

Camouflaging Hairless Areas on the Male Face by Artistic Tattoo

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The hair-bearing areas on dark-complected individuals is characterized by a dark hue caused by the punctate appearance of hair follicles. Scars and skin grafts on these areas do not share this quality and thus look like patches. Women use makeup to cover their scars, but it is uncommon among men to use makeup.

We have simulated the dark hair follicles by artistic tattooing and have achieved a very good result in camouflaging the scars and skin grafts. The pigment used for artistic purposes is made of ferrous oxide, glycerin, and alcohol. These chemicals are biocompatible and have been used for generations by nonmedical persons with no adverse effect.

TECHNIQUE

A simple revolution machine from Spaulding and Rodgers is used to introduce the pigment into the dermis. Initially, tattooing of a small test area is performed. Its purpose is to evaluate the future outcome and to help the surgeon to select the right needle, depth of penetration, and direction.

When the test is satisfactory, the procedure is completed using a single needle on the tattooing machine. The procedure is usually done on an outpatient basis under local anesthesia.

It is important to introduce the needle into the dermis similarly to the natural hair pattern of the patient. In dark-complected patients, the needle is directed obliquely in order to achieve a more natural simulation of hair. Representative patients are presented in Figures 1 to 3.

DISCUSSION

The idea to use tattoo for this purpose came to one of us (Tsur) following a visit to the Whitney Museum in New York, where a huge portrait by the artist Chuck Close in a photorealist style was presented. On close inspection, one could observe that the facial hairs were drawn by a single brush stroke. We used the same principle with the tattoo machine.

The pigment remains permanently fixed in the dermal macrophages and extracellularly within the collagen fibers.¹ Over the years, a minimal amount of it may migrate to the local draining lymph nodes, but this is of no medical consequence.

Tattooing is a simple office procedure that is usually done without any anesthesia. The procedure has an immediate effect. The tattooing is a little darker to begin with, but the color becomes lighter a few weeks later. In some patients, revisions are necessary. Medical tattooing is used in plastic surgery for reconstructing the nipple-areola complex,² camouflaging hemangiomas,³⁻⁷ covering vitiligo spots,¹ and creating the eyebrows,⁸ as well as cosmetically to simulate a dark line along the eyelid margin.⁹

Other techniques for reconstructing hair on the male face involve multistage operations for transferring scalp or neck hair to the lips and cheeks^{10,11} or a single-stage microsurgical operation.¹² The aesthetic results of such transfers are not always optimal. The hair texture is different, and there is occasionally a considerable degree of morbidity.



FIG. 1. (Left) A 38-year-old man 2 years after a deep second-degree burn of his face. Arrow points to the scar. (Right) Appearance 2 weeks following artistic tattoo of his scar. Arrow points to the tattoo.



FIG. 2. (Left) Patient 3 years following a deep second-degree burn to the upper lip, showing hairless scars. (Right) Appearance 1 month following artistic tattoo of the hairless areas.

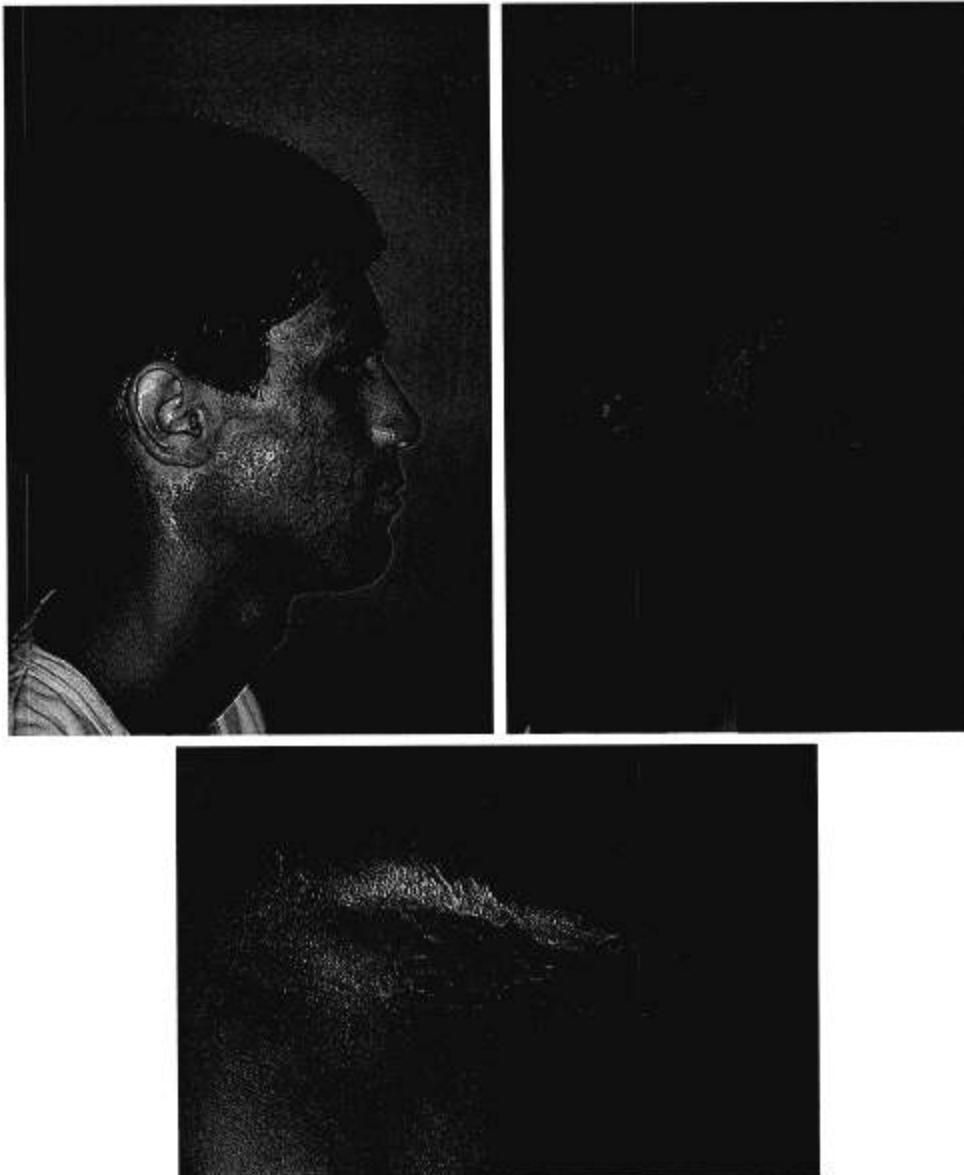


FIG. 3. (Above, left) Patient 2 years following a split-thickness skin graft to the face because of third-degree burn injuries. (Above, right) Result 6 months after tattooing. (Below) A small test area of hair follicle tattoo.

So far we have used the technique on 10 patients. Our follow-up time is 5 to 14 months, and the results are very satisfactory.

The disadvantage of the technique is that tattooing can simulate the hair only at a certain specific point in time. The camouflage is best when the patient is neatly shaven. The hair grows and causes a color change, while the tattoo is static. In cases in which the tattooing is unsatisfactory or the natural hair color changes, we can fade out the tattooing by an argon laser beam.¹³ If the tattoo fades out over the time, a revision can be done by the same technique.

SUMMARY

Marked improvement in the aesthetic appearance of scars and skin grafts of the hair-bearing facial areas of male patients can be achieved by camouflage with punctate tattooing.

The technique is easy and simple to learn. The procedure is performed under local anesthesia and on an outpatient basis.

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