

Hair Sparing Technique in Supratentorial Craniotomies for Tumor: A Retrospective, Single Center Analysis

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Introduction

Hair sparing craniotomies have not demonstrated any evidence of increased in infection rates yet many neurosurgeons continue to prefer to shave their patient's head prior to surgery(1-2). We performed a retrospective, single center analysis to again demonstrate that hair sparing craniotomies are safe and do not place the patient at any undue perioperative risk.

Methods

A retrospective review of supratentorial craniotomies for tumor at the University of Miami Hospital from 2011-2014 was performed. 270 cases were identified when transphenoidal approaches, craniotomies for trauma/stroke/infections, biopsies, and re-do craniotomies for recurrent tumors were excluded. Of those 270 cases, 256 underwent a hair sparing technique and 14 did not. The former group had their hair parted along the planned incision then had the planned incision site scrubbed with isopropyl alcohol. The hair was then parted again over the planned incision using bacitracin ointment and staples were then used to keep the hair out of the field. The surgical site was then scrubbed with 4% chlorhexidine diluted with water and left to dry. The primary outcome measures were readmission rates and need for reoperation. All values were reported as mean with standard deviation. Averages were compared using independent samples t test. Categorical values were assessed with Pearson Chi squared. P values <0.05 were considered statistically significant. All data were analyzed using SPSS (IBM, New York).

Results

There was no statistical significance in readmission rates ($p = .237$) and need for reoperation ($p = .320$) in the two cohorts.

Conclusions

In patients who are undergoing their first craniotomy for resection of a supratentorial tumor, not shaving their hair during the sterile preparation process, is both safe and does not result in any higher rates of readmission or reoperation as compared to shaving prior to sterile preparation.

Learning Objectives

Hair sparing craniotomies are safe and do not place the patient at any undue perioperative risk.

References

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