EM CASE OF THE WEEK.

BROWARD HEALTH MEDICAL CENTER
DEPARTMENT OF EMERGENCY MEDICINE

BROWARD HEALTH
Care Warriors

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Third Trimester Bleeding

A 32-year-old G2P1 female at 32 weeks gestations age presents to the emergency department with significant vaginal bleeding that has soaked through her clothes. She has no past medical history and denies any recent trauma, contractions, or leakage of fluids. She denies any cramping or abdominal pain. Her last sexual intercourse was a week ago. She has not had any prior episodes of bleeding. Her previous child was born full term via c-section with no complications. Vital signs are within normal limits. Physical examination reveals normal heart and lung sounds, and an abdomen that is soft and nontender. Fetal heart tones are heard and within normal limits. What is the next best step in management of this patient?

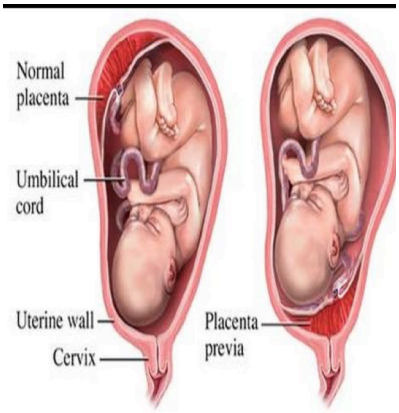
A. Immediate induction of labor

B. Transabdominal ultrasound

C. Digital and speculum examination

D. Observation and expectant management

E. Transfusion of packed red blood cells



Placenta previa is when the placenta is implanted on the lower portion of the uterine segment that is over or near the internal cervical os.

The left image shows a normal lying placenta whereas the right image shows a placenta implanted over the os.

Incidence is higher in multiple gestations because the placenta is larger.

EM Case of the Week is a weekly "pop quiz" for ED staff.

The goal is to educate all ED personnel by sharing common pearls and pitfalls involving the care of ED patients. We intend on providing better patient care through better education for our nurses and staff.

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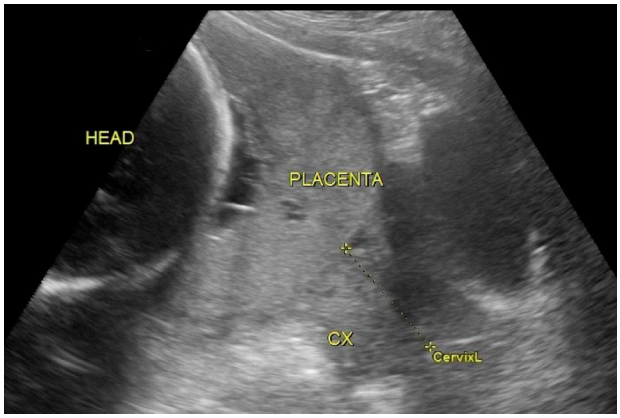
The correct answer is B. Placenta previa must be ruled out in all cases of vaginal bleeding that presents beyond 20 weeks gestations. Therefore, the first step in management of a hemodynamically stable patient is to get an ultrasound to visualize the location of the placenta. Digital or speculum examination can result in severe hemorrhage. Therefore, if the location of the placenta is unknown prior to presentation, it is important to get a transabodminal ultrasound done before a transvaginal ultrasound.



Discussion:

Placenta previa is a cause of second and third trimester bleeding and must always be excluded. It is defined when the placenta gets implanted over the internal cervical os.

Complications of placenta previa include preterm labor and intrauterine growth restriction. This is because the upper portion of the uterus where the placenta normally implants is rich in blood, nutrients, and oxygen. Other complications include maternal blood loss.

Risk factors include advanced maternal age, multiparty, multiple gestations, history of prior placenta previa, and history of c-section and uterine surgery.

Signs and symptoms vary but the classic presentation is painless vaginal bleeding that tends to occur after sexual intercourse. If bleeding is severe enough, maternal tachycardia and hypotension may occur secondary to blood loss.

Management:

The first step in management of a patient with placenta previa is to assess for hemodynamic stability. Patients showing signs of acute blood loss will require transfusion of packed red blood cells. Therefore CBC and type and cross is necessary to obtain.

If the patient is not actively bleeding but has a confirmed diagnosis of placenta preiva, pelvic rest and repeat ultrasound is the mainstay treatment. If at 36 weeks, the previa has not resolved, assess fetal lung maturity and proceed with c-section.

If the patient is over 37 weeks with recurring episodes of bleeding or hemodynamic instability, a cesarean section is the treatment of choice.

If the patient is less than 37 weeks with persistent and recurring episodes of bleeding, they are usually admitted for observation. Serial hemoglobin and hematocrit is generally used to assess blood loss. If less than 34 weeks, steroids are administered for lung maturity.

Placenta previa generally resolves spontaneously as the pregnancy progresses. If the placental edge is 2cm or greater from the edge of the cervical os, vaginal delivery can be attempted.

For a list of educational lectures, grand rounds, workshops, and didactics please visit ***BrowardER.com*** and **click** on the ***"Conference"*** **link**.

All are welcome to attend!

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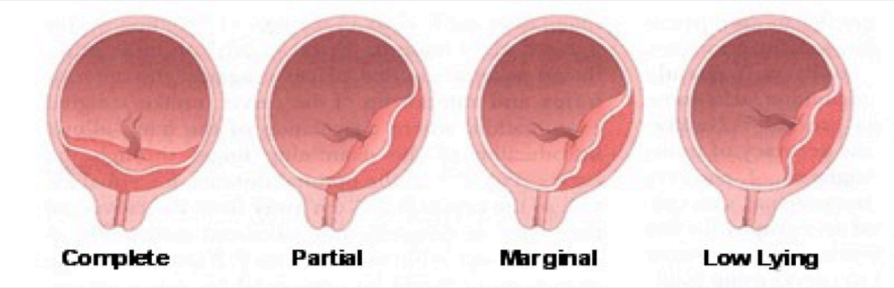
Types of Placenta Previa

Type	Description
Complete	The placenta covers the entire cervical os.
Partial	The placenta partially covers the cervical os.
Marginal	The edge of the placenta is at the edge of the internal os.
Low-Lying	The placenta implants in the lower uterine segment but does not reach the cervical os.



Complete placenta previa usually requires an emergency cesarean section.

Vaginal delivery may be possible in marginal placeta previa.

A low lying placenta often times moves upward as the pregnancy progresses.

Take Home Points

- Placenta previa should be suspected in any pregnant female beyond 20 weeks of gestation that presents with painless vaginal bleeding.
- The diagnostic study of choice to confirm placenta previa is the ultrasound and should be preformed prior to digital or speculum examination.
- Risk factors include prior placenta previa, multiple gestations, prior cesarean section, and multiparity.
- Placenta previa secondary to prior c-section increases the risk for placenta accreta.

ABOUT THE AUTHOR

This month's case was written by Lorin Berman. Lorin is a 4th year medical student from NSU-COM. She did her emergency medicine rotation at BHMC in July 2017. Lorin plans on pursuing a career in OBGYN after graduation.

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