PRACTICAL PEARLS: Precocious Puberty

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
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. 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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