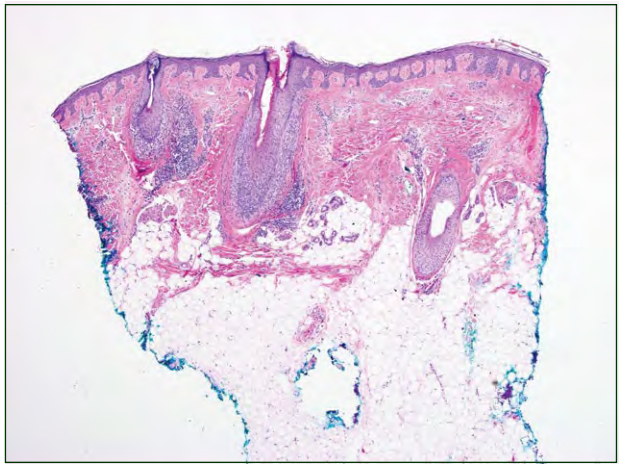
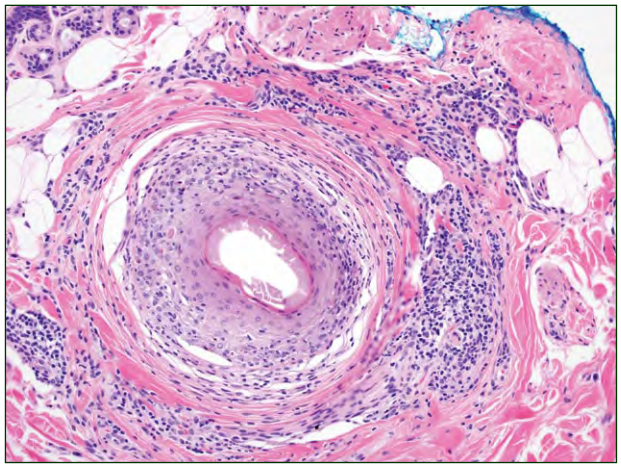


H&E, original magnification ×40.



H&E, original magnification ×200.

The best diagnosis is:

a. alopecia mucinosa
b. central centrifugal cicatricial alopecia
c. discoid lupus erythematosus
d. folliculitis decalvans
e. lichen planopilaris

PLEASE TURN TO PAGE 17 FOR DERMATOPATHOLOGY DIAGNOSIS DISCUSSION

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The authors report no conflict of interest.
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Lichen Planopilaris

Lichen planopilaris (LPP) is a chronic, progressive, scarring alopecia that clinically presents as patchy or diffuse hair loss. The crown and frontotemporal scalp commonly are involved with associated symptoms of tenderness, pruritus, or burning.[1] Physical examination typically reveals perifollicular erythema and scale with eventual loss of follicular ostia. Classic lichen planus on non–hair-bearing skin, nails, or mucous membranes can concomitantly be seen.[1] Histologic examination of LPP classically reveals a folliculocentric lichenoid infiltrate preferentially targeting the infundibulum (Figure 1). There are associated interface changes involving the follicle including vacuolization of the basal layer, cytoid bodies, pigment incontinence, and follicular plugging (Figure 2).[2] The lower portion of the follicle is uninvolved and there is variable involvement of the interfollicular epidermis. With disease progression, concentric lamellar fibroplasia and loss of hair follicles can be seen.[2]

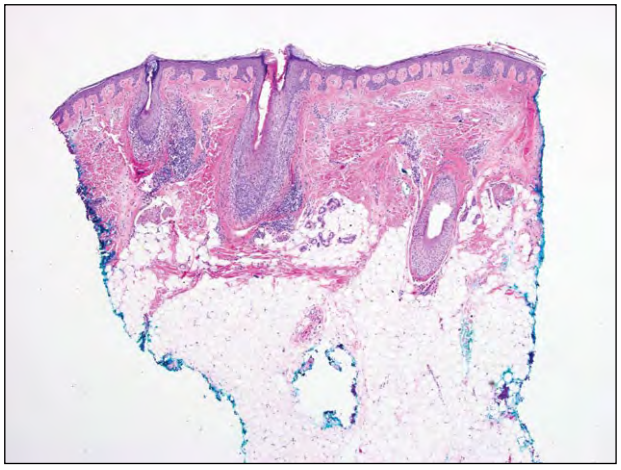

Figure 1. Lichen planopilaris demonstrating folliculocentric lichenoid inflammation (H&E, original magnification ×40).

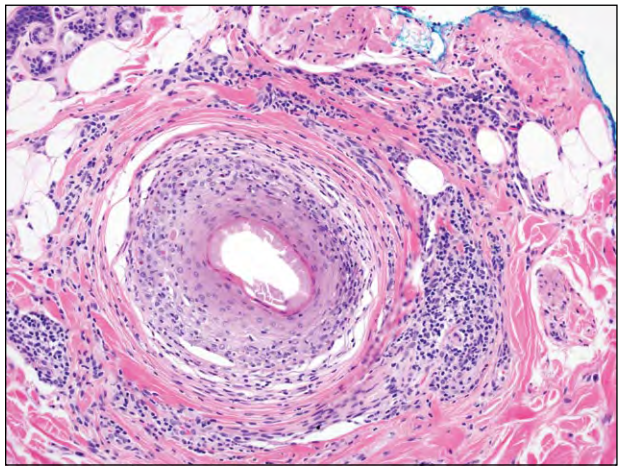

Figure 2. Interface dermatitis involving the superficial portion of the follicular epithelium (H&E, original magnification ×200).

Similar to LPP, histologic examination of discoid lupus erythematosus (DLE) reveals interface dermatitis, follicular plugging, lamellar fibrosis, and destruction of hair follicles and epidermis with disease progression.[2,3] Lymphocytic inflammation predominately is seen at the isthmus; however, unlike in LPP, inflammation may be seen along the entire follicle. Discoid lupus erythematosus also displays interstitial mucin deposition, atrophy, or hyperplasia of the epidermis; basement membrane zone thickening; and perivascular and periadnexal inflammation (Figure 3).[2] Direct immunofluorescence is helpful in distinguishing DLE from LPP. Direct immunofluorescence in DLE demonstrates a band of immunoreactants including IgG, IgA, IgM, and/or C3 along the dermoepidermal junction. In contrast, direct immunofluorescence in LPP may demonstrate cytoid bodies stained by IgM and fibrinogen near the follicular basement membrane zone.

Central centrifugal cicatricial alopecia is distinguished from LPP and DLE by an absence of both interface change and follicular plugging.[2] Eccentric thinning of the outer root sheath and premature desquamation of the inner root sheath also are features (Figure 4). Folliculitis decalvans is characterized by

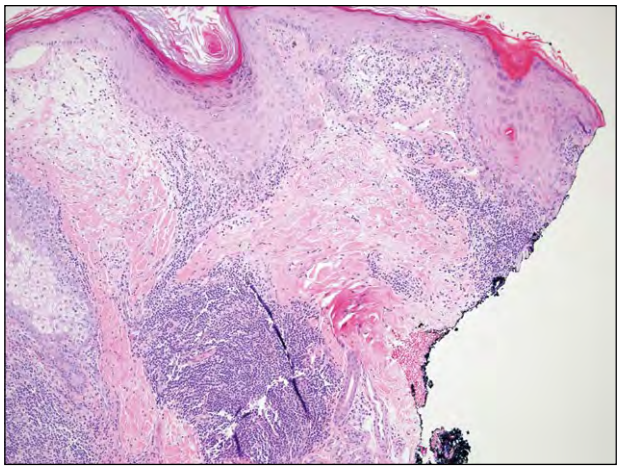

Figure 3. Discoid lupus erythematosus demonstrating folliculocentric and interfollicular lichenoid dermatitis with prominent basement membrane zone thickening; follicular plugging and interstitial mucin also are present (H&E, original magnification ×100).

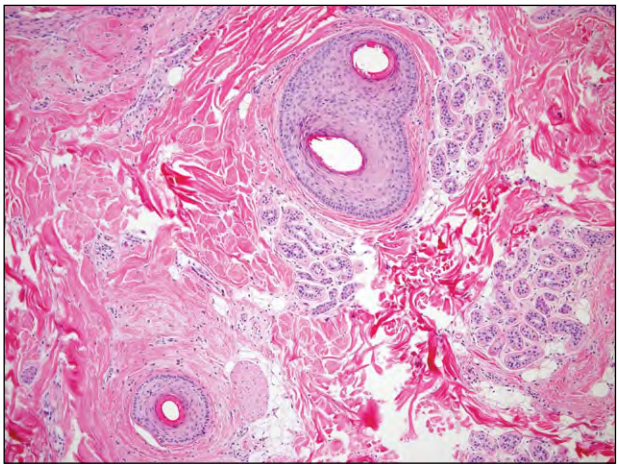

Figure 4. Lack of interface dermatitis with a compound follicle demonstrating eccentric outer root sheath thinning and premature desquamation of the inner root sheath in a case of central centrifugal cicatricial alopecia (H&E, original magnification ×200).

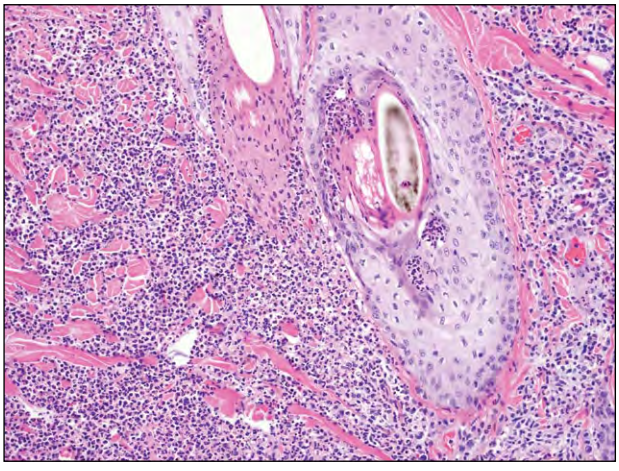

Figure 5. Perifollicular neutrophilic infiltrates are important features of neutrophilic scarring alopecias such as folliculitis decalvans (H&E, original magnification ×200).

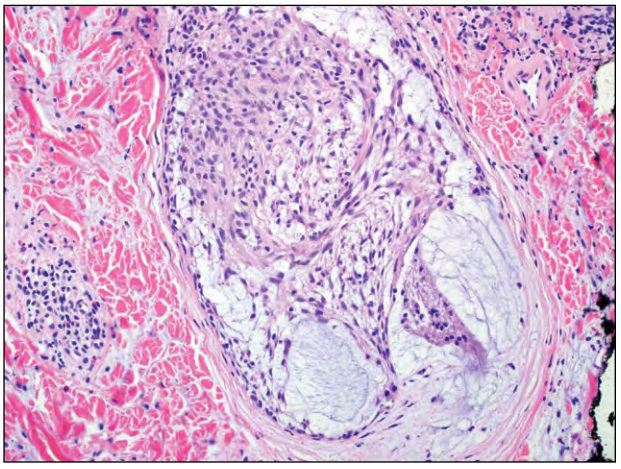

Figure 6. Alopecia mucinosa demonstrating intrafollicular pools of mucin (H&E, original magnification ×200).

perifollicular and interfollicular neutrophilic infiltrate. There may be associated neutrophilic abscesses and hair shaft granulomas (Figure 5).[2] Plasma cells and compound follicles demonstrating 4 or more fused infundibula may be seen in cases of advanced disease.[2,4] Intrafollicular pools of mucin are characteristic of alopecia mucinosa with a predominately lymphocytic perifollicular infiltrate spanning the length of the hair follicle (Figure 6).[2]

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