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Follicular-predominant pretibial Flegel's disease: a unilateral folliculocentric presentation expanding the dermoscopic spectrum

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Dear Editor,

We report a rare unilateral presentation of pretibial Flegel's disease displaying a folliculocentric dermoscopic pattern not previously described in the literature. A 58-year-old woman presented with a 4-year history of multiple firm, brownish, keratotic papules confined to the right pretibial region, gradually extending toward the knee. The lesions were dome-shaped, rough, and scaly, partially coalescing into small plaques. They were completely asymptomatic and showed no tendency to ulcerate. No similar lesions were observed elsewhere, and no personal or familial history of comparable dermatoses was reported. The strict unilaterality represents an uncommon presentation of hyperkeratosis lenticularis perstans, although rare unilateral cases have been previously reported. Dermoscopy (polarized light, $\times 20$ magnification) revealed features that only partially overlapped with those classically reported for Flegel's disease. Each papule exhibited a central, structureless orange-brown area with compact keratin plugs emerging from follicular-like openings, surrounded by a delicate pseudoreticular network of whitish keratotic projections. The background was milky-red to orange, with glomerular and dotted vessels of variable caliber, sometimes merging into small lacunae-like areas irregularly distributed across the surface (Figure 1). The typical whitish peripheral rim consistently described in classical cases was absent, conferring to the lesions a more homogeneous and folliculocentric architecture. The overall pattern differed from the "starburst" configuration reported by Valdebran *et al.*¹ and from the intense reddish background and yellowish central core described by Stabile *et al.*² and Delrosso *et al.*³ In contrast, our case showed a fine, reticulated follicular network and uniform pigmentation, suggesting a prominent follicular involvement, although concomitant interfollicular epidermal alterations were also present.

The predominance of follicular openings, together with the absence of a circumferential keratotic rim, suggests a follicular-predominant morphologic pattern. The pretibial localization may have contributed to this morphologic presentation through local anatomical and mechanical factors, although this hypothesis remains speculative and requires confirmation in additional cases. Histopathologic examination of a representative papule confirmed the clinical and dermoscopic impression. Compact orthokeratotic and parakeratotic hyperkeratosis filled dilated follicular infundibula, alternating with mild interfollicular acanthosis and focal atrophy. The basal layer showed focal vacuolar alteration without cornoid lamella formation. In the papillary dermis, dilated capillaries and a mild perivascular lymphocytic infiltrate corresponded to the dotted and glomerular vessels observed dermoscopically. Periodic acid-Schiff staining was negative for fungal elements, and no viral cytopathic changes were detected. These findings substantiated the diagnosis of

Flegel's disease with prominent follicular involvement. The patient declined treatment, and the lesions remained stable after 12 months of follow-up.

The dermoscopic-histologic correlation was remarkable. The brownish structureless areas corresponded to compact hyperkeratosis and retained keratin plugs, while the whitish pseudoreticular projections reflected alternating parakeratotic and orthokeratotic foci encircling the dilated infundibula. The dotted and glomerular vessels mirrored the dilated papillary capillaries located beneath thinned epidermis. The absence of a continuous keratotic rim, which is almost constant in previous series,¹⁻⁴ underscores the difference in the morphologic architecture of this follicular variant. These observations suggest that follicular involvement may represent a more prominent component of the disease spectrum than previously appreciated, without excluding concomitant interfollicular epidermal participation.

Compared with the available literature, our case expands the clinical and dermoscopic spectrum of Flegel's disease in several respects. While the reports by Valdebran *et al.*,¹ Stabile *et al.*,² and Bortoluzzi *et al.*⁴ consistently describe symmetrical bilateral involvement of the lower extremities, our patient exhibited a strictly unilateral distribution confined to one leg. The dermoscopic architecture differed profoundly, showing a follicular reticulation devoid of the peripheral keratotic border regarded as pathognomonic in most previous accounts. The color pattern, characterized by a milky-red and orange hue with glomerular vessels of varying diameter, diverged from the predominantly erythematous background and uniform dotted vessels noted in earlier cases.¹⁻⁴ In our case, the uniform pigmentation and follicular topography suggest a stable keratinization defect rather than an inflammatory exacerbation.

Taken together, the clinical unilaterality, the folliculocentric dermoscopic pattern, and the consistent histopathologic correlation support recognizing this case as an unusual follicular-predominant presentation of Flegel's disease. Recognition of this form is important to avoid misdiagnosis with porokeratosis, lichen planus actinicus, or viral warts and to acknowledge that the pathogenesis of Flegel's disease may encompass a broader follicular continuum than previously recognized.

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Figure 1. Follicular-predominant presentation of pretibial Flegel's disease. **A)** Clinical aspect: multiple firm, dome-shaped, reddish-brown papules with a dry, scaly surface distributed over the right pretibial area, partially coalescing into small plaques. Lesions are asymptomatic and confined to the leg. **B-D)** Dermoscopy (polarized light, $\times 20$ magnification): the images reveal a folliculocentric pattern characterized by central structureless orange-brown areas with compact keratin plugs and a delicate reticulated network of whitish keratotic projections. Fine dotted and glomerular vessels of variable caliber are visible on a milky-red to orange background, occasionally merging into lacunae-like areas. The absence of the classical peripheral whitish keratotic rim distinguishes this variant from the classic form, reflecting dilated follicular infundibula packed with lamellar keratin and superficial vascular ectasia corresponding to dermal capillaries observed histologically.

