

## Frontal Fibrosing Alopecia: Successfully Treated with Methotrexate or Just the Natural Disease Progression?

A 53 year-old-woman presented to our dermatology clinic with a 3-year history of hair loss and pruritus of the anterior scalp. She denied drug use, comorbidities, and other systemic symptoms. Physical examination revealed a band-like recession of the frontotemporal hairline with loss of the eyebrows and perifollicular erythema. The alopecic skin was atrophic and lighter than the chronically sun-exposed forehead. Some "lonely hairs" were observed, as well as depression of temporal veins. Systemic examination was unremarkable. A diagnosis of frontal fibrosing alopecia (FFA) was established, no biopsy was performed, and treatment with hydroxychloroquine 400 mg/daily with topical minoxidil was promptly started. After 6 months, the patient stopped the drugs because no clinical improvement was observed. More than one year later, she returned with the same symptoms demanding new treatment. We opted to change the immunosuppressant/immunomodulator to methotrexate monotherapy 20 mg once a week to improve ad-



**Figure 1.** Band-like recession of the frontotemporal hairline, "lonely hair" sign, depression of temporal veins, and an eyebrow tattoo

herence. Patient achieved clinical stabilization within seven months of treatment. She maintained with the same clinical features as described above but had an eyebrow tattoo made, and perifollicular erythema was no longer present (Figure 1).

FFA is a cicatricial alopecia caused by immune-mediated inflammatory infiltrate lymphocytes in the infundibulo-isthmic region of the hair follicle. Its etiopathogenesis is unknown, and it usually occurs in postmenopausal Caucasian women. Clinically, FFA presents with progressive loss of frontotemporal hairline resulting in a lighter skin compared with the forehead and with absence of follicular ostia. Perifollicular erythema, pruritus, pain, the "lonely hair sign", and partial or total scarring eyebrow loss can be encountered as well. Biopsy is no longer necessary, but if it is done it is important to remember that there are no pathological criteria, at present, to distinguish FFA from lichen planopilaris (1,2).

There have been no randomized clinical trial on AFF treatment. Topical drugs such as corticosteroids, minoxidil, and calcineurin inhibitors as well as systemic treatments such as 5 $\alpha$ -reductase inhibitors, hydroxychloroquine, retinoids, and methotrexate can usually be used (1,2). The Frontal Fibrosing Alopecia Severity Score should be used during treatment (3), especially regarding the search for perifollicular erythema, which is well-known for having a direct correlation with progressive disease (4).

In a retrospective study with 19 patients at Duke University, methotrexate monotherapy achieved stabilization in one of two patients. The mean duration of therapy was 16 months, and the dose varied between 15-25 mg once a week (5).

Unfortunately, the variable course of this disease and the possibility of spontaneous stabilization lead to risk of overestimating the effects of the prescribed treatments (1). After clinical stabilization, drug withdrawal could be attempted with frequent clinical observation. This difficulty persists as no patient is likely to agree with that.

**References:**

1. Iorizzo M, Tosti A. Frontal Fibrosing Alopecia: An update on pathogenesis, diagnosis, and treatment. *Am J Clin Dermatol*. 2019;20:379-90.
2. Gamret AC, Potluri VS, Krishnamurthy K, Fertig RM. Frontal fibrosing alopecia: efficacy of treatment modalities. *Int J Womens Health*. 2019;11:273-85.
3. Saceda-Corralo D, Moreno-Arrones ÓM, Fonda-Pascual P. Development and validation of the Frontal Fibrosing Alopecia Severity Score. *J Am Acad Dermatol*. 2018;78:522-29.
4. Toledo-Pastrana T, Hernández MJG, Martínez FMC. Perifollicular erythema as a trichoscopy sign of progression in frontal fibrosing alopecia. *Int J Trichology*. 2013;5:151-3.
5. Ladizinski B, Bazakas A, Selim MA, Olsen EA. Frontal fibrosing alopecia: a retrospective review of 19 patients seen at Duke University. *J Am Acad Dermatol*. 2013;68:749-55.

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