ABSTRACT

Background

Various incisions are used for the open reduction and fixation of zygomaticomaxillary complex fractures including cutaneous, transconjunctival and coronal. Traditionally 2 incisions are used for two point fixation at infraorbital rim and frontozygomatic region. But single incision has been tried for two point fixation by extending the transconjunctival incision with lateral canthotomy. In this study a new technique is used by modifying the lateral canthotomy into a ‘Y’ shaped incision with transconjunctival approach. This study is to evaluate and compare the efficacy of the Y - modification of transconjunctival approach with traditional combined subtarsal – lateral eyebrow approach for two point fixation in management of ZMC fractures.

Materials and Methods

The patients who reported to the Department of Oral and Maxillofacial Surgery, Tamil Nadu Government Dental College and Hospital, Chennai with Zygomaticomaxillary complex fractures were included in the study. 10 patients were selected randomly in whom the fractures required ORIF was considered and divided into 2 groups, and 5 patients in each group.

Results

There was statistically significant difference between the intraoperative time and ease of surgical access. There was no significant difference in the cosmetic outcome and complications in transconjunctival approach were lower lid malposition and lower eyelid laceration. Complications in subtarsal lateral eyebrow approach includes inadequate fracture reduction due to inadequate exposure.

Conclusion

Both the techniques yielded good cosmetic results, based on the increased exposure and access the transconjunctival Y modification holds good for two point fixation in ZMC fractures, while the subtarsal approach can be reserved for isolated orbital fractures. Though complication occurred with transconjunctival approach, sound knowledge of anatomy and careful surgical technique and experience may prevent such complications.

Key words:

Zygomaticomaxillary complex fractures, transconjunctival, subtarsal, lateral eyebrow approach, Y modification