Adolescent With Suspected Hirsutism

Suggestive history and physical findings	Initial laboratory and/or radiologic work-up can include:	When to refer	Items useful for consultation	Additional information
Symptoms/signs: • Excessive terminal hair growth in locations typically seen in adult males (face, sternum, lower abdomen, back, and thighs) • Can be associated with other signs associated with androgen excess, such as acne and irregular periods • History of premature adrenarche may be present **Family history:** • Family history of hirsutism and/or polycystic ovarian syndrome (PCOS) may be present Differential Diagnosis	**Blood tests:** • Total and free testosterone (assay for women and children) • DHEAS • Androstenedione • 17 OH progesterone • TSH **Radiologic studies:** • Pelvic ultrasound for very elevated testosterone levels **Other tests to consider after consultation with Pediatric Endocrinologist:** • Prolactin • ACTH stimulation test for androgens	**Urgent:** **Concern for tumor:** • Total testosterone >200 ng/dl • DHEAS >700 mcg/dl **Concern for non classic CAH:** • Elevated 17 OH progesterone **Routine:** • Laboratory findings at or just above the normal ranges Find a Pediatric Endocrinologist	Previous growth data/growth charts Pertinent medical records Recent laboratory studies	Additional Information Polycystic Ovarian Syndrome: A Guide for Families References

Differential diagnosis of Hirsutism:

- Physiologic hyperandrogenism of puberty
- Idiopathic hyperandrogenism
- PCOS

  Less commonly:
- Congenital Adrenal Hyperplasia (CAH): late onset CAH, mild CAH, non classic/virilizing CAH
- Androgen secreting tumors of the adrenal glands or ovaries
- Hypothyroidism
- Cushing's disease
- Severe hyperprolactinemia
- Hypertrichosis
- Exposure to androgenic drugs

Additional Information:

- Hirsutism affects 5–10% of reproductive-aged females
- Diagnosis of hyperandrogenism can be based on clinical symptoms or measurement of serum androgens. In females, androgens originate from three primary sources: (1) the ovarian theca, (2) the adrenal cortex, and (3) within end organs by peripheral conversion.

The American College of Obstetricians and Gynecologists makes the following recommendations and conclusions:

- Pelvic ultrasonography is not routinely indicated unless serum androgen levels or the degree of virilization is concerning for an ovarian tumor.
- Multimodal therapy is the most effective approach to the treatment of hirsutism; this includes lifestyle changes, physical hair removal, and androgen suppression or blockade with medication that slows or prevents new hair growth.
- If hormonal therapy is initiated, patients should be counseled that it may take >6 months before they see the benefits of treatment.
- Patients should be assessed at routine intervals (every 3–6 months) for adverse effects and response to treatment until their condition is stable; they then should be monitored annually.
- Monitoring serum androgens is not recommended.

Suggested References and Additional Reading:

https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Adolescent-Health-Care/Screening-and-Management-of-the-Hyperandrogenic-Adolescent?IsMobileSet=false

Author: Paola Palma Sisto

PES PEDIATRIC ENDOCRINE SOCIETY