SUBMENTAL INTUBATION: TWO CASE REPORTS PRESENTING AN ALTERNATE APPROACH TO SECURING THE AIRWAY IN TRAUMA PATIENTS

Thomas Thorsen, DO; (Krystal Weierstahl, DO)

NASAL INTUBATION

- Commonly used for maxillofacial traumas or oral surgeries. (Allows surgical field without ET tube obstructing view)
- Contraindications

A BIKE AND A LADDER

- 30y & 70y with each with multiple facial and skull fractures after trauma
- Submental chosen with presence of basilar skull fracture and discussion with surgical team
SUBMENTAL INTUBATION

COMPARISON

<table>
<thead>
<tr>
<th></th>
<th>Indications</th>
<th>Contraindications</th>
<th>Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal</td>
<td>Maxillofacial trauma, oral surgery, limited mouth opening, can be done awake</td>
<td>Emergency airway, basilar skull fracture, nasal pyramid fracture, CSF leak</td>
<td>False passage, epistaxis, sinusitis</td>
</tr>
<tr>
<td>Submental</td>
<td>Nasal contraindicated, maxillofacial or oral surgery</td>
<td>Limited mouth opening, coagulopathy, prolonged intubation</td>
<td>Local infection, sore throat, tube kink</td>
</tr>
<tr>
<td>Tracheostomy</td>
<td>Surgical airway required, interval postoperative ventilation, upper airway trauma</td>
<td>Congestepathy</td>
<td>False passage, fracture maxillary, TE fistula, vocal cord injury, infection, scar formation</td>
</tr>
</tbody>
</table>

NASAL INTUBATION WITH SKULL FRACTURE

- 5 known cases of cranial intubation
- At least 40 cases reported of nasogastric tubes being placed intracranial
SAFETY OF NASAL INTUBATION

• Plethora of data showing no complications if skilled anesthesia provider performing procedure

• Each case is unique

• Submental useful alternative when there are concerns with nasal approach

References:


OUR MISSION
The Medical College of Wisconsin Department of Anesthesiology will:

• Provide exemplary, compassionate patient care through a consistent commitment to evidence-based, patient-centered medicine.

• Advance the standards for delivery of outstanding patient care through the development of innovative application of processes and technology.

• Pursue research that will define novel therapies in a dynamic academic environment.

• Improve the quality of the communities we serve through respect, collaboration, mindful practice, and continuous education.