Correction of unaesthetic hair transplantation

Correção de transplante capilar inestético

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ABSTRACT

When outdated techniques and large skin grafts are used in hair transplants, the results are unattractive and disfiguring. More recently, natural looking results have been achieved by transplanting follicular units. The correct shape and implantation level in the hairline contribute to a natural appearance. Correction methods include: camouflage with follicular units, removal of transplanted hairs and suture, reduction of the scalp, correction of scars, and laser therapy. In this article, the combination of different surgical techniques and laser epilation are described with satisfactory results in the correction of hair transplants.

Keywords: hair; transplantation; lasers.

RESUMO

Transplantes capilares utilizando técnicas ultrapassadas e enxertos grandes resultam em aparência inestética e desfigurante. A naturalidade dos resultados foi conseguida mais recentemente com o transplante de unidades foliculares (UF). Contribuem para a naturalidade o desenho correto e o nível de implantação da linha frontal. Os métodos de correção incluem: camuflagem com unidades foliculares; remoção de cabelos transplantados e sutura; redução do couro cabeludo, correção da cicatriz e laserterapia. Descreve-se associação de técnicas cirúrgicas diversas e epilação por laser com resultados satisfatórios para correção de transplantes capilares.

Palavras-chave: *cabelo; transplante; lasers.*

INTRODUCTION

Hair transplants attempt to restore the natural look of the hair. An important aspect of hair restoration involves the correction of previous transplants that were carried out using outdated methods, which led to disfiguring results.[1] In the past, transplants were carried out using 3-4 mm grafts containing up to 25 hairs, which created an artificial appearance.

In the 1990s, a new method that transplanted follicular units (FU) was developed.[2] Since then, several advances in the technique have contributed to ever more natural results. FUs correspond to the anatomical clustering of hairs and contain

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from one to four terminal hairs, in addition to vellus hairs, the erector muscle of the hair, and a sebaceous gland.

In addition to the use of FUs, another decisive factor for natural results is the correct demarcation of the transplant's hairline which must be compatible with the patient's gender, ethnicity and age. Rather than adhering to rigid rules, creating the new hairline requires the surgeon to have an artistic sensibility.

In men, the implantation level of hairs in the hairline varies according to the individual, usually located in the transition of the vertical forehead to the horizontal scalp. The frontotemporal recessions must remain positioned in the sagittal line passing through the outer corner of the eyes. The FUs of a thread of hair are positioned more anteriorly with similar angulation, however they are intentionally distributed irregularly in order to recreate the natural pattern.

Unfavorable transplant results are classified into three categories: technical mistakes, poor planning and complications.3,4 Correction methods include: 1) anterior camouflage with FUs; 2) removal with or without redistribution of transplanted hairs and suture of the defect; 3) reduction of the scalp; and 4) correction of the scar. In special situations, the removal of hairs can be carried out using laser, which can also improve the scar's appearance.[1,4,5]

CASE REPORT

A 35-year-old male patient had two sessions of hair transplant at another medical service in January and July 2005. Grafts of six to 12 threads each had been implanted, in diverse directions (some inverted causing inclusion cysts); and almost all in low hairline. Unsatisfied with the result (Figure 1), the patient sought the medical service where the authors work. He was using 1 mg/day finasteride and 5% minoxidil, denying comorbidities.

METHODS

The first corrective surgery was conducted in November 2005, when the larger and poorly positioned grafts were removed with punches of 2-3 mm, followed by sutures with mono nylon 6-0 thread. Among the fragments removed with the punches, the FUs were reimplanted in the same surgery more posteriorly in the front region and were separated with the assistance of a stereomicroscope. The inclusion cysts were extirpated.

The epilation was started one month later with 800 nm diode laser in areas that had smaller grafts with varied angulation and transfixed follicles. Four sessions at one-month intervals were carried out (Figure 2).

In March 2006, a transplant of about 1,450 FUs was carried out in the frontal region. The 25 x 1 cm donor area at the back of the head included the old scar (Figure 3). A second transplant was conducted in July 2007, using approximately

Figure 2: Frontal view after exeresis of poorly positioned frontal punches and 4 laser sessions

Figure 1: Frontal view in the initial consultation

Figure 3: Frontal view before FU transplant

1,300 FUs harvested from the back of the head, in the upper parietal region and anterior periphery of the vertex (Figures 4 and 5).

RESULTS

The treatment was concluded with periodic 800 nm diode laser epilation sessions (four sessions with monthly intervals), when a progressive improvement of the dilated pores and scars resulting from the initial corrective surgery were observed (Figure 6).

Figure 4: Superior view before FU transplant

Figure 5: Frontal view after FU transplant and 4 laser sessions (note the improvement of the dilated pores in the frontal region)

Figure 6: Frontal view after FU transplant (note dilated pores of grafts were removed in the frontal region)

DISCUSSION / CONCLUSION

Hair transplants with larger grafts frequently result in an artificial appearance, contributing to the stigmatization of both patients and hair transplant surgery. Combined techniques for correcting hair transplants can improve patients' appearance and quality of life. ●

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