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RESIDENT'S FORUM

RF-Mesotherapy With Dutasteride: A Future Alternative Treatment for Androgenetic Alopecia[☆]



FR-Mesoterapia con dutasterida, una futura alternativa para el tratamiento de la alopecia androgenética

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PALABRAS CLAVE

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Several new therapeutic approaches are emerging for the management of androgenetic alopecia (AGA). The use of topical finasteride and oral minoxidil, as well as increased use of oral and, more recently, intradermal dutasteride, are good examples of the recent paradigm shift in the treatment of this entity.^{1,2}

The first clinical trial evaluating the efficacy and safety of intradermal injection of 0.05% dutasteride solution in patients with male AGA was published in 2009.³ Fourteen of the 28 patients received a total of 7 injections, separated by at least 1 week, of a 2-mL dutasteride solution. Increased hair density was reported in 92.9% of patients in the dutasteride group, but only 7.1% in the placebo group. No significant differences in adverse effects were observed between groups.

A 2013 study by Sobhy et al⁴ compared the efficacy of 0.005% dutasteride alone, 0.05% dutasteride in a dexpanthenol, biotin, and pyridoxine solution, and 0.9% physiological serum (control group), administered in 9 separate injections to 90 patients with male AGA. The authors reported a significant increase in the number of follicles in anagen phase in the group that received 0.05% dutasteride in the vitamin solution. However, the possibility that the adjuvants contributed to the differences between groups cannot be ruled out. Another clinical trial published in 2013⁵ compared the efficacy of 2 mL of 0.05% dutasteride in a dexpanthenol, biotin, and pyridoxine solution with that of physiological saline in 126 women with female AGA. Participants underwent 12 mesotherapy sessions over a period of 16 weeks. Improvements were observed in 62.8% of dutasteride-treated patients as compared with 17.5% of patients in the control group.

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A recent study by Saceda-Corralo et al⁶ evaluated the efficacy of dutasteride microinjections using a new, simpler treatment regimen to promote adherence. Six AGA patients (5 men and 1 woman) were injected with 1 mL of 0.01% dutasteride solution in each session. Treatments were administered over 3 sessions at 3-month intervals, and resulted in increased capillary density in all patients, marked improvement in 2 patients, and no adverse effects. Laboratory analyses revealed no significant differences between serum hormone levels before and after treatment.

A growing body of evidence supports the greater efficacy of oral dutasteride than oral finasteride. Dutasteride inhibits 5- α -reductase (5 α R) isoenzymes 1 and 2 with a potency 100 and 3 times greater, respectively, than that of finasteride, and decreases serum dihydrotestosterone levels by 90%. Moreover, its long half-life (approximately 4–5 weeks) allows for longer periods between treatment sessions.

Dutasteride microinjections are a safe and potentially effective alternative for the treatment of AGA that will likely become more common in the future, either as an adjunct or an alternative to oral treatment.

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