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Dissecting Cellulitis of the Scalp

Sandra Jaroonwanichkul, B.A., Anand Rajpara, M.D.
The University of Missouri-Kansas City School of Medicine,
Kansas City, Missouri
Department of Dermatology

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INTRODUCTION

A 32-year-old man presented to a free dermatology clinic with a nine-month history of painful, pruritic lesions on his scalp, accompanied by hair loss. The condition started at the base of the posterior scalp and gradually spread upwards. Despite multiple courses of antibiotics, the lesions did not improve. Dermatologic examination revealed multiple boggy, fluctuant nodules with purulent drainage and overlying alopecic patches on the vertex and occipital scalp (Figure 1). He was diagnosed with dissecting cellulitis of the scalp and began treatment with acitretin 25 mg daily. Acitretin was chosen due to its low cost through the 340B Drug Pricing Program.

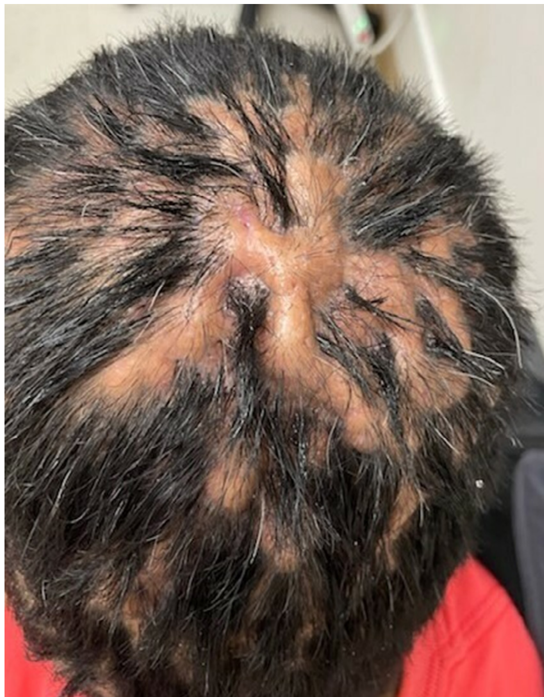

Figure 1. Multiple boggy, fluctuant nodules with purulent drainage and overlying alopecic patches.

DISCUSSION

Dissecting cellulitis of the scalp, also known as perifolliculitis capitis abscedens et suffodiens, is a chronic inflammatory condition affecting the hair follicles of the scalp, found predominantly in African American men aged 20 to 40.[1] Clinically, it is characterized by multiple painful, boggy, fluctuant nodules with interconnecting sinus tracts and overlying alopecic patches, typically located on the vertex and occipital regions of the scalp.[2] Follicular papules and pustules also may be present.[3] Although the exact pathogenesis of dissecting cellulitis remains unclear, it is considered a part of the follicular occlusion syndrome, which also includes acne conglobata, hidradenitis suppurativa, and pilonidal cysts. These conditions are thought to share a common pathogenic mechanism, where follicular obstruction leads to the accumulation of keratinous material and subsequent follicular rupture.[1] This process triggers a neutrophilic and granulomatous response, followed by bacterial infection or colonization. Other associated conditions include arthritis, keratitis, pyoderma gangrenosum, and osteomyelitis.[4]

While the diagnosis of dissecting cellulitis of the scalp often can be made clinically, a biopsy may be necessary for histopathologic analysis if the diagnosis is uncertain. Histopathologic findings vary depending on the stage of the disease. Early stages show acneiform dilation of the follicular infundibula with intrafollicular and perifollicular neutrophilic inflammation. As the disease progresses, perifollicular and deep dermal abscess formation occurs, with sinus tracts lined by stratified squamous epithelium—a hallmark of the disease. In late stages, the follicles are destroyed and replaced by dermal fibrosis and scarring.[5]

The course of dissecting cellulitis of the scalp is typically relapsing, and treatment can be challenging.[1] The primary goals of treatment are to reduce inflammation and prevent further hair loss. Treatment options include isotretinoin or other retinoids like acitretin, antibiotics, steroids, dapsone, TNF-α inhibitors, zinc, laser epilation, radiation therapy, and surgical excision.[5] The differential diagnosis includes folliculitis decalvans, discoid lupus erythematosus, pseudopelade of Brocq, and acne keloidalis nuchae.[3,5] Dissecting cellulitis of the scalp should be strongly considered in patients presenting with painful, pruritic, boggy nodules with purulent drainage and overlying alopecia.

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