

UNIT FOUR: REPRODUCTIVE ENDOCRINOLOGY, INFERTILITY AND RELATED TOPICS EDUCATIONAL TOPIC 42: PUBERTY

Rationale: Puberty is a natural process which can generate concern in patients and families in its normal state. Abnormalities of puberty can be benign or may reflect a more serious underlying disorder. Correctly differentiating between these possibilities can have long-term health consequences.

Intended Learning Outcomes:

The student will demonstrate the ability to:

- Recognize the difference between normal and abnormal puberty
- Develop a differential diagnosis for abnormal puberty
- Describe the diagnostic evaluation for delayed puberty
- Provide treatment options for delayed puberty

TEACHING CASE

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 3 years ago and she has pubic hair. She met her developmental milestones in childhood 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 reports she has a boyfriend but has not been sexually active.

Physical exam:

- Well appearing
- 100/60 with 130 pounds and 5 feet 7 inches tall
- Breast exam: appear symmetric, areola are darkened bilaterally with nipple continuous with the areola
- Abdomen: soft, non-tender, no masses
- External Genitalia: soft straight hair covering the mons but not extending to the thighs

COMPETENCY-BASED DISCUSSIONS & KEY TEACHING POINTS:

Competencies addressed:

- Patient Care
- Medical Knowledge

1. What Tanner stage is this patient?

2. What is the normal process of puberty in girls?

3. What is the differential diagnosis for this patient's presentation?

4. What key test must be performed first?

5. What further history must be elicited?

6. What further studies will help refine the diagnosis?

7. If all lab studies are normal which medication can be used to induce menses?

REFERENCES

Clinical Gynecologic Endocrinology and Infertility, 5th Edition, 1994; Chapter 11
Abnormal Puberty and Growth Problems (377-386).

Beckman CRB, et al. *Obstetrics and Gynecology*. 6th ed. Philadelphia: Lippincott,
Williams & Wilkins, 2009. Chapter 34 Puberty (309-313).