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HAIR TRANSPLANT FORUM INTERNATIONAL

### IN THIS ISSUE

An Operation Restore Project: Procedure to Reconstruct the Eyebrows in a Victim of Scalp Avulsion from the Amazon

### **PLAN TO ATTEND!**





# **Common FUE Graft Harvesting Problems and Solutions**

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### **ABSTRACT**

Technological innovation in follicular unit excision (FUE) has made graft harvesting more efficient than ever, allowing surgeons to increase the number of grafts they can obtain in a single session. Factors such as scalp quality and follicular characteristics such as thickness, length, and curvature of hair follicles vary between individuals, which is why device settings and technique must be personalized for each patient. When performing a hair transplant, the surgeon needs to be able to receive regular feedback about the quality of grafts being excised so that the technique can be corrected accordingly throughout the procedure. We describe common problems and solutions that may occur during the harvesting of grafts via FUE: tethering, capping, skeletonized follicles, aspiration, transections, paring, and broken follicles. This article builds upon principles previously published in "Dynamics of FUE."

Keywords: capping, FUE technique, graft harvesting, transection, skeletonized, tethering

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### **IDEAL FOLLICULAR UNIT EXTRACTION**

Ideal FUE results in a complete follicular unit graft with each excision attempt. One of the most important indicators of a successful complete excision is the slight elevation of the graft above the skin. After the surgeon scores the graft, the potential energy from the anchor system is transformed into kinetic energy, which slightly elevates the graft 1-2mm above the surrounding skin. The elevated skin cap should be parallel to the scalp and not twisted. The grafts are then removed from the scalp without much effort. When examined, an ideal follicular unit does not have any damage throughout its length and all follicles are held together by a skin cap.

### THE IMPORTANCE OF CONSTANT FEEDBACK

We perform FUE using a team-based approach. The surgeon scores the grafts while a technician "chases" behind the surgeon on the scalp and removes the grafts, typically with forceps. Since the scoring by the surgeon is usually faster than the removal by the technician, the technician needs to be able to recognize and communicate any problems to the surgeon to prevent further follicular damage. It is also advisable for the surgeon to periodically ask the technician to "check" several grafts in a new area of the scalp before proceeding to ensure that the settings and technique are appropriate.

We present common problems that can be identified by the surgeon or technician, organized into two categories: inappropriate punch depth and incorrect approach angle.

### PROBLEMS WITH INSUFFICIENT PUNCH DEPTH

The punch device should be set to the minimum depth required for the graft to be liberated with minimal force. When the punch depth is insufficient, the follicular unit will remain attached to the anchoring system in the superficial dermis, making removal difficult. Insufficient punch depth can create the following three problems: tethering, capping, and skeletonized follicles.

### **Tethering**

Tethering is when a scored or excised follicle cannot be easily removed by a one- or two-handed technique by the removing technician using forceps. Tethered grafts require excessive force to be removed

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World Congress Program Chair Gregory Williams, MBBS, FISHRS

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