

*UNIT 2: OBSTETRICS*  
*SECTION B: ABNORMAL OBSTETRICS*

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# Educational Topic 16: Spontaneous Abortion

**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  $\beta$ - $\beta$ -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

- Beckman CRB, et al. *Obstetrics and Gynecology*. 7th ed. Philadelphia: Lippincott, Williams & Wilkins, 2013.
- Hacker NF, Moore JG, et al. *Essentials of Obstetrics and Gynecology*. 5th ed. Philadelphia: Saunders, 2010.