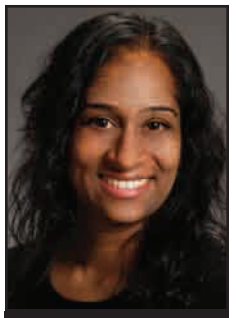

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SUBSPECIALIST CONSULT

Precocious Thelarche or Adrenarche

First recognize that a child with precocious puberty might actually have a serious underlying medical condition that triggers puberty. It is appropriate for you to distinguish true precocious puberty from precocious puberty secondary to a general underlying medical condition if this is within your comfort zone.

Begin with a complete history and physical examination. If you see physical signs of puberty that are not simply caused by "early puberty," consider looking for underlying thyroid disorders, ovarian tumors, central nervous system tumors, or even tumors of the adrenal gland.

Importantly, perform a complete evaluation before initiation of any "treatment." Occasionally, a patient with premature vaginal bleeding undergoes a very thorough hormone evaluation only to find the cause of her bleeding is a foreign body. Therefore, inspect the vaginal cavity as part of your physical examination or include this in your gynecologist referral when a girl presents with vaginal bleeding and no other evident signs of puberty. You might spare the patient a full hormone work-up. Also refer the child to a gynecologist if you suspect an abnormality of the reproductive tract because of pelvic pain, vaginal discharge, and/or abnormal vaginal bleeding.

The treatment for precocious puberty is controversial itself. Administration of an injection that blocks gonadotropin-releasing hormone (GnRH) secretion from the hypothalamus is the most commonly prescribed therapy (leuprolide acetate, Lupron Depot-PED). Consider referral of these patients because gynecologists and pediatric endocrinologists have the most experience with this medication.

A bone age study during your initial evaluation is an easy-to-order test for early puberty. Determination of the bone age of the left wrist is particularly worthwhile.

Other medications and lifestyle modifications are not particularly effective at halting early puberty.

Optimally, I advocate a combined effort among the pediatrician, the pediatric endocrinologist, and the gynecologist with a special interest in children.

Consider ordering a bone age study during your initial evaluation. It is an easy-to-order test for early puberty. Determination of the bone age of the left wrist is particularly worthwhile and provides useful information should you decide to refer to a specialist. Referral is warranted if a child with precocious puberty has advanced bone age.

Although precocious puberty includes thelarche and adrenarche, some important differences exist. Breast development, the growth spurt, and menses are all under the control of one system, the hypothalamic-pituitary-ovarian axis. Adrenarche, or secondary sexual hair, is primarily under the control of the adrenal gland, although the ovary is a major contributor to circulating androgens. Clinically, evaluate adrenal pathology more aggressively in cases of precocious adrenarche than in cases of thelarche.

It is also appropriate for a child without precocious puberty concerns to see a gynecologist in the early teenage years. This specialist can help you educate patients on reproductive health, including when Pap testing needs to be done and strategies to prevent pregnancy and sexually transmitted infection. ■

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