



**“ASSESSMENT OF MANDIBULAR RAMUS HEIGHT IN PATIENTS WITH
UNILATERAL CONDYLAR FRACTURES TREATED BY CLOSED
METHOD” -A PROSPECTIVE STUDY**

by

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ABSTRACT

Purpose: The aim of this study is to assess the mandibular ramal height and its associated changes in patients with unilateral condylar fractures treated by closed method.

Patients and methods: The study consists a total of twenty patients (17 males and 3 females), with unilateral condylar fractures. All patients were assessed for changes in ramal height , facial symmetry , condylar displacement and occlusion during pre-treatment , immediately post-treatment, 3rd and 6th month follow-up through orthopantomogram , PA mandible , Reverse townes's radiographs. Additionally, TMJ and inter-incisal opening was assessed clinically and then data was subjected to statistical analysis.

Results: Patients with condylar fracture treated by closed method had significant reduction in ramus height and a marked facial asymmetry at 3rd and 6th month follow-up. Notable changes in condylar displacement was seen in both coronal and sagittal plane on radiographic evaluation but the degree of coronal and sagittal displacement was statistically insignificant at follow-up. During 3rd and 6th month follow-up there was a complete resolution of tenderness and crepitus. A notable reduction was seen in clicking of the TMJ which was statistically significant. Inter-incisal mouth opening and occlusion were improved remarkably during follow-up.

Conclusion: Patients treated by closed methods develop asymmetries characterized by shortening of the face on the side of fracture. It is likely that loss of posterior facial height on the side of fracture in these patients is an adaptation that helps re-establish a new temporo-mandibular articulation. Unilateral condylar fractures of the mandible can be treated non-surgically in patients with minimal occlusal discrepancies, adequate