

Alopecia Areata Mimicking Pseudopelade of Brocq

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We report a case of a white woman with discrete, asymmetrical, noninflammatory areas of hair loss clinically suggestive of pseudopelade of Brocq (PB). However, the histologic features revealed a diagnosis of alopecia areata (AA). We discuss the importance of histopathologic examination in the diagnosis of AA.

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Alopecia areata (AA) is a common form of noncicatricial alopecia. The characteristic lesion of AA is a round to oval, smooth, nonscarring patch involving the scalp or any other hair-bearing area. Although the clinical features of AA have been well-documented and the diagnosis usually can be made based on clinical presentation,^{1,2} we describe a case of a 51-year-old white woman with hair loss histologically consistent with AA but visibly difficult to distinguish from pseudopelade of Brocq (PB), a form of cicatricial alopecia. We discuss how AA can mimic PB and emphasize that while the clinical picture usually is sufficient to differentiate between scarring and nonscarring forms of alopecia, it is important to have histologic support, as the treatment modalities and prognoses differ.

Case Report

A 51-year-old white woman presented with hair loss of 2 months' duration. On physical examination, she had polygonal, discrete, asymmetrical areas of alopecia with some tufting at the vertex of the scalp similar to PB (Figures 1 and 2). There was no evidence of inflammation or scale. A

punch biopsy revealed a sparse lymphocytic infiltrate within a fibrous tract (Figure 3). Treatment of affected areas with intralesional triamcinolone acetonide (3 mL of 10 mg/mL total) resulted in a dramatic improvement at 1-month follow-up. The lack of scarring on histopathology, clinical presentation, and response to intralesional steroids led to a diagnosis of AA.

Comment

The term *pelade* is synonymous with AA in the French language.³ Scarring alopecia that appeared in patches similar to AA was named pseudopelade by Brocq⁴ in 1888. Pseudopelade of Brocq is a progressive cicatricial alopecia that usually occurs in middle-aged white women and is frequently described as discrete, asymmetrical, slightly depressed,^{5,6} alopecic patches primarily involving the parietal scalp and vertex of the scalp with minimal to any preceding inflammation. The description of "footprints in the snow" classically has been used to describe these lesions and refers to dermal atrophy leading to a depressed appearance (Figure 4).⁵ Debate still exists if PB represents an autonomous disease that is an idiopathic form of scarring alopecia (Brocq alopecia) and/or a final stage of several scarring disorders (ie, lichen planopilaris, chronic cutaneous lupus erythematosus).⁷ Histologic examination of PB usually demonstrates nonspecific features, and findings expected are those of a burned-out scarring alopecia,^{8,9} including sparse to moderate perifollicular and perivascular lymphocytic infiltrates, reduced or absent sebaceous glands, and atrophy of the follicular epithelium without associated interface alteration.^{10,11} Although our patient presented with the footprints in the snow distribution of hair loss, which led to clinical suspicion of a diagnosis of PB, the histopathologic features of PB were not demonstrated.

Alopecia areata usually appears as discrete patches of alopecia in a round or oval shape. Exclamation point hairs are a frequent finding in AA

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Figure 1. Noninflammatory alopecia of the central scalp.



Figure 2. Alopecia demonstrating a footprint in the snow appearance similar to pseudopelade of Brocq.

and represent short broken hairs that proximally taper. These features usually are clinically diagnostic,^{1,2} though skin biopsy findings sometimes are necessary to distinguish AA from other forms of nonscarring alopecia including telogen effluvium, androgenetic alopecia, trichotillomania, alopecia syphilitica, and tinea capitis.^{2,5,6} The histopathology varies with the 4 clinical stages of the lesions: acute hair loss, persistent alopecia, partial telogen to anagen conversion, and recovery.¹² A peribulbar lymphocytic infiltrate without scarring is

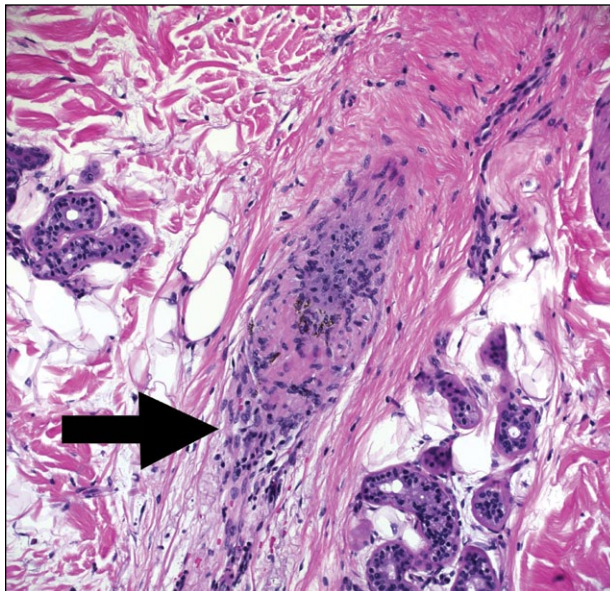


Figure 3. A sparse lymphocytic infiltrate within a fibrous tract. Arrow points to a residual lymphocytic infiltrate in the peribulbar area (H&E, original magnification $\times 20$). Photograph courtesy of Drazen Jukic, MD, PhD, Department of Dermatology, University of Pittsburgh, Pennsylvania.



Figure 4. Pseudopelade of Brocq.

characteristic of the diagnosis of all 4 stages of AA, but a reduction in the anagen to telogen ratio, miniaturized dystrophic hairs, and fibrous tracts may be appreciable.⁶ Although clinical correlation is necessary, eosinophils also are detectable in AA

within the peribulbar infiltrate and fibrous tracts, which may be helpful in diagnosis.^{6,13} The histopathologic results in our case were consistent with a diagnosis of AA, thereby discrediting our clinical suspicion of PB.

Conclusion

Pseudopelade of Brocq was named based on its mimicry of AA, but the opposite also may be true, as demonstrated in our case. Although the clinical picture usually is sufficient to distinguish between scarring and nonscarring forms of alopecia, this case emphasizes the importance of histopathologic evidence to obtain an accurate diagnosis.

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