

## Frontal fibrosing alopecia treatment options

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**Summary** Frontal fibrosing alopecia (FFA) is a rare dermatologic disease that causes scarring and hair loss and is increasing in prevalence worldwide. FFA patients typically present with hair loss in the frontal scalp region and eyebrows which may be associated with sensations of itching or burning. FFA is a clinically distinct variant of lichen planopilaris (LPP) that affects predominantly postmenopausal women, although men and premenopausal women may also be affected. Early diagnosis and prompt treatment are necessary to prevent definitive scarring and permanent hair loss. Data from retrospective studies indicate that 5-alpha-reductase inhibitors (5aRIs) are effective in stabilizing the disease. In our clinical experience, we have seen optimal results treating FFA patients with oral finasteride in conjunction with hydroxychloroquine, topical calcineurin inhibitors (tacrolimus) and excimer laser in patients with signs of active inflammation.

**Keywords:** Frontal fibrosing alopecia (FFA), treatment, finasteride

The prevalence of frontal fibrosing alopecia (FFA) is increasing worldwide and early diagnosis and prompt treatment are necessary to prevent definitive scarring and permanent hair loss. The main objective of treatment is to reduce inflammation and prevent disease progression. Disease activity is best evaluated with dermoscopy with peripilar casts being a good indicator of progression.

The lack of randomized clinical trials does not allow for definitive conclusions to be made regarding optimal treatment for FFA, but available evidence gives some guidance as to potential effective treatment approaches. Data from retrospective studies indicate that 5-alpha-reductase inhibitors (5aRIs) are effective in stabilizing the disease. A retrospective multicenter study in 355 FFA patients concluded that 5-alpha-reductase inhibitors were the most effective treatment modalities for FFA (1). In this study population, which represents the largest FFA study cohort to date, the 5aRIs finasteride and dutasteride were utilized in approximately one-third of

patients, with improvement noted in 47% of patients and stabilization observed in 53% of patients (1). Furthermore, in a systemic review measuring treatment response of 114 FFA patients, 45% of patients treated with finasteride or dutasteride showed a favorable clinical response (2). We first reported the efficacy of finasteride in FFA patients 12 years ago (3) and still widely utilize this medication when treating patients. In fact, a recent case report indicates that 5aRIs may induce hair re-growth in some patients (4).

To date, FFA patients are mainly treated with combination medical therapy which has proven to be the favored course of action in our experience. We treat a large number of FFA patients in our academic clinical practice and have seen the best results using oral finasteride in conjunction with hydroxychloroquine, topical calcineurin inhibitors (tacrolimus) and excimer laser in patients with clinical or dermoscopic evidence of active inflammation. Four retrospective studies have evaluated the effectiveness of hydroxychloroquine in the treatment of FFA (1,5-7). In one such study, 15 FFA patients treated with hydroxychloroquine experienced a 73% reduction in signs and symptoms of FFA at 6-month follow up (5). Limited case reports support usage of tacrolimus in FFA patients (8,9). In our clinical experience, excimer laser is very effective in reducing inflammation and peripilar casts in patients with active disease. At least one study has confirmed the efficacy of excimer laser, showing success in treating 13 patients

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with lichen planopilaris and achieving a significant reduction in clinical signs of inflammation (10). In this study, excimer laser treatments were performed twice per week with a cumulative mean dose of 4,300 mJ/cm<sup>2</sup> (10).

Intralesional and topical steroids are commonly used by dermatologists to treat active disease, but they should be used with caution in FFA patients as they can worsen skin atrophy which is a hallmark of this disease. In addition, topical minoxidil is helpful and should be considered as female pattern hair loss is commonly associated with FFA. Positive results of combination therapy using minoxidil were seen in one small study of 8 FFA patients that showed halting of disease progression in 50% of FFA patients treated with minoxidil (2% concentration twice per day) and finasteride therapy (2.5 mg/day) following 12 to 18 months of treatment (3). Again, combination therapy seems to be the optimal choice for FFA patients, with finasteride serving as the core treatment to arrest disease inflammation, along with hydroxychloroquine, tacrolimus and excimer laser. Minoxidil should then be considered to increase hair volume.

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