

# **EVALUATION OF ENDOSCOPIC ASSISTED REPAIR OF ORBITAL BLOWOUT FRACTURES**

## *Thesis*

Submitted for the partial fulfillment of MD Degree  
*in Plastic Surgery*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

(وَقُلِ اعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ  
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## **List of Abbreviations**

|             |  |
|-------------|--|
| <b>ORIF</b> | : Open reduction and internal fixation |
| <b>BOF</b>  | : Blowout fracture                     |
| <b>LPOF</b> | : Lowest point of the orbital floor    |
| <b>NOE</b>  | : Naso-orbitoethmoid                   |
| <b>V2</b>   | : Infraorbital nerve                   |
| <b>MTD</b>  | : Medial trap door fracture            |
| <b>MBO</b>  | : Medial blowout fracture              |
| <b>LBO</b>  | : Lateral blowout fracture             |
| <b>OBFs</b> | : Orbital blowout fractures            |

## **INTRODUCTION**

The introduction of endoscopy and minimally invasive surgery has revolutionized the surgical treatment of many diseases. Endoscopy has become common tool in urologic, laparoscopic, and sinus surgery. It offers magnified visualization, access through smaller incisions, less postoperative morbidity, and often greater patient acceptance. Using endoscope in maxillofacial trauma offers a new technique for the reduction and internal fixation (ORIF) of facial fractures this concept now is being evaluated in orbital trauma (*Lee et al., 2002*).

The orbits are paired bony structures in the midface separated in the midline by the interorbital space. They are limited above by the floor of the anterior cranial fossa and below by the maxillary sinus on each sides. Orbital fractures result from severe injuries in the midfacial area (*Converse, 2004*).

They may occur as isolated fractures or in association with fractures of the maxilla, zygoma, nasoorbital or frontoethmoidal areas (*Codner, 2000*). Orbital blowout fractures are classified into pure blowout fractures and impure blowout fractures. Impure blowout fractures are associated with