

Patch of Hair Loss on the Scalp

Leslie Castelo-Soccio, MD, PhD; Jessica S. Yang



An 11-year-old girl presented for evaluation of a patch of hair loss on the right parietal scalp that had been present and stable for 2.5 years. Physical examination revealed a unilateral area of hair loss that was triangular in shape on the right parietal/temporal region, measuring 2.1×2.2 cm. Dermatoscope examination showed vellus hairs throughout. A hair-pull test was negative and the patient confirmed that the area had never been completely smooth. There were no associated symptoms and no family history

of autoimmune disease or hair loss. Prior to presentation, the patient underwent a trial of intralesional steroids and topical steroids to the area without effect.

What's the diagnosis?

- a. alopecia areata
- b. telogen effluvium
- c. temporal triangular alopecia
- d. tinea capitis
- e. traction alopecia

Dr. Castelo-Soccio is from the Department of Pediatrics, Children's Hospital of Philadelphia, Section of Dermatology, Pennsylvania. Ms. Yang is from Case Western Reserve University, Cleveland, Ohio.

The authors report no conflict of interest.

Correspondence: Leslie Castelo-Soccio, MD, PhD, Children's Hospital of Philadelphia, 3550 Market St, 2nd Floor Dermatology, Philadelphia, PA 19104 (castelosoccio@email.chop.edu).

The Diagnosis: Temporal Triangular Alopecia

Temporal triangular alopecia (TTA), also known as congenital triangular alopecia, was first described in the early 1900s.¹ It presents clinically as a triangular-shaped area of nonscarring alopecia either unilaterally or bilaterally. Limited clinical data suggest that most unilateral cases are on the left frontotemporal region of the scalp. In bilateral cases, there may be asymmetry in size of the area involved.² Dermatoscopically, TTA is characterized by decreased terminal hair follicle density as well as the presence of vellus hairs with an absence of inflammation.³ The majority of TTA is noted between birth and 6 years of life with the areas staying stable thereafter. Large areas of TTA may suggest cerebello-trigeminal-dermal dysplasia (Gomez-Lopez-Hernandez syndrome), a rare neurocutaneous syndrome characterized by rhombencephalosynapsis, trigeminal anesthesia, and parietooccipital alopecia (Online Mendelian Inheritance in Man 601853).⁴ Although TTA is largely idiopathic, it has been suggested that the trait may be paradominant, whereby a postzygotic loss of the wild-type allele in a heterozygotic state causes triangular alopecia and reflects

hamartomatous mosaicism.⁵ It also is an important mimicker of alopecia areata. Correct identification prevents unnecessary treatment to the areas of the scalp. Hair restoration surgery has been reported as a tool to treat this disorder.⁶

REFERENCES

1. Tosti A. Congenital triangular alopecia. report of fourteen cases. *J Am Acad Dermatol*. 1987;16:991-993.
2. Armstrong DK, Burrows D. Congenital triangular alopecia. *Pediatr Dermatol*. 1996;13:394-396.
3. Iorizzo M, Pazzaglia M, Starace M, et al. Videodermoscopy: a useful tool for diagnosing congenital triangular alopecia. *Pediatr Dermatol*. 2008;25:652-654.
4. Assoly P, Happle R. A hairy paradox: congenital triangular alopecia with a central hair tuft. *Dermatology*. 2010;221:107-109.
5. Happle R. Congenital triangular alopecia may be categorized as a paradominant trait. *Eur J Dermatol*. 2003;13:346-347.
6. Wu WY, Otberg N, Kang H, et al. Successful treatment of temporal triangular alopecia by hair restoration surgery using follicular unit transplantation. *Dermatol Surg*. 2009;35:1307-1310.