SDM
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EVALUATION OF RESULTS OF ZYGOMATICOMAXILLARY COMPLEX FRACTURES; EARLY INTERVENTION VERSUS LATE INTERVENTION - A PROSPECTIVE STUDY

By

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ABSTRACT:

AIMS & OBJECTIVES: To examine results of early and late surgical intervention of ZMC fractures prospectively.

MATERIALS AND METHODS:

The study included 44 subjects who were admitted at Craniofacial Surgery & Research Centre, SDMCDSH for surgical treatment of ZMC fractures from 2013-2015 and were categorized based on time between injury and surgical treatment into:

Group 1: Early intervention: 1-10 days.

Group 2: Late intervention: 11-30 days.

The patients were evaluated pre-operatively and at 1, 3 & 6 months post- operatively for facial asymmetry, paresthesia, enophthalmos, diplopia, proptosis, visual acuity, trismus and ocular injury. The 2 groups were compared and data was analyzed statistically.

RESULTS: In both groups, there was a strong male predominance (88.75%), with most of them occurring in the third decade of life and RTA being the common aetiology (86.65%). Pre-operatively 85% and 100% patients reported with facial asymmetry in Group 1 and Group 2 respectively. It was restored to normal by the end of 3 months post-operatively in both groups. Pre- operatively paresthesia was present over the malar regions in 45% and 45.5% patients of Group1 and Group 2 respectively. It was reversed in all patients of both the groups by the end of 3 to 6 months post-operatively. Pre-operatively, only 12.5% patients of Group 2 had enophthalmos. In all these cases, orbital floor reconstruction with titanium mesh was done and

postoperatively orbital volume was restored. Proptosis was seen pre-operatively in 15% and 12.5% patients of Group1 and Group 2 respectively. Patients from both the groups recovered from proptosis one month post-operatively. Pre-operatively trismus was present in 55% and 41.6% patients of Group 1 and Group2 respectively, which was relieved 1 month post-operatively in both groups.

CONCLUSION: Within the limitations of this study, the overall results of early versus late surgical intervention of ZMC fractures were similar. Although statistically late intervention did not show significant results, this study recommends the timing of surgical intervention for ZMC fractures to be as early as possible or within 7-10 days since malunited ZMC fractures pose surgical challenge, require different treatment strategy and increases operating time.

Keywords: ZMC fractures; Trismus; Facial asymmetry; Enophthalmos.