# Successful Treatment with Fusidic Acid in a Patient with Folliculitis Decalvans

## Dear Editor,

Folliculitis decalvans (FD) is a rare form of primary neutrophilic cicatricial alopecia. It is a highly distressing disease that affects young and middle-aged adults, with a slight male predominance (1).

The most frequent clinical manifestations are follicular pustules and diffuse and perifollicular erythema that heal with centrifugal scarring. Follicular tufting, erosions, and hemorrhagic crusts can also be present, and this alopecia is most often located at the vertex and occipital area. Patients frequently complain about pain, itching, or burning sensations, and the involvement of other body areas is rare (2).

The pathogenesis of this disease remains unclear. *Staphylococcus aureus* and other hair follicle bacteria can often be isolated from the pustules, suggesting the role of a bacterial infection in its etiology. A defect in the host's immune response can also be postulated by reports of familial cases and the appearance of FD in patients with immunity dysfunctions. Other mechanical factors have been suggested, such as structural abnormalities of the follicle or local inflammation (2).

Management of this alopecia is difficult and its course is typically chronic and relapsing. The treatment aim is to stop inflammation and further irrever-



**Figure 1.** Large atrophic alopecic patch at the occipital region with areas of follicular tufting and peripheral crusts.

sible destruction of hair follicles. Antibiotics remain the first-line therapy, due both to their anti-inflammatory and antimicrobial properties (1). Although topical fusidic acid is widely used as adjuvant treatment, there are few data regarding its oral use.

We report a case of folliculitis decalvans successfully treated with oral fusidic acid. Our patient was a 41-year old Cape Verdean woman with a two month history of alopecia with painful, purulent discharge at the vertex of the scalp. The patient was diagnosed with human immunodeficiency virus type 1 (HIV-1) infection 5 years prior and was stable on her regimen of efavirenz, tenofovir, and emtricitabine, with undetectable viral load. She denied application of topical or capillary products. Dermatological examination revealed a patch of cicatricial alopecia with crusts and follicular pustules (Figure 1). Direct microscopic examination and mycological culture showed no fungal element. A diagnosis of folliculitis decalvans was established and the patient was started on oral fusidic acid at a dose of 500 mg three times a day. Betamethasone dipropionate 0.05% and salicylic acid 3% lotion as well as azelaic acid 5% lotion were also applied to the affected area once daily. After two months of treatment, the patient showed clinical improvement, with less erythema and suppuration of the affected scalp. A partial hair regrowth was noted, mainly at the periphery. Subsequently the patient maintained only topical therapy, and no recurrences were observed after 6-months of follow-up.

Fusidic acid is useful in the treatment of skin and soft tissue infections, particularly those due to *S. aureus*, as shown by randomized controlled studies (3). The clinical efficacy of fusidic acid in the treatment of folliculitis decalvans has been reported previously. Bogg was the first to describe this useful effect (4). Sutter also reported good results with fusidic acid used both topically and orally (500 mg three times a day) (5). However, both failed to report the treatment duration or the outcome on discontinuation. Abeck described three patients that responded to a three week oral course of fusidic acid (500 mg three times a day) and to a maintenance treatment with zinc sulfate (4). During the following year, recurrence was observed in only one patient after ending zinc sulfate therapy.

Oral antibiotics are frequently used to treat folliculitis decalvans. Tetracyclines and the combination of clindamycin with rifampicin are the most commonly used (2). However, the disease usually progresses when treatment is stopped. Fusidic acid is an anti-staphylococcal drug with few adverse effects. It is highly bioavailable orally, and has a long plasma half-life. Despite years of clinical use in numerous countries, resistance rates remain at low levels to date (6). Since clinical series or cases including ours have shown good results, this drug should not be forgotten when considering treatment options for folliculitis decalvans.

## **References:**

- Sillani C, Bin Z, Ying Z, Zeming C, Jian Y, Xingqi Z. Effective treatment of folliculitis decalvans using selected antimicrobial agents. Int J Trichology. 2010;2:20-3.
- Vanó-Galván S, Molina-Ruiz AM, Fernández-Crehuet P, Rodrigues-Barata AR, Arias-Santiago S, Serrano-Falcón C, et al. Folliculitis decalvans: A multicentre review of 82 patients. J Eur Acad Dermatol Venereol. 2015;29:1750-7.
- Schöfer H, Simonsen L. Fusidic acid in dermatology: An updated review. Eur J Dermatol. 2010;20:6-15.

- 4. Abeck D, Korting HC, Braun-Falco O. Folliculitis decalvans: Long-lasting response to combined therapy with fusidic acid and zinc. Acta Derm Venereol. 1992;72:143-5.
- 5. Suter L. Folliculitis decalvans. Hautarzt. 1983; 32:429-31.
- 6. Farrell D, Castanheira M, Chopra I. Characterization of Clin Infect Dis. 2011;52:487.92.

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