Chapter 22
A Chronic Inflammatory Scalp Disorder with Coexisted Alopecia

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A 22-years-old male patient presented with pustules and scarring alopecia (Fig. 22.1) on the scalp since a couple of months. The pustules were painful. Topical corticosteroids were not helpful to control the disease. His medical history was otherwise unremarkable. There was no family history of hair or scalp disorders.

Based on the case description and the photographs, what is your diagnosis?

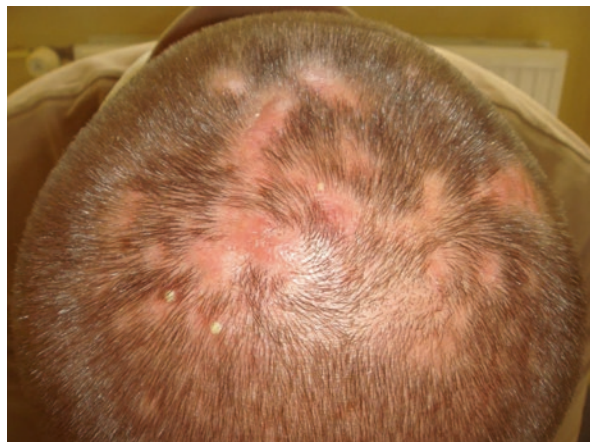

Fig. 22.1 Multiple pustules and alopecic lesions on the scalp

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Differential Diagnoses

1. Tinea capitis.
2. Dissecting folliculitis.
3. Folliculitis decalvans.
4. Eosinophilic pustular dermatosis of the scalp.
5. Gram-negative folliculitis.

Diagnosis

Folliculitis decalvans.

Discussion

Folliculitis decalvans is an orphan disease. It is characterized by a chronic and relapsing course of painful follicular papules, pustules, crusting, and tufting of hairs (bundle hairs). The chronic inflammation eventually results in hair follicle destruction, loss of bulge-resident stem cells, and scarring alopecia. Recent studies suggest a persistent unbalanced, subepidermal microbiota with *Staphyloccocus aureus* and an inflammasome activation to be involved in the inflammation and chronicity [1, 2].

The pain is a major symptom to differentiate this disorder from tinea capitis. Gram-negative folliculitis may be painful but often the pain is milder, the inflammation less pronounced. Alopecia is rarely seen with gram-negative folliculitis. Dissecting folliculitis can be coincide with inverse acne (hidradenitis suppurativa) and shows a similar clinical pattern with boils and interconnecting abscesses leading eventually to extensive dermal fibrosis [3].

The treatment of folliculitis decalvans is not standardized. Dapsone and isotretinoin lead to an improvement in up to 60% and 90% respectively. The combination of clindamycin plus rifampicin achieved response rates of about 80% with longer remissions [4]. An early treatment may prevent extensive scarring alopecia. Newer treatment options include biologics such as adalimumab or apremilast [5, 6].

Key Points

- Folliculitis decalvans is a chronic and painful hair disorder of the scalp
- Inflammasome activation and disturbances of the local microbiome are involved in its pathogenesis
- Treatment aims to control inflammation and to prevent scarring alopecia

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