Perifollicular Papules on the Trunk

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A 40-year-old black man presented with numerous perifollicular flesh-colored papules on the back, chest, abdomen, and proximal aspect of the arms of 6 years' duration. He described these lesions as persistent, nonpainful, and nonpruritic. He previously was treated with an unknown cream without any benefit. These lesions were cosmetically bothersome.

What's the diagnosis?

- a. disseminate and recurrent infundibulofolliculitis
- b. folliculitis
- c. keratosis pilaris
- d. lichen nitidus
- e. papular eczema

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The authors report no conflict of interest.

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The Diagnosis: Disseminate and Recurrent Infundibulofolliculitis

punch biopsy of a representative lesion on the trunk was performed. Histopathologic examination revealed a chronic lymphohistiocytic proliferation, focal spongiosis, and lymphocytic exocytosis primarily involving the isthmus of the hair follicle (Figure 1). At the follicular opening there was associated parakeratosis of the adjacent epidermis (Figure 2). Given these clinical and histopathological findings, a diagnosis of disseminate and recurrent infundibulofolliculitis (DRIF) was made.

Disseminate and recurrent infundibulofolliculitis was first described by Hitch and Lund¹ in 1968 in a healthy 27-year-old black man as a widespread recurrent follicular eruption. Disseminate and recurrent infundibulofolliculitis usually affects young adult males with darkly pigmented skin.^{2,3} It has less commonly been described in children, females, and white individuals.^{3,4} Associations with atopy, systemic diseases, or medications are unknown.³⁻⁶ The onset usually is sudden and the disease course may be characterized by intermittent recurrences. Pruritus usually is reported but may be mild.⁵

Histopathology is characterized by spongiosis centered on the infundibulum of the hair follicle and a primarily lymphocytic inflammatory infiltrate. Neutrophils also may be identified.³ Disseminate and recurrent infundibulofolliculitis can be differentiated histologically from clinically similar entities such as keratosis pilaris, which has a keratin plug

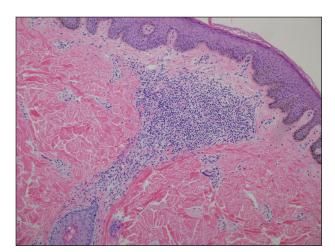


Figure 1. Perifollicular lymphohistiocytic infiltrate with plasma cells centered on the isthmus of the hair follicle (H&E, original magnification ×10).

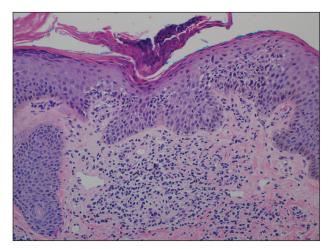


Figure 2. Focal spongiosis and lymphocytic exocytosis with parakeratosis of the epidermis (H&E, original magnification $\times 20$).

filling the infundibulum; lichen nitidus, which is characterized by a clawlike downgrowth of the rete ridges surrounding a central foci of inflammation; or folliculitis, which is characterized by perifollicular suppurative inflammation.

Treatment of DRIF is anecdotal and limited to case reports. Vitamin A alone or in combination with vitamin E has been reported to lead to some improvement.⁵ Tetracycline-class antibiotics, keratolytics, antihistamines, and topical retinoids have not been successful, and mixed results have been seen with topical steroids.⁵⁻⁷ There is a reported case of improvement with a 3-week regimen of psoralen plus UVA followed by twice-weekly maintenance.⁸ Promising results in the treatment of DRIF have been shown with oral isotretinoin once daily.³⁻⁵ Finally, DRIF may resolve independently⁶; therefore, treatment of DRIF should be addressed on a case-by-case basis.

REFERENCES

- 1. Hitch JM, Lund HZ. Disseminate and recurrent infundibulo-folliculitis: report of a case. *Arch Dermatol*. 1968;97:432-435.
- Hitch JM, Lund HZ. Disseminate and recurrent infundibulo-folliculitis. Arch Dermatol. 1972;105:580-583.
- 3. Calka O, Metin A, Ozen S. A case of disseminated and recurrent infundibulofolliculitis responsive to

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- treatment with systemic isotretinoin. *J Dermatol*. 2002;29:431-434.
- 4. Aroni K, Grapsa A, Agapitos E. Disseminate and recurrent infundibulofolliculitis: response to isotretinoin. J Drugs Dermatol. 2004;3:434-435.
- 5. Aroni K, Aivaliotis M, Davaris P. Disseminated and recurrent infundibular folliculitis (D.R.I.F.): report of a case successfully treated with isotretinoin. *J Dermatol*. 1998;25:51-53.
- Owen WR, Wood C. Disseminate and recurrent infundibulofolliculitis. Arch Dermatol. 1979;115: 174-175.
- 7. Hinds GA, Heald PW. A case of disseminate and recurrent infundibulofolliculitis responsive to treatment with topical steroids. *Dermatol Online J.* 2008;14:11.
- 8. Goihman-Yahr M. Disseminate and recurrent infundibulofolliculitis: response to psoralen plus UVA therapy. *Int J Dermatol.* 1999;38:75-78.

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