



**“FUNCTIONAL ASSESSMENT FOLLOWING ENDOSCOPIC ASSISTED
INTRAORAL OPEN REDUCTION AND FIXATION OF SUBCONDYLAR
FRACTURES”**

by

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ABSTRACT

Aims & objectives: The purpose of this study , which was the first of its kind in India, was to assess the functionality of this recent concept of the use of endoscopic assisted intraoral open reduction and fixation of subcondylar fracture.

Materials and methods: This was a retrospective study from the year 2014-2016, that involved 15 Patients who underwent EAORIF. These patients were subjected to functional analysis by the assessing the following parameters: Pain, tenderness, facial asymmetry, occlusion, deviation, lateral movements, mouth opening, clicking, crepitus, facial nerve injury, pre operatively and at 2week, 4week, 3month, and 6 month intervals respectively. The final data was analyzed statistically.

Results: Of the 15 patients, all were male. Pain had significantly resolved at the end of 6 months, with a change of 84.69%. Tenderness was resolved completely at 3 months, Facial symmetry was achieved at the end of 3 month. Adequate occlusion was achieved in all cases without postoperative MMF. There was no restriction in lateral excursive and protrusive movements. Deviation of the mandible, clicking and crepitus was resolved in all cases. Mean inter-incisial mouth opening of 42.33mm was achieved at the end of 6 months. Facial nerve weakness was noted at 2 weeks post operatively, in one patient, which had resolved completely by the end of 6 months. Of the three patients , where additional stab incision were used, one came back with infection at the stab wound at 5months.

Conclusion: Within the limitations of this study, the overall results shows that

EAORIF, should be one of the most considered method of open reduction and fixation of subcondylar fracture. As in our study, we saw complete resolution of TMJ function, adequate occlusion, and mouth opening at the end of the 6 month post operative follow up period, with patient satisfaction regarding aesthetics and mandibular movements. However, it is important to know about the technique sensitivity and the steep learning curve, added to the high of the special instruments.

KEYWORDS: Subcondylar fracture; Open Reduction and internal fixation; Facial Nerve Injury; Endoscopic Assisted Intraoral Open Reduction And Internal Fixation; Facial asymmetry.