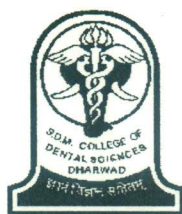


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**EVALUATION OF POST TRAUMATIC AND POST OPERATIVE  
SENSORY DISTURBANCES OF INFERIOR ALVEOLAR AND INFRA  
ORBITAL NERVE IN MAXILLO FACIAL FRACTURES  
-A PROSPECTIVE STUDY**

By

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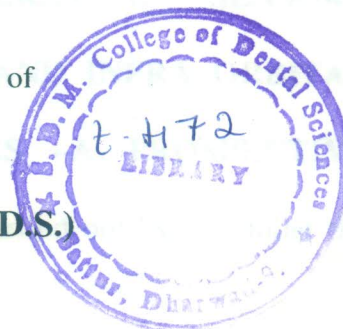
in

**ORAL AND MAXILLOFACIAL SURGERY**

Under the guidance of  
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## **ABSTRACT:**

Maxillofacial neurodeficiency may be caused by various surgical procedures such as tooth extractions, osteotomies and mainly by trauma. These deficiencies may be intolerable.

**OBJECTIVE** -The purpose of the study was to evaluate the incidence, prevalence, and posttraumatic and post operative nerve deficits in inferior alveolar nerve and infraorbital nerve in surgical treatment of maxillofacial injuries.

**STUDY DESIGN** -Total 30 patients (19 mandibular and 11 midfacial fractures) underwent open reduction and internal fixation (miniplate fixation). For all patients following tests were undertaken preoperatively and postoperatively on 7<sup>th</sup> day, 4 weeks, 3 months and 6 months. Tests were sharp/blunt test, two point discrimination test and EMG of masseter reflex. These tests were used to establish the sensory status of the inferior alveolar and the infraorbital nerves in the region of the fracture, and on the intact and control sides.

**RESULTS** - The incidence of post-traumatic sensory disturbance was 26% for mandibular fractures and 63% for fractures to the midface. The immediate of postoperative sensory disturbance in surgical treatment of mandibular fracture involving the region of inferior alveolar nerve along its intrabony course, including the post-traumatic sensory disturbance, was 68% and 81% following surgical treatment of midfacial fractures. The incidence of persistent sensory disturbances following surgical treatment was 5% in case of mandibular fractures, and 18% in case of midface fractures. Recovery of neurological function is delayed in the presence of a displaced fracture.

**Key words** -Maxillofacial fractures, Nerve damage, Recovery