

Correspondence

Ulerythema ophryogenes: successful eyebrow restoration with hair follicle transplantation

Dear Editor,

A 25-year-old Caucasian man came to our clinic to seek solution for bilateral eyebrow loss present since childhood (Figure 1a). His family history revealed that his father and an aunt also experienced eyebrow loss. Physical examination revealed bilateral eyebrow hair loss and absence of beard hair on both cheeks.

Two punch biopsies were obtained, one from the alopecic area of the eyebrow (Figure 2a) and the other from the beard (Figure 2b), showing follicular miniaturization, cicatricial fibrosis, and absence of inflammation. Both the clinical and histopathological findings supported the diagnosis of ulerythema ophryogenes (UO).

Eyebrow transplantation was decided as a therapeutic alternative. The technique used for donor harvesting was the excision of a small strip (6 cm×0.9 cm) from the retroauricular scalp area. The donor strip was dissected under the stereomicroscope into single hair grafts. A total of 577 single hair grafts were dissected and, after local anesthesia of the eyebrows, the grafts were inserted using 0.6 mm implanters into premade incisions done with a 23-gauge needle.

The patient was followed up for 17 months after surgery. He was very satisfied with the result, requesting another small touch-up session in order to increase the density (Figure 1b).

UO is a variant of keratosis pilaris, which is associated with a variety of genodermatoses. While UO affects men more than women, its true prevalence is unknown.¹ Its pathogenesis remains unclear and may occur sporadically or in an autosomal-dominant fashion with variable penetrance. The onset of UO starts during childhood with bilateral multiple small erythematous keratotic follicular papules in the lateral third of the eyebrows, sometimes with cheek and forehead involvement.¹



Figure 1 (a) Preoperative photograph demonstrating bilateral loss of lateral eyebrows. (b) Postoperative photograph 17 months after hair transplantation

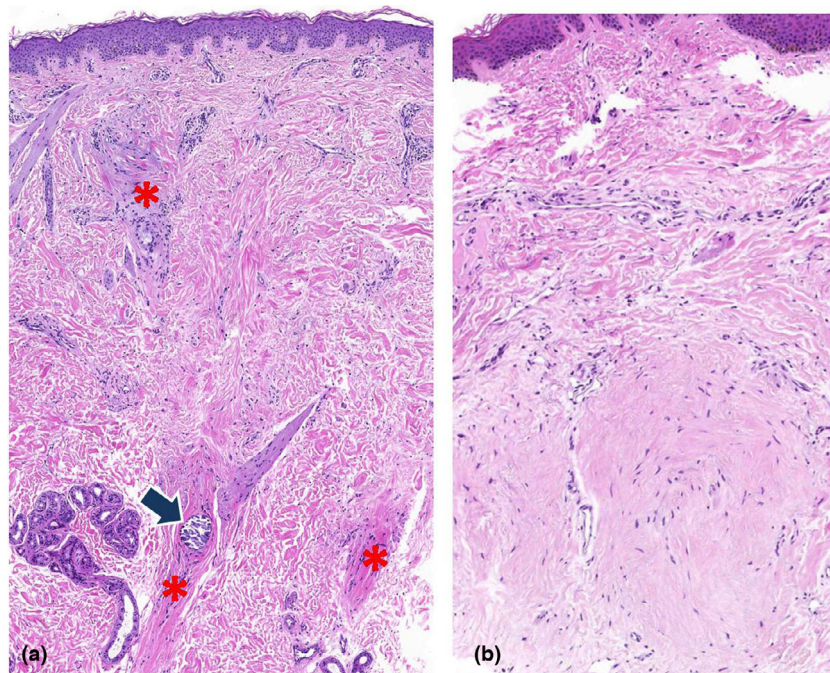


Figure 2 (a) Histopathological image of the beard biopsy (Hematoxylin and eosin, ×50), demonstrating three follicular fibrous tracts (*) indicative of scarring alopecia. Dystrophic calcification (arrow) is present in one of them. (b) Histology of the eyebrow biopsy shows a cicatricial nodule at the lower half of the picture (Hematoxylin and eosin, ×100)

Although the inflammation undergoes spontaneous resolution during puberty, the patients are left with a scarring alopecia resulting in permanent hair loss of the affected area.

Because eyebrows are essential and a prominent facial feature, patients with UO can be psychologically affected by their appearance and seek cosmetic solutions. Eyebrow restoration with hair follicle transplantation appears to be an excellent alternative in UO as seen in our patient as well as in two previous reports.^{2,3} In one of the reports, the transplanted eyebrows remained intact over a 4-year follow-up,² whereas the other case was lost to follow-up after the procedure.³

It is important to note that the eyebrow loss in UO may be clinically similar to the one seen in patients with frontal fibrosing alopecia (FFA).³ This differential diagnosis is important because the long-term outcome to hair transplantation in most FFA patients is unsuccessful with loss of the transplanted hairs after 4–5 years.⁴ In contrast, the noninflammatory nature of the eyebrow alopecia in established cases of UO appears to support the permanency of the transplanted grafts. For this reason, we recommend performing histological analysis in order to confirm the diagnosis and rule out active inflammation. Furthermore, the patient should be informed about the disease nature, and long-term follow-up is important.

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Conflict of interest: None.

Funding source: None.

doi: 10.1111/ijd.16749

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