Research Article:

Cosmetic Outcomes of Scalp in Standard Reverse Question Mark Incision and L.G Kempe Incision in Large Craniotomies

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Abstract:

Introduction: Craniotomy is a surgery in which a flap of the skull is opened to access the problem area in the brain. Since paying attention to the aesthetic aspects of the patient's head after surgery is very important for the patient's mental health and social life, surgeons should try to adopt a method that minimizes damage to the scalp and follicles.

Methods: In this clinical trial study, patients who were candidates for frontotemporaneopranital craniotomy surgery were selected. 23 selected patients were randomly divided into two groups consisting of a 12-member intervention group (LG Kempe) and an 11-member control group (Standard Reverse Question mark). Patients underwent a preoperative biopsy of the scalp and a follow-up biopsy six months postoperatively. In the evaluation of aesthetic aspects, the created scar was scored using SBSES scoring system. Patients were also directly asked about their satisfaction with the operation and the scar created.

Results: In 23 patients, the results showed that patients who underwent LG Kempe incision craniotomy received significantly higher scores in SBSES scoring evaluations (P value = 0.005, p <0.05). There was no significant difference in subjective evaluations by asking patients about their satisfaction with the scar site and the operation area (P value = 0.75, p> 0.05). In the analysis of post-operative hair follicle density between the two groups (P value = 0.910, p> 0.05) general changes in pre-operative and post-operative follicle density in all samples (P value = 0.657. P> 0.05) as well as comparing the changes between two groups, no significant difference was found between follicular density changes between the intervention and control groups (P value = 0.137, p> 0.05).

Conclusion: Patients treated with LG Kempe incision had significantly higher SBSES scores, which can be considered an aesthetically superior method that could prevent the formation of undesirable scar.

Keywords:
Craniotomy, Aesthetics, Hair follicle, Scar

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