

**UNIT FOUR: REPRODUCTIVE ENDOCRINOLOGY, INFERTILITY &
RELATED TOPICS**
**EDUCATIONAL TOPIC 45: NORMAL AND ABNORMAL UTERINE
BLEEDING**

Rationale: The occurrence of bleeding at times other than expected menses is common. Accurate diagnosis of abnormal uterine bleeding is necessary for appropriate management.

Intended Learning Outcomes:

The student will demonstrate the ability to:

- Define the normal menstrual cycle and describe its endocrinology and physiology
- Define abnormal uterine bleeding
- Describe the pathophysiology and identify etiologies of abnormal uterine bleeding
- Discuss the steps in the evaluation of abnormal uterine bleeding
- Explain medical and surgical management options for patients with abnormal uterine bleeding
- Counsel patients about management options for abnormal uterine bleeding

TEACHING CASE

CASE: A 45 year-old G2P0020, with LMP 21 days ago, presents with heavy menstrual bleeding. Prior to 6 months ago her cycles came every 28-30 days, lasted for 6 days, and were associated with cramps that were relieved by ibuprofen. In the last 6 months there has been a change with menses coming every 25-32 days, lasting 7-10 days and associated with cramps not relieved by ibuprofen, passing clots and using 2 boxes of maxi pads each cycle. She is worried about losing her job if the bleeding is not better controlled. She denies dizziness, but complains of feeling weak and fatigued. Her weight has not changed in the last year. She denies any bleeding disorders or reproductive cancers in the family. She uses condoms for contraception. She takes no daily medications and has no other medical problems. She is married and works in a factory.

On exam, BP=130/88; P= 100; Ht=5'6'; Wt=150 pounds. She appears pale. Pelvic exam shows normal vulva, vagina and cervix; normal size, mildly tender, mobile uterus; non-tender adnexae without palpable masses. Labs show Hgb: 9.0, HCT: 27%, HCG: negative, Endometrial biopsy: normal secretory endometrium, Pelvic ultrasound: heterogeneous myometrium, endometrial lining 1.4cm and irregular consistent with endometrial polyp, normal ovaries.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:

Competencies addressed:

- Patient Care
- Medical Knowledge
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

1. What are the parameters of a normal menstrual cycle?

2. Describe the normal endocrinologic and physiologic events that make the menstrual cycle possible.

3. What is the definition of abnormal uterine bleeding?

4. What possible etiologies could cause this patient's bleeding?

5. Which of these etiologies is associated with anovulation?

6. Discuss the mechanism for anovulatory bleeding

7. How can you tell if this patient is having ovulatory cycles?

8. What further tests would indicate if there was an anatomic problem?

9. Describe 3 possible medical and 2 possible surgical therapies.

10. What are important considerations when counseling the patient and helping her choose the best option for her.

REFERENCES

ACOG Practice Bulletin 14, Management of Anovulatory Bleeding, March 2000.

Beckman CRB, et al. *Obstetrics and Gynecology*. 6th ed. Philadelphia: Lippincott, Williams & Wilkins, 2009.

Hacker NF, Moore JG, et al. *Essentials of Obstetrics and Gynecology*. 5th ed. Philadelphia: Saunders, 2010.