Pull Test, Hair Card Help Diagnose Teen Alopecia

BY SHERRY BOSCHERT

SAN FRANCISCO — Hair loss is not just for adults.

Two simple tools can help diagnose early-onset androgenetic alopecia, which affects 15% of adolescents beginning at age 7-17 years.

The hallmark of androgenetic alopecia is miniaturized hairs, meaning the hair follicles get finer and don't grow as long as normal hairs. The number of hair follicles remains the same, but they're short, fine hairs, Dr. Vera H. Price said at a meeting of the Society for Pediatric Dermatology.

She recommended doing a hair-pull test, which will be negative in androgenetic alopecia: Grab a small cluster of scalp hairs (about 0.5 cm in area) between your thumb and forefinger, and pull very slowly to the end of the hairs. If six or more hairs come out during the pull, that's a positive finding indicating a problem other than androgenetic alopecia. If only two to four hairs come out, the pull test is negative.

When prescribing minoxidil, 'I tell them it's not forever … it's until the next good product' comes along.

DR. PRICE

Next, examine the hairs using a hair card. A hair card is white on one side (to contrast with dark hairs) and black on the other side (to contrast with lighter-colored hairs). Part the hair, place the card next to the scalp, and look at the follicles next to the card.

This can be especially helpful for spotting miniaturized hairs in adolescents, who tend to have less obvious hair thinning than do adults with androgenetic alopecia.

The hair miniaturization also can be seen via a dermatoscope, but "if you can teach yourselves to use a piece of white paper, it will do very much what a dermatoscope does" to diagnose androgenetic alopecia, noted Dr. Price, who is director of the hair research center and professor of clinical dermatology at the University of California in San Francisco.

Clinically, the adolescents are hormonally normal, and they may or may not have a family history of androgenetic alopecia. They (or their parents) may complain that the teen's hair is not growing the way it used to, that it seldom needs cutting, and that the ends are wispy.

Boys may have mildly decreased hair density in the frontal and vertex regions, and subtle accentuation of bitemporal recession, the normal end shape of the hairline near the temples.

Girls may show a widened central part and increased spacing among hairs. If a girl complains that her ponytail is smaller, shorter, and skimpier than it used to be, that's a very helpful diagnostic sign, and suggests that androgenetic alopecia has been present for some time, Dr. Price said.

Clinical signs of puberty usually are present and are reassuring that normal androgen development is taking place. Ask about the patient's diet to check for adequate protein intake, and get a list of medications, if any are being taken.

Lab tests aren't necessary unless there's a clinical reason for them, Dr. Price suggested. If a thyroid problem is suspected, order a TSH test and complete blood count. If you do suspect an androgen problem, order tests for total testosterone, dehydroepiandrosterone sulfate, and prolactin, although usually these aren't needed.

For menstruating girls, you might want to check ferritin and total iron-binding capacity to make sure iron levels are sufficient.

Among the differential diagnoses, alopecia areata would have a positive hair-pull test and patches of missing hair, neither of which are suggestive of androgenetic alopecia. Trichotillomania also presents with patches of missing hair, and a hair card will show broken ends on the follicles.

If there's some reason for hair shed-

ding (such as fever) in the patient's history, the problem may be telogen effluvium. The history would point to anagen arrest as a cause of hair loss if the patient had been on chemotherapy.

Dr. Price treats adolescent androgenetic alopecia with daily applications of minoxidil (Rogaine) if the teenager is willing to make a long-term commitment that is needed since the effects are evaluated after 1 year and will disappear if the drug is stopped.

"I tell them it's not forever that they'll be using this; it's until the next good product" comes along, she said.

She does not use finasteride (Propecia) in adolescents because there have been no studies of its use in boys who were younger than age 18 years, and it is contraindicated for girls of childbearing age. Spironolactone does not enlarge hair follicles, so she doesn't use that agent in these patients, either.

Dr. Price has been a consultant for Pfizer Inc., which markets minoxidil and spironolactone, and she has received research funds from Pfizer and from Merck & Co., which markets finasteride.

Minoxidil may cause unwanted facial hair in 5% of patients within 4 weeks of starting therapy, but such hair goes away quickly if treatment is stopped.

Cosmetic options—such as using creative hair styling or hair extensions—also can help the patient and family members cope with adolescent alopecia. "There's a lot of counseling of the patient and family" with this condition, she said. ■

COURTESY DR. VERA H. PRICE

Part the hair, place the card next to the scalp, and look at the follicles next to the card.