

# Eyebrow transplantation: Alternative body sites as a donor source

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*To the Editor:* Aesthetic improvement of eyebrows or their reconstruction after damage caused by trauma or burns is not an uncommon procedure in the field of hair transplantation. The usual hair donor source for such transplantation is the scalp-occipital area.<sup>1, 2, 3</sup> However, this option is not feasible in some instances because the hair is both too coarse and grows excessively long for the intended eyebrow recipient site. One alternative for the donor source is leg hair, which has been successfully used to improve hairlines in males.<sup>4</sup> Advantages of using leg hair for eyebrow transplantation are that it is significantly finer compared with typical head hair, and naturally short as a result of a brief anagen (growth) phase.<sup>4, 5, 6</sup> The latter results in leg hair being similar in length to eyebrow hair, which also permits transplanted leg-to-eyebrow hair to be trimmed much less frequently compared with scalp hair.

This case involves the use of leg hair for transplantation in a 46-year-old Hispanic male born with genetically sparse eyebrows ([Fig 1](#)). Using follicular unit extraction, 400 grafts from the leg were transplanted into both eyebrows. Leg donor areas were pretreated with 5% minoxidil for 3 months before surgery to induce anagen phase and then shaved 10 days before surgery to better identify late-phase anagen hair.<sup>4, 7</sup> Follicular unit extraction was performed under local anesthesia using subcutaneous injections of epinephrine (1:100,000) and lidocaine 1%, and bupivacaine hydrochloride 0.25%, without tumescence. A 19G hypodermic needle with the tip modified to form a punchlike instrument was mounted on a rotary tool and enabled a graft to be extracted with minimal damage as the axis of the punch cutting edge was directed away from the

follicles; there was less need for precision in tracing the angle of the follicle deep to the skin.<sup>4, 7</sup> Although the occasional aid of blunt needle tip dissection is required, this technique facilitates easy removal of hair follicles. Slits were created in preparation for recipient grafting using 19G hypodermic needles inserted with the bevel facing down to accentuate the angle of the hair shaft to the plane of the skin.



Fig 1

Eyebrow insufficiency. Before hair transplantation to eyebrow.

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Approximately 10 months after transplantation, the patient had complete eyebrows and a high level of satisfaction ([Fig 2](#)); length was maintained by trimming at 3- to 4-week intervals. In contrast, eyebrows that are created with transplanted scalp hair would likely require trimming every 10 to 14 days.<sup>2</sup> Leg donor area healing was excellent. Three other patients with genetically low eyebrow volume have also been successfully treated. The hair source was leg only in 1 patient; leg and forearm in another; and leg, forearm, and nape of the neck in the last patient. Overall hair yield was about 75% to 80% for these 4 patients.

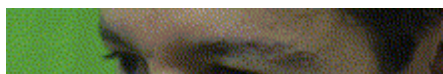


Fig 2

Eyebrow insufficiency. After hair transplantation to eyebrow, approximately 1 year after surgery.

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Leg hair width after transplantation generally approximates eyebrow hair caliber and is a better match than traditional head donor-sourced hair because of its finer quality and shorter length. In general, the value of leg hair transplantation to eyebrows should be expected to be independent of the causes of eyebrow hair loss.<sup>1-8</sup> In some instances, other finer sources of hair if available can be used to augment eyebrow appearance.

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