Hair Transplantation of Plucked Hair Biopsies

To the Editor:

In conventional hair transplantation, grafts are obtained by cutting out hair follicles from the occipital side of the scalp. A major disadvantage is the loss of the donor area. Moll et al. revealed that a considerable portion of the epithelial structures from the hair follicle is attached to the plucked hair and that different parts of the plucked hair have different proliferative and differentiative characteristics. A hair can easily be plucked out of the follicle. When it is possible to use plucked anagen hair as hair transplantation grafts, we can preserve the donor area, because the empty donor area. Moll et al. revealed that a considerable portion of the epithelial structures from the hair follicle is attached to the plucked hair and that different parts of the plucked hair have different proliferative and differentiative characteristics. A hair can easily be plucked out of the follicle. When it is possible to use plucked anagen hair as hair transplantation grafts, we can preserve the donor area, because the empty hair follicles give rise to new hairs. We studied the possibility to use fresh plucked anagen hairs as hair transplantation grafts.

In healthy male subjects between 24 and 41 years old (mean 32 years) with androgenetic alopecia classified on the Hamilton as III-IV, the occipital area of the scalp was anesthetized with a topical eutectic cream of lidocaine 25 mg/ml and prilocaine 25 mg/ml (EMLA; Astra Pharmaceutica, Zoetermeer, The Netherlands). Hairs were plucked with depilation tweezers from the occipital area of the scalp and 200 anagen hairs were selected under a dissection microscope and put in a sterile petri dish with Ringers-lactate solution.

The recipient areas (left and right geheimratsecke) of each patient were anesthetized with lidocaine 1% and adrenaline 1:100. Approximately 200 slits were made in these recipient areas with NoKor needles. Then the hairs were implanted and the recipient areas treated with an antibiotic fucidine cream. Directly after treatment, there were signs of erythema and each pore was covered with a little blood clot. After the procedure, an intramuscular bolus injection of 1 ml Celestone and erythromycin per os for 7 consecutive days was given as usual in hair transplantation. The operational sides of the geheimratsecken were examined the first 7 days and later on a 2-week interval for a period up to 4 months.

After 2 months, the implanted hairs in the recipient areas had fallen out and 4 months after the treatment, none of the implanted plucked anagen hairs resulted in hair growth.

From this study, we can conclude that it is not possible to use fresh plucked anagen hairs as hair transplantation grafts and that the connective tissue surrounding the epithelial structures are necessary for successful fair transplantation. The importance of this interaction between epithelial and dermal structures was also suggested by Jahoda et al.

References


Regarding Intraoperative Lymphatic Mapping and Sentinel Lymph Node Biopsy

To the Editor:

In a recent Letter to the Editor (Dermatol Surg 2001;27(4):426-7), Reintgen et al. restate the reasons they believe that intraoperative lymphatic mapping (ILM) and sentinel lymph node biopsy (SLNB) should be considered the standard of care for the treatment of advanced melanoma.

In doing so, four of their eight references were either "in press" (1 reference), abstracts (2 references), or the proceedings of a meeting (1 reference). This puts a very heavy burden on the reader who is unable to critically evaluate such references used to support an issue which is subject of much debate and some disagreement.

However, I have a more serious concern about the letter. In it, Reintgen et al. state "Let us address the medicolegal definition of the standard of care." Then, rather than addressing such a definition, the authors go on to state that "Already physicians have been sued successfully by not offering some kind of nodal staging procedure for patients with melanoma so that the stage III disease can be identified and the survival benefit of the adjuvant interferon alfa-2b adjuvant at least be offered to the patient."

Any prudent physician would agree that patients should be told about and offered referral to experienced centers with ongoing trials of ILM and SLNB. However, rather than defining the "medicolegal" standard of care, I believe that Reintgen et al. have attempted to raise the specter of a malpractice suit for those who deviate from their convictions about the scientifically proven value of ILM and SLNB. I believe such statements amount to a form of intellectual coercion.

An academic or scholarly approach would have been to cite such cases in the manner done in legal literature. Close examination of those legal cases may reveal that quite different factors were central to the malpractice alluded to. After all, completion of a malpractice case usually occurs years after the negligent event. Given this long lag time and the only slowly evolving and conflicting evidence in proving the efficacy of ILM and SLNB and interferon therapy, I believe there may be more to these instances of malpractice than the