

Early Pregnancy Loss (Miscarriage) Management Workshop

Pre-test

1. Definitive diagnosis of early pregnancy loss can be made if (select all that apply):
 - a. The patient is having heavy bleeding and says she "passed tissue at home"
 - b. Ultrasound shows a gestational sac with a 4mm embryo (crown rump length) without a fetal heartbeat
 - c. Products of conception are seen on speculum exam
 - d. An intrauterine pregnancy was previously seen on ultrasound and is now no longer seen on ultrasound

ANSWER: c and d. "Passing tissue at home" is not reliable because the endometrial cast (vaginal bleeding) from an ectopic pregnancy can look like "tissue." Definitive diagnosis can be made if products of conception (gestational sac and villi) are seen by the provider, or if a previously seen pregnancy is no longer visible by ultrasound. While a fetal heartbeat can sometimes be seen as early as 2 mm crown rump length (CRL), an early pregnancy loss cannot be definitively diagnosed until the CRL is at least 7mm without a visible fetal heartbeat.

2. What signs or symptoms would prompt you to refer a patient with first trimester bleeding to the Emergency Room (select all that apply)?
 - a. Cramping and bleeding, after a normal dating ultrasound 2 weeks ago
 - b. Lightheadedness
 - c. Dizziness
 - d. Cramping and bleeding, with no prior ultrasound in this pregnancy (no confirmed intrauterine pregnancy), and point of care or same day ultrasound is not available

ANSWER: b, c, d. If there is concern about ectopic pregnancy and definitive testing can't be done in the office, or if there are any signs or symptoms of acute blood loss, patients should be referred to the emergency room for evaluation. In the absence of these red flags, first trimester bleeding can often safely be managed in the office, and most patients do not need to be referred to the Emergency Room.

3. Which of the following are acceptable treatments for early pregnancy loss (select all that apply):
 - a. Expectant management, or "wait and see"
 - b. Medical management with misoprostol
 - c. Medical management with mifepristone and misoprostol
 - d. Uterine aspiration in the office using local anesthesia
 - e. Uterine aspiration under sedation

ANSWER: All of the above are safe options. It is best to allow women to select a treatment option, because mental health outcomes are better when women are involved in the decision-making process. Mifepristone/misoprostol is more effective (84%) than misoprostol alone (67%).

4. Which of the following are true regarding bHCG levels (select all that apply):
- a. In early, viable, intrauterine pregnancies, bHCG levels should increase by at least 49% every 48 hours
 - b. In a normal pregnancy beyond 9 weeks gestation, bHCG levels may plateau or drop, instead of rising regularly
 - c. bHCG levels should always be followed to zero after early pregnancy loss
 - d. bHCG levels should be followed to zero in cases of first trimester bleeding where pregnancy location cannot be confirmed (pregnancy of unknown location)

ANSWER: a, b, and d are all true. bHCG levels will increase steadily until approximately 9 weeks gestation, when the levels may decrease in normal pregnancies. In the case of a documented intrauterine pregnancy, completed early pregnancy loss can be documented by a decrease in bHCG of >80% after passage of tissue. There is no need to monitor bHCG levels further after completed early pregnancy loss has been confirmed. During management of pregnancy of unknown location, when ectopic pregnancy has not been excluded, most providers will follow bHCG levels to zero, due to the ongoing risk of rupture even at low bHCG levels.

5. Every patient with an early pregnancy loss should have the following labs (select all that apply):
- a. Antiphospholipid antibody
 - b. Hemoglobin
 - c. Rh factor
 - d. Pap smear
 - e. Pathology evaluation of the passed tissue
 - f. STD testing

ANSWER: b and c. Baseline hemoglobin is helpful at the time of early pregnancy loss diagnosis because it can aid future evaluation of prolonged or excessive bleeding. Rh status should also be checked, unless previously known, and Rh negative women should receive microRhogam 50 mg IM. Pap smears and STI testing should be done only as indicated for routine screening based on age and risk factors. Antiphospholipid antibody and tissue pathology are indicated in the workup of recurrent pregnancy loss, but do not need to be done after a first early pregnancy loss.

6. In a patient with a size/dates discrepancy (when the size of the uterus on bimanual exam doesn't match the expected size based on LMP), you should consider (select all that apply):
- a. Ectopic pregnancy
 - b. Error in report of LMP
 - c. Uterine flexion
 - d. Early pregnancy loss
 - e. Multiple gestations

Answer: All of the above. Ultrasound and bHCG levels can aid in diagnosis.

7. How often does expectant management work for incomplete early pregnancy loss?
- 0-25% of the time
 - 25-50% of the time
 - 50-80% of the time
 - >80% of the time

ANSWER: d. The success rate of expectant management is 80 to 99% for incomplete early pregnancy loss, when vaginal bleeding has already started. If bleeding hasn't yet begun at the time of diagnosis, ultrasound findings can be used to help guide patients about their management options. Success rates are lower (75%) for treating a missed pregnancy loss (fetal pole or yolk sac is seen but no heartbeat) with expectant management. For anembryonic pregnancies (when no fetal pole or yolk sac is seen), expectant management is least successful, around 66%. Most studies show that passage will occur in the first 2 weeks, however there appears to be no additional risk to prolonging expectant management as long as the patient would like. Most women get tired of waiting during prolonged expectant management, and ask for an intervention.

8. Women should be told which of the following regarding the cause or early pregnancy loss (select all that apply):
- The most likely cause is a chromosomal abnormality that would not have allowed the pregnancy to develop normally
 - Nothing they did caused the pregnancy loss
 - There is nothing they can do to stop an early pregnancy loss once it has begun: there is no evidence for bedrest
 - Most women go on to have normal pregnancies after having an early pregnancy loss

ANSWER: all of the above are true. While there are risk factors for early pregnancy loss (smoking, cocaine use, excess caffeine or alcohol use, uncontrolled DM), none of these can be said to definitively have caused pregnancy loss in any individual as many, many pregnancies continue despite presence of these risk factors and pregnancy loss is very common in the absence of any risk factors. The time of an early pregnancy loss is not the best time to review healthy lifestyle issues; these are best discussed at office visits for preconception care.

9. A patient presents in early pregnancy with intense cramping and light bleeding. During an exam, you find an open cervical os which is distended with tissue.

True or false: The best treatment to relieve her cramps is to remove the protruding tissue with a ring forceps.

Answer: True. The pregnancy is no longer viable, and the pain of cervical dilation from the tissue passing can be intense. Gently removing the tissue with a ring forceps will likely relieve the pain and allow the uterus to pass the rest of the tissue on its own.