

Management of Abnormal Pregnancies

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A 27 yo woman presents to the ED complaining of vaginal bleeding. Her LMP was approximately 6 weeks ago and she tells you that her home pregnancy test was positive two days ago. On exam, her cervical os is closed and she has some dark blood in her vaginal vault. Her hct is 39%, her uCG is positive and her serum β -hCG is 4,500mIU/mL. On pelvic ultrasound you see an irregular, intrauterine gestational sac measuring about 2.5 cm but no fetal pole.

What is her diagnosis?

More than likely this patient has a missed abortion. Signs of an abnormal gestation by transvaginal ultrasound include the following:

1. Mean Gestational Sac Diameter (MGSD) greater than 16mm without an embryo
2. MGSD greater than 13mm without a yolk sac
3. No fetal heart activity in an embryo with a CRL greater than 5mm
4. Yolk sac without an embryo by 6 wks gestation
5. No gestational sac by 6wks gestation
6. Markedly distorted gestational sac
7. Visualization of amnion without an embryo

A gestational sac should be visualized by transvaginal ultrasound by 1,000 - 1,200mIU/mL, a yolk sac should be visualized by 7,200 mIU/mL and an embryo with cardiac activity should be visualized by 10,800 mIU/ mL.

How do you counsel the patient about her treatment options?

As discussed before, it is important to discuss with the patient about whether the pregnancy wanted or not. If the pregnancy is wanted, it is reasonable to bring the patient back in 48hrs for a repeat serum β -hCG. If the repeat β -hCG does not rise appropriately, thus confirming an abnormal pregnancy or if the pregnancy was not planned and you have made the diagnosis of an abnormal pregnancy, you can offer the patient expectant management, medical management or surgical management.

With expectant management, you should counsel the patient that she will eventually pass the products and she will experience symptoms similar to a miscarriage with heavy bleeding and cramping. The process may take up to 4 weeks to be completed. You should bring this patient back for follow-up in 2-4 wks

With medical management, you may offer the patient Misoprostol (Cytotec) which she can take according to the following research based protocol:

- FDA regimen for medical abortion: Misoprostol, 400 mcg PO with repeat dose 10 days later if there are retained products, specifically retained gestational sac.
- Evidence- based protocol: Misoprostol, 800mcg sublingual or vaginal with repeat dose 10-14 days later if there is persistent products

With both protocols, the effective rate of expulsion is about 80 to 90% with one dose and over 90% with two doses. About 2-5% of patients may require surgical uterine evacuation after two doses of Misoprostol. Most patients will deliver within 24-72hrs,

although the process can take up to 10- 14 days. The bleeding subsides within about 7- 10 days and over 90 % of patients stop bleeding after 2-3 weeks. The most common side-effect of Misoprostol include: nausea (36-67%), headache (13-32%), vomiting (13-34%), diarrhea (8 to 23%), dizziness (12 to 37%) and fever or chills (4 to 37%). Side effects are slightly increased in patients who take the drug orally. Contra-indications to Misoprostol include: allergy to Misoprostol or other prostaglandin, uncontrolled seizure disorder and acute inflammatory bowel disease.

With surgical management is chosen, then give the patient a prescription for Misoprostol 400 mcg sublingual, which she will need to take the day of her procedure to ripen her cervix and facilitate the dilation of her cervix. The procedure can be in an outpatient setting, using 1 % lidocaine without epinephrine as a paracervical block, to be administered in the cervix at 12, 4 and 7 o'clock. Suction curettage is performed using a plastic curette and vacuum pressure. Choose a curette that is one size smaller than the estimated gestational size of the uterus.

Remember to offer the patient rhogam if she is Rh-negative and at least 6 wks pregnant.

A 35yo patient is referred to you with a missed abortion at 13 weeks. On pelvic exam, her cervical os is closed and she is not bleeding. Her hct is 35% and she has no symptoms. Prior to counseling the patient, you repeat a transvaginal ultrasound confirming the presence of a fetus with a CRL consistent with 13 wks and no cardiac activity.

What management options can you offer this patient?

Once again you can counsel the patient about expectant and surgical management.

Although Misoprostol has been used in second trimester pregnancy failures using the following protocols:

- 400 mcg PO, every 4 hours until expulsion is completed
- 200mcg intravaginally every 12 hours until expulsion is completed.

Both protocols require hospital admission. These patients are better served by using Misoprostol as a cervical ripening agent and undergoing surgical uterine evacuation since they are at increased risk of bleeding and treatment failure due to their advanced gestational age.

References

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