**INTRODUCTION**

Precocious puberty (PP) is traditionally defined as development of secondary sexual characteristics before age 8 in girls and before age 9 in boys. Incidence of central PP 1/5000-1/10,000; idiopathic causes more common in girls, organic causes more common in boys.

Variations of normal growth and development which do not need evaluation include:

- **premature adrenarche** (early onset of pubic hair and/or body odor)
- **premature thelarche** (nonprogressive breast development under age 2)
- **lipomastia** (apparent breast development which is really adipose tissue)

[http://pediatrics.aappublications.org/content/pediatrics/137/1/e20153732.full.pdf](http://pediatrics.aappublications.org/content/pediatrics/137/1/e20153732.full.pdf)

**INITIAL EVALUATION AND MANAGEMENT BY PRIMARY CARE**

Think about **true precocious puberty** when you see:

- progressive breast development over a 4-6 month period
- progressive testicular enlargement
- pubertal signs accompanied by rapid linear growth and/or any CNS symptoms.

⇒ Screening includes LH, FSH, Estradiol/Testosterone and a bone age.

Think about virilizing disorders (**late onset congenital adrenal hyperplasia; adrenal or gonadal tumors**) when you see:

- excessive axillary/pubic hair, acne, voice changes over 3-6 month period
- progressive penis enlargement without testicular enlargement
- virilizing signs with rapid linear growth

⇒ Screening includes 17-OHP, Testosterone, DHEAS and a bone age.

**WHEN TO REFER**

- If 17-OHP >100 ng/dl and bone age is advanced
- LH>0.3 mIU/ml, Testosterone > 50 ng/dl, Estradiol >2 ng/dl (>20 pg/ml)

**HOW TO REFER**

- (413) 794-KIDS; Pediatric Endocrinology

**WHAT TO EXPECT FROM BAYSTATE CHILDREN’S HOSPITAL VISIT**

- Thorough history and examination; may include additional blood tests and imaging
- Initiation of treatment if needed with follow-up
- Counseling and education for the patient and family

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August 2016
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