

Educational Topic 42 & 43: Puberty & Amenorrhea

Student Handout

Clinical Case:

A 26-year-old G₂P₂ woman presents because of no periods for 9 months. She delivered two full term healthy children vaginally and their ages are 5 and 3. She breastfed her youngest for 1 year, menses returned right after she stopped, and were monthly and normal until 9 months ago. She is not using any contraception, although intercourse is infrequent. She feels very fatigued, has frequent headaches and has had trouble losing weight. She has no history of abnormal Paps or STI's. She takes no medications. She is married and works from home as a computer consultant. On exam, BP= 120/80, P= 64, Ht= 5'8", Wt= 160 pounds. She appears tired but in no distress. Breasts show scant bilateral milky white discharge with manual stimulation. Breast exam reveals no masses, dimpling or retraction. Exam is otherwise normal, including pelvic exam. HCG is negative.

Discussion Questions:

1. Does this patient have primary amenorrhea, secondary amenorrhea or oligomenorrhea?
2. What is the differential diagnosis for this disorder?
3. What additional studies are needed?
4. Consider that this patient has a prolactin level of 130. The test, when repeated with the patient fasting is 100. What is your next step?
5. How would your next step differ if the patient had normal labs with an estradiol level of 30pcg/ml and an FSH of 2mIU. What treatment would you offer her? What is she at risk for?

References:

***Obstetrics and Gynecology* by Beckmann** 5th Edition, 2006; Chapter 36 *Amenorrhea and Dysfunctional Uterine Bleeding*. Pages 359-364.

***Essentials of Obstetrics and Gynecology* by Hacker and Moore** 4th Edition, 2004; Chapter 33 *Amenorrhea, Oligomenorrhea, and Hyperandrogenic Disorders*. Pages 398-408.

The absence of normal menstrual bleeding may represent an anatomic or endocrine problem. A systematic approach to the evaluation of amenorrhea will aid in the diagnosis and treatment of its cause.

The APGO Educational Objectives related to this topic are the following:

- A. Define amenorrhea and oligomenorrhea*
- B. Describe the etiologies of amenorrhea and oligomenorrhea*
- C. Describe the evaluation methods for amenorrhea and oligomenorrhea
- D. Describe the treatment options for amenorrhea and oligomenorrhea
- E. Counsel patients who decline therapy

*Designated as Priority One in the APGO Medical Student Educational Objectives, 8th Edition

CLINICAL CASE:

A 15-year-old female comes in for exam because she has not had her period. She seemed to be developing normally and had normal breast development that started about 2 years ago; she has pubic hair. She met her developmental milestones and is of normal height and weight. She has not had any significant medical illnesses. Her ROS is negative and her family history is negative.

She is active in school and is a cheerleader. She works out with the team and runs. She does well in school. She lives at home with her mom, dad and sister. She does not currently have a boyfriend and has not been sexually active.

Physical exam

Normal appearing adolescent, 100/60 with 130 lbs. and 5'7"

HEENT-WNL

Lungs-clear; heart-RRR no murmur or gallops; breast exam-Tanner 4 no abnormalities noted; ABD-Normal; EXT Genitalia- appears normal with pubic hair Tanner 3; single digital exam done of the vagina and palpates a normal vagina; rectal exam was negative; uterus is palpated and feels to be normal size.

At this point, because her physical findings are considered to be WNL and it does not seem as if there is an anatomic reason for her amenorrhea and slight delay in pubic hair development that this likely just delayed puberty and reassurance can be given. However patient is sent home with prescription for Provera to determine if her endometrium is estrogen primed and therefore with intact pituitary and ovarian function.

Discussion Questions

1. What is the differential diagnosis for delayed puberty?
2. What is the normal sequence of maturational events?
3. Describe the Tanner Stages of breast and pubic hair development.

4. Describe the diagnostic approach to delayed puberty.