

Child With Suspected Gynecomastia

Suggestive history and physical findings	Initial laboratory and/or radiologic work-up can include:	When to refer	Items useful for consultation	Additional information
<p><u>Symptoms/signs:</u></p> <ul style="list-style-type: none"> • Palpable subareolar breast tissue in male • Breast tissue may be asymmetric, unilateral, or bilateral but appear at different times <p>Link to Differential Diagnosis</p>	<p><u>Blood tests:</u></p> <ul style="list-style-type: none"> • Consider evaluation in prepubertal males or if pubertal males with significant breast tissue (after consultation with Pediatric Endocrinologist) <ul style="list-style-type: none"> ○ LFTs ○ LH, FSH* ○ Testosterone* ○ Estradiol* ○ DHEA-S ○ TSH, Free T4 ○ hCG ○ Prolactin ○ Karyotype <p><u>Radiologic studies:</u></p> <ul style="list-style-type: none"> • Testicular ultrasound if testicular mass or elevated hCG <p>*Pubertal laboratory tests should be obtained in the <u>early AM</u> using <u>sensitive pediatric assays only</u></p>	<p><u>Urgent:</u></p> <p>Prepubertal males</p> <p><u>Routine:</u></p> <p>Pubertal males with significant or rapidly enlarging gynecomastia</p> <p>Find a Pediatric Endocrinologist</p>	<p>Previous growth data/growth charts</p> <p>Pertinent medical records</p> <p>Recent laboratory studies</p>	<p>Additional Information</p> <p>Pubertal Gynecomastia: A Guide for Families</p> <p>References</p>

Differential diagnosis of gynecomastia:

- Pubertal gynecomastia
- Pseudogynecomastia due to obesity/lipomastia
- Hypogonadism
- Hyperthyroidism
- Exogenous exposures to lavender, tea-tree oil
- Medication Induced: Antipsychotics, Anabolic steroids, Alcohol or drugs of abuse including: marijuana, heroin, amphetamines
- Pathologic causes: hCG secreting tumors, testosterone or estrogen secreting tumors (Leydig cell tumor, adrenal tumor), liver disease (chronic)
- Breast masses: benign tumors (lipomas, neurofibromas, dermoid cysts), rarely carcinomas

Additional Information:

- Benign, pubertal gynecomastia is the most common cause of gynecomastia and occurs in up to 2/3 of normal pubertal boys, with the majority of pubertal gynecomastia self-resolving by completion of puberty.
 - Laboratory/radiologic evaluation is generally not needed in boys with suspected pubertal gynecomastia unless there is significant or rapidly changing breast development.
 - Boys with suspected pubertal gynecomastia should be monitored for rapid progression of breast development.
- Gynecomastia results due to relative imbalance between testosterone and estradiol levels, transient estradiol excess or increased sensitivity of breast tissue to estrogen.
- Gynecomastia can be commonly associated with Klinefelter syndrome.
- No good treatment options exist, regardless of cause. Once growth and puberty is complete, referral for cosmetic surgery may be considered.

Suggested References and Additional Reading:

- Question From the Clinician: Adolescent Gynecomastia. *Peds in Review*. 2003 Sep; 24(9): 317-319. doi: 10.1542/pir.24-9-317
- Nordt CA, DiVasta AD. Gynecomastia in adolescents. *Curr Opin Pediatr*. 2008 Aug;20(4):375-82. doi:10.1097/MOP.0b013e328306a07c.

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