Introduction

Consideration of the airway is paramount in management of facial fractures in both the acute setting and delayed repair. As experts in laryngotracheal surgery, otolaryngologists often play a key role in airway management in both settings. On presentation, soft tissue swelling and prolapase may complicate placement of an endotracheal tube, and also necessitate emergent intervention. During planned fracture repair, surgeons and anesthesiologists must collaborate to determine a precise airway plan due to the inherent conflict of need for a secure airway and a need for surgical access. It is our goal to review current techniques and propose an intraoperative algorithm for securing the difficult airway in these patients.

Materials & Methods

The literature review was conducted by searching the PubMed and Ovid databases using key words "maxillofacial," "trauma," and "airway." Excluded from our review were articles that exclusively described a single patient case presentation, discussed trauma management in the acute setting, was not in the English language, or focused on the development of a novel biomedical device for airway management.

Intraoperative Airway Algorithm

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Emergent Airway Algorithm

1. Otolaryngologists are uniquely posed to provide insight on the difficult airway access of a maxillofacial trauma patient from both a reconstructive and surgical airway standpoint.
2. Modifications can be made to standard endotracheal and surgical airway techniques to prevent interference with the surgical field and minimize risk for accidental extubation.
3. The proposed algorithms can be used to guide airway management in patients with maxillofacial trauma in the acute setting and during reconstructive procedures.