



Prof. Dr. Özgür ERDOĞAN

Ağız, Diş ve Çene Cerrahisi ; Dişhekimliği
Oral & Maxillofacial Surgery ; Dentistry

Endoscopic-Assisted Surgery in Oral and Maxillofacial Surgery



What is Endoscopic-Assisted Surgery?

Endoscopic-assisted surgery is an advanced and minimally invasive technique utilized in oral and maxillofacial surgery to address complex conditions with precision and reduced recovery times. This cutting-edge approach employs a small camera, or endoscope, which allows surgeons to visualize intricate areas of the face, jaw, and skull through small incisions.

Where is Endoscopic Surgery Used in Oral and Maxillofacial Surgery?

Endoscopic-assisted surgery is versatile and applied in various procedures, including:

- **Temporomandibular Joint (TMJ) Surgery:** Used to diagnose and treat TMJ disorders with minimal invasion.
- **Facial Trauma Repair:** Assists in the precise fixation of facial fractures with minimal incisions. By using this approach, skin incisions can often be avoided, thereby reducing skin scarring and the risk of facial nerve injury.
- **Treatment of Cysts and Tumors:** Enables the safe removal of cysts and benign tumors in sensitive regions.
- **Sinus Surgery:** Enhances the management of maxillary sinus conditions.
- **Removal of Impacted or Displaced Teeth:** Effectively manages complex cases, such as displaced third molars in hard-to-reach areas like the infratemporal fossa.

What are the Advantages of Endoscopic-Assisted Surgery?

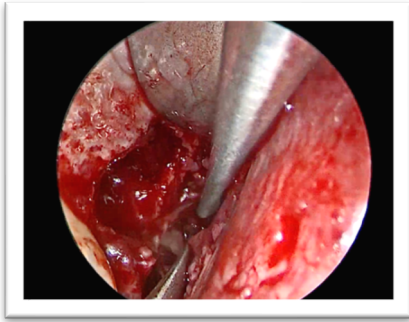


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1. **Minimally Invasive:** Unlike traditional open surgeries, endoscopic-assisted procedures require smaller incisions, resulting in minimal scarring and reduced post-operative discomfort.
2. **Enhanced Visualization:** The high-definition visualization provided by the endoscope enables surgeons to navigate and treat challenging anatomical areas with greater accuracy.
3. **Faster Recovery:** With less tissue disruption, patients often experience quicker healing and shorter hospital stays.
4. **Reduced Risks:** The precision of this technique minimizes the risk of complications, such as damage to surrounding nerves and tissues.

Dr. Özgür Erdoğan's Expertise



Dr. Özgür Erdoğan's experience with endoscopic-assisted surgery began during his fellowship at the Department of Oral and Maxillofacial Surgery at Freiburg University, Germany in 2009. It was here that he was introduced to the potential of using endoscopy in oral and maxillofacial procedures. Initially, Dr. Erdoğan utilized endoscopic-assisted techniques primarily for fracture repairs, where the minimally invasive approach proved invaluable in achieving precise and reliable outcomes while minimizing patient discomfort. Over time, he extended its application to other areas of oral surgery. The photograph shows a moment during one of Dr. Erdoğan's procedures: the endoscopic-assisted removal of a displaced maxillary third molar from the infraorbital fossa.

Publications by Dr. Özgür Erdoğan

You may find Dr. Erdoğan's publications on Endoscopic Assisted Surgery subject below.

1. Transoral endoscopic assisted reduction and internal fixation of mandibular condylar neck fractures with short condylar segment. Journal of Craniomaxillofac Surg. 2024 Aug;52(8):914-921. (Abdelazeem MH, Cakir M, *Erdoğan O*)



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2. Transoral Endoscopic-Assisted Reduction and Internal Fixation of Mandibular Condylar Fractures in Children. Journal of Oral Maxillofacial Surgery. 2023 May;81(5):566-574. (*Abdelazeem MH, Aboelela S, Erdogan O*)
3. A modified endoscopic technique for the repair of isolated orbital floor fractures. *European Journal of Plastic Surgery* **43**, 491–494. 2020 (*Abdelazem MH, Erdogan O*)
4. Endoscopically Assisted Transoral Gap Arthroplasty of the Temporomandibular Joint Ankylosis in a Pediatric Patient. Journal of Craniofacial Surgery 2018 Sep;29(6) (*Abdelazeem MH, Erdogan O, Awad TA*)