

Combination of calcipotriene foam, 0.005% and tazarotene foam, 0.1% in the treatment of plaque psoriasis of the scalp and body: A Case Report

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BACKGROUND

Psoriasis is a chronic immune-mediated inflammatory skin disease. Plaque psoriasis is clinically described as sharply demarcated, erythematous, and scaly plaques.¹ Topical treatment options for plaque psoriasis include corticosteroids, vitamin D analogues, retinoids, calcineurin inhibitors, and tar formulations.² Long term use of topical corticosteroids is associated with side effects such as skin atrophy and telangiectasias. Topical vitamin D derivatives and retinoids are steroid-sparing alternatives used for the treatment of plaque psoriasis. The choice of vehicle is an important factor to consider with topical therapies, especially when psoriasis is present on hair-bearing areas such as the scalp. Foam vehicles are associated with increased patient adherence due to easy application and non-greasy delivery system. They also have better penetration than ointment and solution vehicles.³ Calcipotriene foam, 0.005% (Sorilux[®]) has been shown to be safe and effective for the treatment of plaque psoriasis on the body and scalp.^{3,4} Tazarotene 0.1% in gel formulation was shown to have comparable efficacy as topical calcipotriol 0.005% ointment in the treatment of plaque psoriasis.⁵ However, tazarotene foam, 0.1% (Fabiior[®]) has only been approved for acne vulgaris and has not been evaluated for plaque psoriasis.

PATIENT PROFILE

- 34-year-old white woman
- 5+ years history of plaque psoriasis
- Prior treatment included clobetasol propionate shampoo, 0.05% and clobetasol ointment, 0.05%
- No other medical problems or skin conditions

RESULTS



CASE REPORT

A 34-year-old white woman presented to our dermatology clinic with a history of red scaly plaques on her elbows, face, and scalp for more than 5 years. She complained of itching and scaling in the affected areas. She had been treated previously with clobetasol propionate shampoo 0.05% for scalp psoriasis and clobetasol ointment 0.05% for plaque psoriasis on her elbows and face. She reported frequent recurrence with the aforementioned treatments. She did not have any other medical problems or skin conditions. Physical exam was notable for erythematous plaques with silvery scales on bilateral elbows and small scaly plaques on the anterior scalp along the hairline. At this visit, Physician's Global Assessment (PGA) of psoriasis on her limbs and Scalp Physician's Global Assessment (ScPGA) were both 4 (severe). She was prescribed calcipotriene foam 0.005% to be applied in the morning and tazarotene foam 0.1% to be applied in the evening directly to the plaques on her scalp, elbows, and face every day for a total of 4 weeks. She was not planning pregnancy at the time and agreed to use an effective method of contraception during treatment with tazarotene. Four weeks later, she returned to our clinic and reported using the combination therapy as instructed daily for 1 week, at which point she experienced mild irritation and burning at the application site. She then started using the combination therapy every other day for the remaining 3 weeks. She denied application site irritation with every other day regimen. For her scalp, she continued to use clobetasol propionate shampoo 0.05% twice a week. Plaques on her elbows and face had significantly improved to PGA of 1 (almost clear), with reduction in erythema, thickness, and scaling. Plaques along her hairline were much less erythematous, scaly, and keratotic with improvement in ScPGA to 1 (almost clear).

DISCUSSION

We present a case of plaque psoriasis on the scalp, face, and elbows refractory to treatment with topical corticosteroid, which responded successfully to topical nonsteroidal combination therapy with calcipotriene and tazarotene in foam vehicles. Evidence is limited regarding the effectiveness of nonsteroid combination therapy in the treatment of plaque psoriasis, especially scalp psoriasis. The combination of calcipotriene ointment and tazarotene gel has been shown to be as effective as clobetasol ointment in reducing plaque scaling, thickness, and overall severity over a 2-week period.⁶ However, the combination of calcipotriene and tazarotene in foam vehicles has not been evaluated as a topical treatment option for plaque psoriasis of scalp or body. Calcipotriene 0.005% foam has been shown to be a safe and effective monotherapy for the treatment of plaque-type psoriasis and scalp psoriasis, with improvements seen as early as 2 weeks.^{3,4} Topical tazarotene in foam formulation has not been previously evaluated for treatment of psoriasis. The foam vehicles are not only effective and safe, but also easier to use in areas with hair, which may increase compliance and satisfaction in patients with plaque psoriasis of body and scalp. Thus, the combination of calcipotriene foam and tazarotene foam may be an effective steroid-sparing topical treatment option for patients with psoriasis on the scalp and body who have failed other topical therapies.

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