Review of the Literature
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Umar, S. Observation: the transplanted hairline: leg room for improvement. Arch Dermatol. 2012; 148:239-242.
(See author synopsis below.)

In a recent publication in the dermatology literature, Dr. Sanusi Umar of Los Angeles described two case reports in which he transplanted hairs from the leg to soften hairlines in young men (ages 29 and 35) who had previously undergone hair transplantation but were dissatisfied with their results. In each case, the donor areas were shaved 7-10 days pre-operatively to ensure the use of strictly anagen hairs. The areas were pre-treated with minoxidil to shorten the telogen phase. Approximately 1,000 follicular unit grafts were harvested from the leg or thigh in each case and placed individually along the frontal hairline. The author used a custom-made rotary tool to extract the follicles individually using FUE. He reported that 75-80% of the hairs grew in and that the patients were satisfied in both cases. The leg areas of extraction healed well and had no appearance of scars. One patient had 3-year follow up and was still pleased with the results.

Commentary: One of the major limitations of contemporary hair transplantation is the artificial appearance of thick donor hairs when transplanted along the frontal hairline. This is especially noticeable in Asians or individuals with dark hair contrasting a lighter scalp tone. Hair surgeons and their techs must be careful to place single-hair follicular units along the periphery in order to maintain the most subtle, natural appearance. However, this is not always possible and even so we are faced with challenges of keeping a hairline soft. Dr. Umar’s technique offers an interesting and useful way to address this problem using hair from elsewhere on the body. This is an especially helpful technique when donor hair is already limited. The limitations of body hair transplantation have traditionally been a difference in texture (often more curly) and length of anagen phase (much shorter), but the author brings to light the fact that these differences may be key elements in making hairlines appear as soft as possible.

A summary of “The transplanted hairline: leg room for improvement”
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Background
The large caliber of head hair in hair transplantation imparts a coarse hairline, whereas natural hairlines are typically softer. In hirsute individuals, transplantation of leg hair to the hairline may result in a superior aesthetic appearance.

Observation
A total of 1,025 leg hair follicles in one patient was grafted to an area 0.5-1.0cm in front of and 0.5-1.0cm internal to the vanguard hair of the original hairline and temporal recesses (Figures 1 and 2). A second patient received approximately 1,000 leg hairs and 600 head hairs to advance and soften his hairline and to create a custom widow’s peak (Figures 3 through 6). Transplantation resulted in a fully grown and soft-looking hairline after 9 months in the first patient, with growth of 75%-80% of the transplanted leg hair. The mean length of the transplanted leg hair was longer than the length of the original leg hair, with less curliness but similar hair width. Transplanted leg hair width was significantly finer compared with existing head hair width. After 4 years, results were sustained, minimizing concerns that subsequent hair loss might result from leg hair cycle variations. In the second patient, similar results were observed at 3 years.

Conclusion
The use of leg hair in transplantation provides additional options in patients with hairlines that need to be refined.

The follicular unit extraction (FUE) technique generally provides good results in the creation of hairlines but the use of single-hair follicles from the safe donor area (assuming head donor hair is an option) is limited in the creation of softer looking hairlines because the hair caliber is rather large. In this study, the author explored the possibility of using leg donor hair, which is usually of smaller caliber, to improve the aesthetic appearance of hairlines.

Selected leg and thigh donor areas were first treated with 5%