

Series Editor: Camila K. Janniger, MD, Newark, New Jersey

Congenital Triangular Alopecia: A Case Report and Review

Lt Col Kathleen B. Elmer, USAF, MC, FS; Rita M. George, MD

Congenital triangular alopecia is a nonscarring loss of hair mass on the scalp's temporal regions. The area of hair diminution commonly is described as triangular or lancet shaped. Although previously considered congenital, this condition usually is noticed after 2 years of age and, more recently, is thought to be acquired. We propose that this entity be renamed triangular alopecia. Because this condition involves normal rather than inflamed skin, it does not respond to topical or intralesional steroids. It is important to make the correct diagnosis to avoid unnecessary and potentially harmful interventions. We present the case of a 10-year-old boy with triangular alopecia.

Congenital triangular alopecia usually presents as a patch of alopecia on the frontotemporal scalp after 2 years of age. The involved area is described as triangular or lancet shaped, with the base of the lesion impinging on the hairline. Biopsy results have shown normal skin without evidence of inflammation, and thus anti-inflammatory treatments are useless in resolving this condition. It is important to diagnose this benign nonprogressive condition correctly so that inappropriate treatments are not pursued.

Case Report

A 10-year-old healthy boy was evaluated for bilateral temporal alopecia. His mother noted the alopecia for approximately 6 years. The findings from the physical examination revealed that the

patient had fine vellus hair on the bilateral frontotemporal scalp. There was no scale, erythema, or scarring of the scalp (Figure).

Comment

Congenital triangular alopecia, although an unusual disorder, is diagnosed more frequently now than in the past because of an understanding of its presentation.¹ This condition, once considered congenital, is acquired in the majority of cases. Most patients present between 3 to 6 years of age. Therefore, it is unlikely that parents would not notice the balding areas on their child's head.² The actual area of alopecia is usually unilateral but may be bilateral. Hair density is normal, but the hairs are primarily vellus rather than terminal. The epidermis and dermis are not inflamed.³

Although congenital triangular alopecia is a benign, asymptomatic, nonprogressive condition, the potential for its misdiagnosis exists. There are enough differentiating features between alopecia areata and congenital triangular alopecia, but confusion between the 2 conditions has occurred.⁴ Although alopecia areata may appear on any area of the scalp and is most commonly oval, congenital triangular alopecia generally is triangular and appears on the frontotemporal region. Congenital triangular alopecia is a stable condition, whereas alopecia areata can enlarge or regress over time. The diagnosis of congenital triangular alopecia commonly is made based on clinical features and distribution and not on biopsy results. However, biopsy specimens using vertical and transverse sectioning techniques, though not always conclusive, can be helpful in some instances in distinguishing alopecia areata from congenital triangular alopecia.^{2,5} Biopsy results of congenital triangular alopecia show no inflammation, whereas those of alopecia areata usually manifest peribulbar inflammation. Sometimes, chronic alopecia areata may not demonstrate significant inflammation, and differentiation

Dr. Elmer is from Wilford Hall and Brooke Army Medical Centers, San Antonio, Texas. Dr. George is in private practice in Goodyear, Arizona.

The opinions expressed are those of the author and should not be construed as official or as representing those of the Army Medical Department, the United States Air Force, or the Department of Defense.

Reprints: Kathleen B. Elmer, MD, 107 Rimdale, Universal City, TX 78148 (e-mail: kelmer@satx.rr.com).



Patch of vellus hair in triangular distribution on bilateral frontotemporal scalp.

from congenital triangular alopecia cannot always be made by histologic findings.²

Other conditions that may be confused with congenital triangular alopecia are aplasia cutis congenita and traction alopecia. In some cases, both conditions may be differentiated histologically from congenital triangular alopecia, though aplasia cutis congenita also may have a normal histologic appearance.^{2,3} In general, biopsy is not warranted, as the history and clinical presentation of the disorders vary.

Unlike alopecia areata, congenital triangular alopecia does not respond to steroids. Unnecessary and potentially harmful treatment with steroids have been documented in some cases misdiagnosed as alopecia areata.³ If treatment of congenital triangular alopecia is contemplated, hair grafting or excision may be considered.²

We propose that the word *congenital* be dropped from this entity and simply renamed *triangular alopecia* to describe more accurately its clinical presentation and course.

REFERENCES

1. Bargman H. Congenital triangular alopecia. *J Am Acad Dermatol.* 1988;18:390.
2. Trakimas C, Sperling LC, Skelton HG 3rd, et al. Clinical and histologic findings in temporal triangular alopecia. *J Am Acad Dermatol.* 1994;31:205-209.
3. Feuerman EJ. Congenital temporal triangular alopecia. *Cutis.* 1981;28:196-197.
4. Tosti A. Congenital triangular alopecia. *J Am Acad Dermatol.* 1987;16:991-993.
5. Sperling LC. Hair anatomy for the clinician. *J Am Acad Dermatol.* 1991;25:1-17.