State-of-the-Art FUE: Advanced Non-Shaven Technique

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Follicular unit extraction (FUE) has grown in popularity at an exponential rate for a variety of reasons. Patient demand is a key reason. The most significant disadvantage of FUE as it was originally offered, and later modified, is the necessity to shave all or portions of one’s head. For this reason, I developed the non-shaven FUE (NSFUE) technique in 2003. I introduced this method of FUE to Korea in 2008 where colleagues Drs. Jisung Bang and Jae Hyun Park have successfully incorporated it into their practices.

A modification of FUE involved leaving the hair longer above and below a shaved area. Depending on the length of the surrounding hair, you could shave one large patch under longer hair (greater than 6cm in length) or multiple smaller patches under shorter hair (less than 5cm). Shaved patches within longer hair allow removal of several thousand grafts without shaving the entire head (Figure 1). Shaved patches within shorter hair limit the number of grafts obtainable in a single sitting (Figure 2).

A disadvantage of shaved patches is the difficulty concealing this unnatural haircut. If the surrounding hair is quite long, the shaved area can be concealed easily. However, if the hair is somewhat shorter, there is a greater risk that the hairstyle will be discovered. More importantly, harvesting from multiple, small shaved patches leaves high density above and below the harvested area(s), which can lead to patient dissatisfaction with donor area appearance (Figure 3A and B).

I discovered the problem with shaved patches the difficult but common way mistakes are discovered. After treating a strip scar with the NSFUE method in 2003, the patient complained that the concentrated cluster of FUE white dots looked worse than the strip scar. Since then, I have heard other patients complain about shaved patches both in my hands and in the hands of other physicians. I now only use the shaved patch FUE method when the surrounding hair is long enough to cover the area and the entire safe donor area is shaved since grafts may be harvested with a random distribution so that discrete patches of white dots can be avoided. In women, however, the entire safe donor area can be shaved because they typically have longer hair.

In other instances, I avoid the shaved patch; an irregular pattern of extraction sites is aesthetically superior to isolated strips of hypopigmented extraction sites.

The Individual Follicular Cluster Trimming Technique

Once I discovered the problem with shaved patches, I looked for ways to trim donor follicular areas selectively and rapidly. My goal was to prepare approximately 25% of the hair follicles for grafting while leaving the remainder of the follicles uncut so that I could obtain an optimal graft harvest and the patient could more easily conceal the extraction area.

I tried using hair-thinning shears because thinning shears are often used to thin a male’s hair during a haircut. Although these cut large areas quite well, the problem was controlling the distribution: too many hairs were cut in a small area while other areas were not cut at all. To remedy this, I tried removing some of the teeth on the thinning shears without success. I next removed some teeth from an electric razor, again without success.