



The Frontotemporal-Orbitozygomatic Approach: Reconstructive Technique and Outcome

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Introduction

The Fronto-Temporal-Orbito-Zygomatic (FTOZ) approach also known as “the workhorse of skull base surgery” has captured the interest of many researchers throughout the years. Most of the studies published had focused on the surgical technique and the gained exposure. However, few studies have described reconstructive techniques or functional and cosmetic outcomes. The goal of this study is to describe the surgical reconstruction after the FTOZ approach and analyze the functional and cosmetic outcomes.

Methods

The Fronto-Temporal-Orbito-Zygomatic (FTOZ) approach also known as “the workhorse of skull base surgery” has captured the interest of many researchers throughout the years. Most of the studies published had focused on the surgical technique and the gained exposure. However, few studies have described reconstructive techniques or functional and cosmetic outcomes. The goal of this study is to describe the surgical reconstruction after the FTOZ approach and analyze the functional and cosmetic outcomes. Eighty-two consecutive patients, who had undergone FTOZ craniotomy for different reasons, were selected. The same surgical (one-piece FTOZ) and reconstructive techniques were applied in all patients. The functional outcome was measured by complications related to the surgical approach: retro-orbital pain, exophthalmos, enophthalmos, ocular movement restriction, pseudomenigocele (PMC), and secondary surgeries required to attain a reconstructive closure. The cosmetic outcome was evaluated by analyzing the satisfaction of the patients and their families. Questionnaires were sent to the eighty-two patients. A statistical analysis of the data obtained from the charts and questions was performed.

Results

Of the 82 patients studied, 58 had no complications whatsoever. Ocular movement restriction was found in 2 patients (2.4%). Cranial nerve injury was documented in 7 patients (8.5%). One patient (1.2%) underwent surgical repair of a Cerebrospinal (CSF) leak from the initial surgery. Two patients (2.4%) developed delayed postoperative pseudomenigocele. Full responses to the questionnaires were collected from 28 patients giving an overall response rate of 34%. Overall, 22 patients (78.5%) were satisfied with the cosmetic outcome of surgery.

Conclusions

The reconstruction after FTOZ approach is as important as the performance of the surgical technique.

In our series, the orbitozygomatic osteotomy did not significantly increase surgical complications or alter cosmetic outcome.

Learning Objectives

By the conclusion of this session, participants should be able to:

- 1) Describe the importance of FTOZ approach as a skull base technique.
- 2) Identify an effective treatment

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