

Scalp Micropigmentation Corrective Treatment with Hair Transplant

Inderjit Kaur^{1*}



¹Klinik Dr Inder, Petaling
Jaya, Selangor, Malaysia

Abstract

This is the case of a 31-year-old Malaysian-Chinese man who was suffering from androgenic alopecia, Norwood stage 4. Seeking to treat the condition, he went to seek a Scalp Micropigmentation (SMP) treatment to conceal the baldness. Unfortunately, without being thoroughly informed of the intricacy of the procedure, the patient went to get the treatment from a tattoo parlour, which is not specialized in performing an actual SMP treatment for hair loss. As a result, he is left with a noticeably unnatural-looking hairline. To address this issue, patient was advised to undergo a proper hair restoration (specifically FUE procedure) to cover the inked area, thus, delivering a tangible result and solution to his hair loss. A new hairline was constructed and 2000 hair grafts were harvested from the donor area and implanted; 30FU/cm² on the frontotemporal recess areas and 40FU/cm² on both the frontal part and a part of the mid-scalp region.

Keywords:

Scalp Micropigmentation, SMP, Male Pattern Baldness, FUE

Address of corresponding author:
Klinik Dr Inder, P-G-022,
Centrestage, Jalan 13/1, Seksyen
13, 46200 Petaling Jaya,
Selangor, Malaysia
Email: klinikdrinder@gmail.com

Often referred to as a scalp tattoo or hair tattoo, Scalp Micropigmentation (SMP) is a non-surgical procedure that creates the illusion of higher hair density by camouflaging the surface area of the scalp where hair loss has already occurred, in addition to giving a more defined hairline. It's an increasingly popular solution for people wanting to duplicate the natural look, imitating hair follicles in close proximity to the scalp. SMP is used to address male's concerns of hair loss including Male Pattern Baldness, alopecia and hair thinning. It is important to note that SMP, despite its bynames, is neither a scalp tattoo nor a hair tattoo. However, not all cases of SMP came out the way intended. Some amateur-level SMP procedures deliver comically unnatural-looking results, causing the patient a humiliating experience when socializing or when in public.

Main Cause of Bad Results of SMP

One of the most common problems with SMP is having it done by unlicensed or unqualified technicians who are lacking in experience and exposure. This often results in a serious misunderstanding on how it works, which leads them to treat the procedure as a tattoo or permanent makeup, a different procedure relying on different techniques. Such is the case of our patient who was not thoroughly informed of the procedure and its predicted results.

Case Presentation

On April 1, 2019, a Malaysian-Chinese patient, aged 31, presented with a badly done hair follicle replication. The patient was suffering from Male Pattern Baldness predominantly across the frontal region. According to the patient, when he started to suffer from hair loss, he intended to conceal the baldness with a

micropigmentation treatment. Instead of consulting an actual doctor or specialist, he went to get his 'SMP' at a tattoo parlour. The result left him devastated and highly insecure with his own look that he had to don headwears all the time.

Hairline

The scalp tattoo has caused an unnatural-looking result, which does not remotely resemble hair follicles. In addition, the way the hairline was drawn is highly unrealistic with no macro- and micro-irregularities, giving off an overly accentuated structure, as seen in **Figure 1**.

Pigment

For the inks used, specific pigment grades are formulated just for the procedure. Inks of inferior quality tend to deliver an unnatural finish. The standard SMP procedure requires the inks to be injected as tiny, layered dots in different shades of black to replicate a natural-looking depth of hair follicles and to add hair density.

Size and Penetration

When injected, the fine needle should penetrate with precision into the Dermis layer, which is a different depth than that of a tattoo. This very meticulous technique is what sets SMP apart from a tattoo or permanent makeup procedure. Going too deep will cause ink migration, due to the denser nature of the collagen. This phenomenon explains why the ink changes colour or stretches in shape and size. Besides that, the best application is to employ the appropriate needle stroke and pressure so as not to create an unrealistic size of dots in imitating the hair follicles.



Figure 1: The hairline was drawn is highly unrealistic with no macro- and micro-irregularities, giving off an overly accentuated structure



Figure 2: The head was shaved off to prepare for a Follicular Unit Excision (FUE) procedure

Other Important Factors to Consider

Due to its minuscule and extremely sensitive nature, SMP requires a very specific technique which accounts for several factors to ensure the best outcome. Those factors include duration of the needle in contact with the scalp, pigment colour, compatibility of the scalp, consistency of ink, degrees of pressure, angle of the needle against the scalp, number of needles, needle thickness and pattern of dot placement.

Management and Outcome

SMP Repair Treatment

When consulted, the patient was advised to go for a tangible result as he was genuinely interested to have a hair restoration. In addition to that, he was not keen to go through a tattoo removal laser treatment and rather had his tattooed scalp covered with actual hair. Consequently, his head was shaved off [Figure 2] to prepare for a Follicular Unit Excision (FUE) procedure.

Prior to the FUE, his hairline was constructed and outlined, which covers the entire frontal part, a part of the mid-scalp region and both the frontotemporal recess areas. The hairline extends slightly over the inked area, covering the pigment, and broadly spreads across the frontal part to create smoother frontotemporal corners (apex). This designed [Figure 3] was particularly requested by the patient.

To cover the inked area properly within the newly constructed hairline, around 2000 hair grafts were harvested from the donor area and implanted, 30FU/cm² on the frontotemporal recess areas and 40FU/cm² on both the frontal part and a part of the mid-scalp region [Figure 3].

Results

Four months following the procedure, the patient returned for a follow-up. He was very satisfied with how it turns out. The entire site is covered with a hair density great enough to render his scalp tattoo unnoticeable. From the oblique views, the hair near the hairline gradually increases in density towards the frontal part [Figure 4].

Even from the frontal view, the hair distribution conceals the inked area by a considerable amount and makes the badly done SMP looks diminished [Figure 4]. Since the SMP was not removed but merely camouflaged, it is left as it is, thickening the specific areas suffering from the hair loss (the frontal and the frontotemporal recess areas). As the transplanted hair growth just started four months prior, this is not the end result. As time passes, the hair will grow at an increased density.

Discussion

Depending on the objective, SMP is an excellent option for people opting for a subtle look; whether it is to have a “buzz cut” look, or to replicate the stubble look instead of the shiny

baldness or even to increase the density of a full head of hair. However, it depends on both the techniques and experience in delivering the results. A qualified technician should be familiar with the best application and be able to demonstrate it practically. It is advisable for potential patients to do thorough researches into

finding the best and trusted hair expert to administer the SMP treatment so as to not leave unrealistic effects on the scalp. It is worth noting that SMP is not similar to a tattoo or permanent makeup process, thus, finding a practice that specializes in this treatment is important.

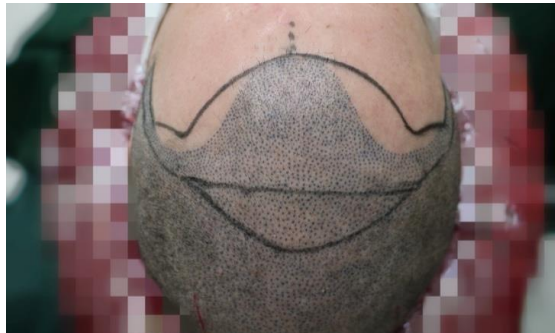


Figure 3: The frontal part and a part of the mid-scalp



Figure 4: The hair near the hairline gradually increases in density towards the frontal part



References

1. Lam, S. (2014). *Hair transplant 360* (3rd ed.). New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.
2. Rassman, W. R., Kim, J., Pak, J. P., Ruston, A., & Farjo, B. (2016). Combining scalp micropigmentation (SMP) and Hair Transplantation. *International Society of Hair Restoration Surgery*, 26(3), 85–95. <https://doi.org/10.33589/26.3.0085>
3. Rassman, W. R., Pak, J. P., Kim, J., & Estrin, N. F. (2015, March). Scalp micropigmentation: A concealer for hair and scalp deformities. *The Journal of clinical and aesthetic dermatology*. Retrieved October 25, 2021, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4382144/>
4. Shanshanwal, S. J. S., Dhurat, R. S., & Dandale, A. L. (2017). Standardization of SMP procedure and its impact on outcome. *Journal of Cutaneous and Aesthetic Surgery*, 10(3), 145. https://doi.org/10.4103/jcas.jcas_116_16
5. Traquina, A. C. (2001). Micropigmentation as an adjuvant in cosmetic surgery of the scalp. *Dermatologic Surgery*, 27(2), 123–128. <https://doi.org/10.1097/00042728-200102000-00005>
6. Unger, W., Shapiro, R., Unger, R., & Unger, M. (2011). *Hair transplantation* (5th ed.). London: Informa Healthcare.