Rationale: Spontaneous abortion is a common and often distressing complication of early pregnancy. An accurate and prompt diagnosis is warranted.

Intended Learning Outcomes:

A student should be able to:

- Develop a differential diagnosis for first trimester vaginal bleeding
- Differentiate the types of spontaneous abortion (missed, complete, incomplete, threatened, septic)
- List the causes of spontaneous abortion
- List the complications of spontaneous abortion
- Discuss treatment options for spontaneous abortion

TEACHING CASE

CASE: A 32 year-old G1 woman presents with a positive urine pregnancy test at 9 weeks 4 days from start of last normal menstrual period. She reports 5 days of moderate painless vaginal bleeding and chills. Physical examination shows a temperature of 101.5° orally, pulse 95, and BP 95/60 with normal bowel sounds, no rebound, and 5/10 suprapubic tenderness. Pelvic exam shows moderate amount of blood in vagina with a closed 5/10 tender cervix and an 8/10 tender uterus. No adnexal masses or tenderness.

Lab data shows a serum β-β-hCG level of 6,500 mIU/ml and ultrasound shows a gestational sac in the uterus with no fetus seen. The ovaries and tubes appear normal.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:

Competencies addressed:
- Patient Care
- Medical Knowledge
1. What are the different types of spontaneous abortion?

2. Which type or types is most likely in this case and why?

3. Why does this patient have a fever and tenderness and what needs to be done about it?

4. If this patient was 6 weeks pregnant with no fever or tenderness, had an \( \beta \)-hCG level of 700 mIU/ml and a negative ultrasound with no evidence of a gestational sac, what would be your differential diagnosis if she had a small amount of bleeding and no fever or tenderness?

5. How would you make the diagnosis in question 4?

6. For a patient with any type of abortion, what blood test is essential to do?

7. What are the causes of spontaneous abortion?

8. What are treatment options for spontaneous abortion?

REFERENCES
