about personal circumstances, values, and priorities
3. Provider also discusses preferences while acknowledging personal values and biases
4. Decision is reached
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**
- 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**
- 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**
- 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**
- Least amount of pain possible
- Experience symptoms of bleeding and cramping in private
- Least amount of bleeding

**Past Abortion or Miscarriage (if applicable)**
- Different treatment from previous
- Similar treatment to previous
EPL Evaluation and Counseling: Summary

- EPL evaluation includes a thorough history with open-ended questions and a pertinent physical exam.
- Transvaginal ultrasound allows precision in EPL diagnosis.
- β-hCG levels are useful when an IUP is not seen on ultrasound.
- Patient-centered care includes counseling that recognizes patient priorities and values to make a treatment decision.