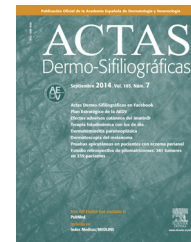




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## OPINION ARTICLE

### Hair Transplantation for Frontal Fibrosing Alopecia: Part of the Solution?



### Trasplante de pelo en la alopecia fibrosante frontal: ¿parte de la solución?

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Primary cicatricial alopecias (PCA) are a diverse group of inflammatory hair disorders of unknown aetiology, clinically characterised by the loss of hair shafts, visible follicular ostia, and variable degrees of scalp inflammation. The hair follicle is the primary target of the disease process and persistent inflammation leads to irreversible damage to the hair follicle's stem cells. Ultimately, replacement of follicular structures by scar-like fibrous tissue occurs.<sup>1–3</sup> Frontal fibrosing alopecia (FFA) is one of the most common types of PCA. The clinical diagnosis is typically straightforward; FFA is considered to be a subtype of lichen planopilaris (LPP) and is based on similar histopathological findings.<sup>4,5</sup> An effective medical treatment remains elusive and evidence-based recommendations are weak: intralesional triamcinolone acetonide, finasteride, dutasteride, oral and topical corticosteroids (level of evidence D), and antimalarials (level of evidence E).<sup>1,5,6</sup> Despite medical treatment, the course of FFA is uncertain and, in the best scenario, these drugs can only stop disease progression.<sup>1</sup> In daily practice, we have observed that the cosmetic impact of FFA on women is a frequent cause of anxiety, and just halting the alopecia process is generally not sufficient in most cases. Some patients with FFA insistently demand a hair transplant despite being properly informed of the high risk of hair loss a few months after the procedure.

How could hair transplantation be part of the solution for FFA? Literature regarding hair transplantation for FFA is

scarce. Publications by Nusbaum et al. and Jiménez et al. report similar results: despite the growth of the hair shafts for 1.5–2 years after transplantation, more than 50% of the transplanted hairs had been lost after 3 years. Histological confirmation of FFA in the remaining transplanted follicles suggests that FFA displays recipient dominance. Post-transplant medical therapy is not mentioned in either of the publications.<sup>6,7</sup> Gurfinkiel et al. reported a successful case of hair transplantation in a female patient with FFA and vulvar lichen sclerosus with a follow-up of 6 years, maintaining systemic finasteride 1 mg/day and topical minoxidil 2% bid as post-transplant maintenance therapy.<sup>8</sup>

Unger et al. have recently proposed two new categories of cicatricial alopecia: unstable and stable. Unstable cicatricial alopecias (UCA) have a tendency to progress and recur intermittently over the course of time, in either new or previously affected areas (e.g., discoid cutaneous lupus erythematosus, LPP). Stable cicatricial alopecias are secondary to isolated events that cause permanent scarring in a hair-bearing region (e.g., burn, surgical scar); once successfully corrected surgically, there is no need for further therapy.<sup>9</sup> The chronic and relapsing nature of FFA, even after hair transplantation, is the paradigm of UCA. It has become clear that this procedure can only be considered for FFA after a certain period of observation with no disease activity, and recommendations range from 1 to 5 years<sup>6–8</sup>; we do not usually consider hair transplantation in FFA until 2 years of clinical stability have been observed. However, once hair transplantation has been performed, these patients should be kept on maintenance medical treatment for affected areas, even if no clinical signs of disease activity are visible.

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The usefulness of performing trichoscopy to monitor disease activity and response to therapy cannot be emphasised enough: look for the presence of perifollicular hyperkeratosis/desquamation and perifollicular erythema, which are correlated with disease activity in FFA.<sup>10</sup>

Regarding the maintenance medical treatment to be prescribed after hair transplantation for FFA, clobetasol propionate 0.05% lotion twice a week could be considered as a possible maintenance scheme; from our clinical practice experience, the risk of adverse effects with this regimen appears to be very small. As an alternative, a topical calcineurin inhibitor such as tacrolimus 0.1% ointment or pimecrolimus 1% cream could also be considered (tolerability: pimecrolimus > tacrolimus). In our experience, maintaining concomitant post-transplant therapy with systemic finasteride 5 mg/day and topical minoxidil 5% is also advisable, particularly if androgenetic alopecia is concomitantly present. Dutasteride has been recently attempted as an alternative to finasteride; although dutasteride might appear at least equally effective, its superiority and more favourable safety profile are not yet proven. Follow-up visits should be frequent, and more aggressive anti-inflammatory therapy must be initiated in case of clinical relapse, not only to “protect” transplanted hairs but also to prevent alopecia progression to previously uninvolved areas.

To summarise, the need for post-transplant medical therapy for FFA is, in our opinion, absolutely decisive for the success of the transplantation. Prior to surgery, two requirements for FFA hair transplantation must be met: 2 years of clinical stability and the patient’s commitment to follow-up visits and adherence to post-transplant medical therapy.

Strong evidence-based recommendations for the medical and surgical treatment of FFA are warranted.

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