## LETTERS AND COMMUNICATIONS

## Eyebrow Transplants: The Use of Nape and Periauricular Hair in 6 Patients

Although the caliber of the central part of eyebrow hair often approximates that of scalp hair, the aesthetics of the eyebrow is defined by its soft margins. Modern techniques for eyebrow transplants commonly involve the use of single hair follicles derived from the mid-occipital area. Because the mid-occipital area contains coarser hairs compared with the rest of the scalp, eyebrows created from this source are likely to appear coarse in their margins. Hair margins of the nape and periauricular areas (NPA) generally have the thinnest calibers. Although these finer hairs would be obvious candidates for evebrow transplantation, their location presents practical challenges to the follicular unit strip surgery method of hair transplantation, including unacceptable scarring.1 Although Toscani and colleagues2 reported a case series on 17 consecutive patients in which eyebrow transplants were performed, they excised relatively large strips from the nape area of the occipital region. Although hair caliber from the NPA is expected to be less than that of the midoccipital area, hair is still coarser than hair follicles located closer to the NPA hairline margins. In Italy, where their work was performed, thick-haired eyebrows are more widespread than in other regions of the world. Given that hair from the occipital region is of the largest caliber, this type of hair would seem to be too coarse to implant in many evebrows. Use of follicular unit extraction (FUE) from hair located close to the hairline margins of the NPA can overcome some of the problems associated with strip harvesting and result in more control over eyebrow softness aesthetics. I report results for eyebrow hair transplantation in 4 women and 2 men using FUE.

## Patients and Methods

Patient 1 (54-year-old white woman) lost eyebrows from overplucking and resorted to tattooing to

compensate, although she considered it to look fake; 450 grafts were transplanted from the NPA (the same area as for all patients). Tattoo removal was not attempted before and after the procedure. Patient 2 (41-year-old white woman) wanted fuller eyebrows and an accentuated curve; 450 grafts were transplanted. Patient 3 (50-year-old white woman) lost eyebrow thickness from overplucking and wanted fuller eyebrows; 293 grafts were transplanted. Patient 4 (70-year-old Hispanic woman) had eyebrow loss, and medical evaluation revealed no secondary etiologic factors; 401 grafts were transplanted. Patient 5 (42-year-old African American man) had lack of volume in the outer half of both eyebrows since childhood; 200 grafts were transplanted. Patient 6 (39-year-old white man) had inadequate eyebrow fullness and wanted thicker eyebrows; 600 grafts were transplanted. None of the 6 patients had evidence of hairline recession in the donor areas. All patients were fully consented.

Hair transplantation by FUE was performed under local anesthesia by subcutaneous injections of epinephrine (1:100,000) and lidocaine 1% and bupivacaine hydrochloride 0.25%. Tumescence was not performed in the donor areas. A rotary tool was used to mount a hypodermic needle (18 to 19 gauge) with the tip modified to form a punch-like instrument. The tool enables a graft to be pulled up as the tip cuts around the graft, minimizing much of the customary graft damage because the axis of the punch cutting edges is directed away from the follicles.<sup>3</sup>

A controllable fluid irrigation system hydrates each graft at the time of scoring. Freed hair follicles were easily removed with occasional aid of blunt needle tip dissection and placed in sterile petri dishes containing chilled Ringer lactate solution. Wounds created by these customized punches widen with depth, so injury to follicles is diminished and wound closure

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