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Letter

Triangular temporal alopecia: a rare case in adulthood

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Abstract

Triangular temporal alopecia (TTA) is an asymptomatic, circumscribed, non-scarring form of alopecia that affects the temporal scalp. Although TTA is most often seen between ages two and nine, the condition has rarely been described in adults. If unrecognized, adulthood TTA can be misdiagnosed, leading to unnecessary steroid treatment. This case report describes TTA in an adult woman who had no prior history of alopecia. It also reviews the existing TTA literature, describing the diagnosis and management of this condition.

Keywords: Temporal triangular alopecia, alopecia, miniaturized follicles

Case synopsis

A 36-year-old woman presented with a 10-year history of bilateral bald patches on her temporal scalp. She reported prior to this she had normal hair growth in the affected regions. She denied any history of trauma or traction at the site of alopecia and further denied any frequent use of curlers, braids, or hot combs. She had no family history of hair loss. Physical examination revealed two 3.5 x .5 cm triangular shaped alopecic patches, one on each temporal scalp (Figure 1) (Figure 2). She was negative for hair pull and there was no evidence of erythema, scaling, or pustules on the involved skin.

Figure 1. 3.5 x .5 cm triangular shaped alopecic patches on left temporal scalp. No evidence of erythema, scale, or pustules.

Discussion

Temporal triangular alopecia (TTA), also known as congenital triangular alopecia is an asymptomatic, circumscribed, non-scarring form of alopecia first described by Sabouraud in 1905. It typically manifests as an area of triangular or lancet-shaped alopecia localized over the temporal scalp. In variant presentations, the shape of the alopecic region may be ovoid, involvement may be bilateral, or the area affected may be over the occipital scalp. The skin surrounding the alopecia is always normal, without evidence of inflammation [1].

Temporal triangular alopecia most commonly presents between the ages of two and nine. It may also present at birth or, rarely, in adulthood [1]. Its etiology remains unknown. Although it typically occurs sporadically, reports of TTA within families and instances of TTA as a component of syndromes with autosomal inheritance have led to speculation about genetic causes, potentially via para-dominant inheritance or mosaicism. Temporal triangular alopecia may also occur as a component of syndromes with multisystemic birth anomalies, including Gomez-Lopez-Hernandez Syndrome and Phacomatosis Pigmentovascularis type 2 [2].

Histopathology of TTA reveals a normal number of hair follicles with an increased proportion of miniaturized hairs and vellus hairs in the superficial dermis [1]. Differential diagnosis of TTA includes alopecia areata and androgenetic alopecia, which present with similar clinical features.

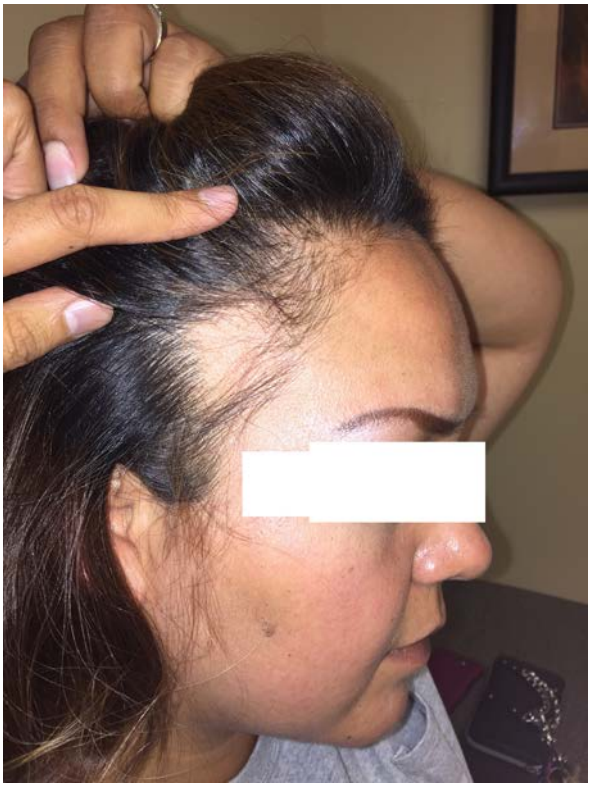

Figure 2. 3.5 x .5 cm triangular shaped alopecic patches on right temporal scalp. No evidence of erythema, scale, or pustules.

Dermoscopy can help differentiate TTA from these conditions. It can rule out the presence of black and yellow dots and exclamation point hairs, which are features of alopecia areata, as well as the presence of collapsed fibrous root sheaths below miniaturized follicles (“streamers”), which are features of androgenetic alopecia [1, 4].

Treatment options for TTA include complete hair excision, hair transplantation, and topical treatment with minoxidil. A recent case involving treatment of 3% minoxidil in a one-year-old female with TTA showed evidence that minoxidil prevents the process of hair follicle miniaturization, improving terminal hair growth for the duration of treatment [3].

Given its close clinical resemblance to other forms of alopecia, TTA is often misdiagnosed, leading to improper steroid treatment. Thus, although TTA does not commonly present in adulthood, it is essential that physicians consider it in patients presenting with localized, non-scarring alopecia. Awareness of the more unusual presentations of TTA can raise the likelihood of accurate diagnosis and treatment.

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