# REVIEW

# A Severe Case of Folliculitis Decalvans

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**Abstract**
*Folliculitis decalvans (FD) is an uncommon, chronic skin disease, characterized by cicatricial alopecia and follicular pustules. This condition affects men more often, and rarely occurs in children. The etiopathogenesis suggests that immunologic response to staphylococcal superantigens may play a role in FD. Treatment is necessary, and should be adapted to the clinical form and severity of the disease.*

**Key words:** folliculitis decalvans, doxicycline, S. Aureus.

## Introduction

Folliculitis decalvans (FD) is a rare, chronic, primary neutrophilic scarring alopecia, characterized by expanding patch of alopecia, with pustules. In some cases, it associates pain or pruritus [1]. The incidence in not exactly known, an it is estimated between 9% and 11% [2, 3]. FD occurs more often in men, and rarely affects children [4].

Etiopathogenesis of FD is still unclear. However, involvement of *S. aureus* has been accepted: not only its bacterian role, but also staphylococcal superantigens that bind to class II major histocompatability complex (MHC) proteins, causing nonspecific activation of T lymphocytes, resulting in release of cytokines and follicular destruction [5]. Other theories include: an autoimmune process, a genetically determined immune deficiency, pathogenic biofilms, and a congenital abnormality of follicular orifices [6 - 8].

Clinically, FD presents as multiple confluent plaques of cicatricial alopecia, with pustules, with/without inflammatory papules and absence of follicular orifices [9].

The diagnosis of FD is established by cicatricial hair loss and histologic evidence of a neutrophilic inflammatory infiltrate [10].

Management of patients with FD is important, because this scarring alopecia may lead to loss of all hair follicles. Treatment should always be started when the disease is active, and this means the presence of pustules, crusts, erythema, pruritus or pain, progressive scarring, or progressive hair loss. On the other hand, when this signs of inflammation do not exist any more, response to treatment is low [11].

**Case report**

We present the case of a 48 years old man, who referred to our Dermatology Clinic for the evaluation of a multiple scarring, confluent plaques, at level of the scalp, accompanied by pruritus and pain, in evolution for 1 year. The patient was treated with several topic antibiotics, but the disease continued to progress. Family history and medical history were unremarkable. Except the skin lesions, physical exam revealed no other abnormal findings.

On clinical exam of the skin we found: multiple erythematous, scarring, confluent plaques, with variable diameter, with crusts and pustules, at level of the scalp (Fig. 1).

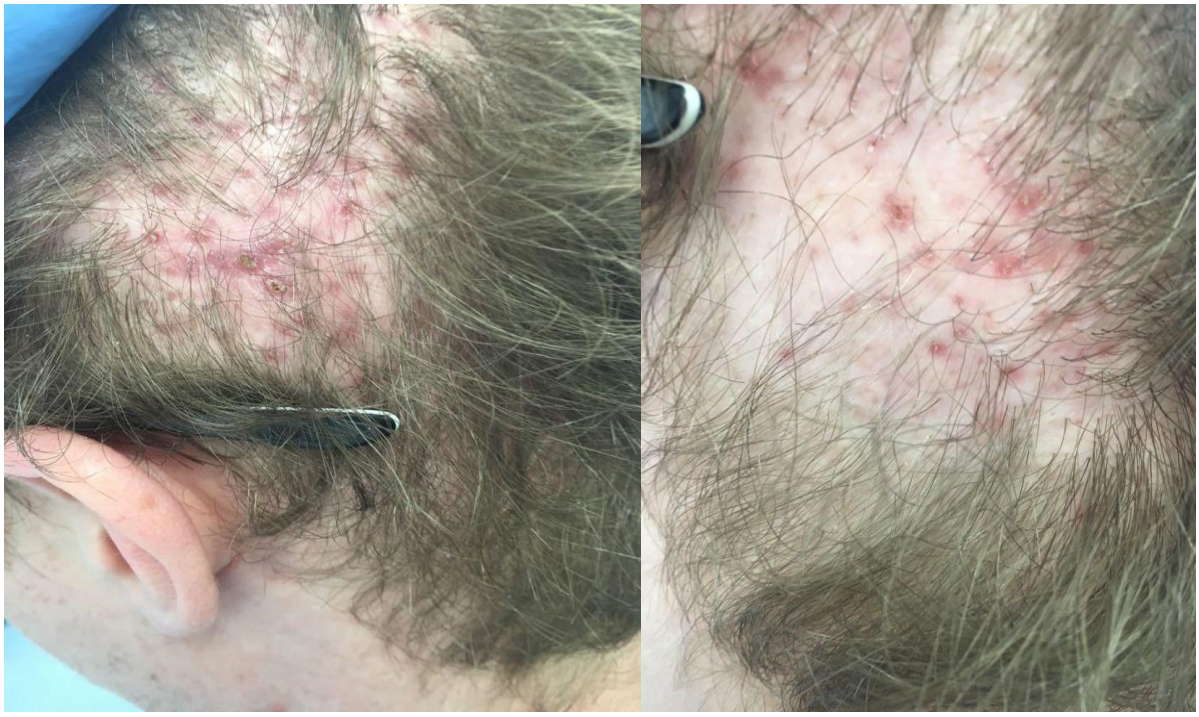

Fig 1- plaque of cicatricial alopecia, with pustules and crusts

Routine blood tests were normal.

We performed dermoscopy, which revealed: absence of follicular ostia, perifollicular erythema, perifollicular epidermal hyperplasia observed in a starburst pattern, hair diameter diversity, and large, follicular pustules.

We suspected FD, and for a diagnostic of certainty, we prelevated a skin biopsy, from the periphery of a cicatricial plaque, with

histopathological examination: dense, perifollicular inflammation of the upper portion of follicles, epithelial destruction, lymphocytic inflammation. The histopathological examination sustained the clinical aspect: FD.

Corroborating the clinical, paraclinical data, and histopathological examination, we set the final diagnosis of FD.

The management of a patient with FD is challenging. We initiated systemic therapy with oral antibiotic: Doxycycline 100 mg/day. Also, because symptoms (pain, pruritus) were very disturbing, we recommanded dermatocorticoids. Local, we apllied disinfectant solution and antiseptic shampoons. The treatment was well tolarated.

The patient presented to the control, four weeks after discharge. Evolution of the disease was favorable, as the palques did not extend any more. Also, the patient denied any symptoms.

## Discussions

Diagnosis of FD should include several criteria: one or more confluent areas of scarring alopecia on the scalp, absence of follicular ostia in areas of alopecia, perifollicular scale extending onto the hair shaft and tufting of hair shafts [12].

Differential diagnosis of FD includes: dissecting cellulitis of the scalp, acne keloidalis nuchae, erosive pustular dermatosis of the scalp, tinea capitis, lichen planopilaris,
discoid lupus erythematosus, central centrifugal cicatricial alopecia [9].

Treatment of FD is difficult, and is adapted to the clinical, severity and extension of the condition. Because this skin disease is a cicatricial one, the therapy should be started as soon as possible. First-line therapy is represented by tetracyclines: 50 to 100 mg of doxycycline or minocycline given twice daily. Its beneficial effects are observed in one to two months. In case of severe symptomes, one of the options would be triamcinolone acetonide for injections in the affected area, administrated in several sessions, at in interval of four to six weeks or longer. Local, a high-potency topical corticosteroid is one of the options. In acute episodes, systemic glucocorticoids may be useful [13]. However, because of their multiple side-effects, are not recommanded in long-term therapy. In case of failure of initial treatment, the alternatives include: rifampin, clindamycin, or oral isotretinoin [11].

## Conclusions

In conclusion, diagnosis and management of FD are challenging. Because this skin condition is evolving with alopecia, diagnosis should be established and therapy should be started as soon as possible. Also, follow-up of patients with FD is important, due to the chronic course of the disease.

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