

## *UNIT 4: REPRODUCTIVE ENDOCRINOLOGY, INFERTILITY & RELATED TOPICS*

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# Educational Topic 44: Hirsutism and Virilization

**Rationale:** Androgen excess causes short and long-term morbidity, and may represent serious underlying disease.

**Intended Learning Outcomes:**

A student should be able to:

- Recognize normal variations and abnormalities in secondary sexual characteristics
- Define hirsutism and virilization
- Describe pathophysiology and identify etiologies of hirsutism
- Describe the steps in the evaluation and initial management options for hirsutism and virilization
- Describe how hirsutism and virilization are manifested in other medical disorders

### TEACHING CASE

**CASE:** A 25 year-old G0 woman presents with increased hair growth on the face, particularly the upper lip, chin and neck. Her menses started about age 13, occur every 2-4 months and have never been regular. She noted the onset of facial hair around menarche, and it has gradually increased. She has been shaving twice a week and using electrolysis when she can afford it. She wonders about her fertility. She has no allergies and takes no medications.

LMP was 2 months ago. Duration is 7-10 days with heavy flow for 3 days. She has been sexually active and is using condoms for contraception. No prior abnormal pap smears or STIs.

Social history is remarkable for occasional alcohol and no recreational drugs or smoking. She is a bus driver. Family history is remarkable for mother with irregular cycles, obesity, diabetes, hypertension and similar facial hair growth, and sister with obesity, irregular cycles, and similar facial hair growth.

On physical exam, her weight is 204 pounds, height is 5 feet, 3 inches, BP 120/80. She is noted to have terminal hair on the upper outer 1/3 of her lip, few sparse hairs in the sideburn area and chin, midline terminal hairs on the chest and in the periareolar area, and obese abdomen without striae. Terminal hair is noted in a vertical band below the umbilicus. Normal external genitalia are present. Uterus is anteflexed, anteverted, midline and normal size. Adnexae are without palpable masses.

**COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:**

Competencies addressed:

- Patient Care
- Medical Knowledge
- Systems-based Practice

1. What is the differential diagnosis for the patient's hirsutism based on the history and physical examination alone, and what is the most likely diagnosis?
2. What additional evaluation would you recommend?
3. For what short and long term health concerns is this patient at high risk?
4. What would you recommend to minimize these risks?
5. Outline a management plan for helping the patient achieve pregnancy.
6. What is virilization and how would the management change if virilization was present?

REFERENCES

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