I-GEL SUPRAGLOTTIC AIRWAY INSERTION – BLS/ALS

INDICATIONS

- Need for advanced airway in an apneic patient without a gag reflex

CONTRAINDICATIONS

- Gag reflex
- Limited mouth opening
- Airway (larynx/pharynx) mass, abscess, trauma

EQUIPMENT

- Suction catheter and suction device
- I-gel airway device
- Water-based lubricant
- Support strap or tape
- ETCO2

PROCEDURE

1. **Prepare for procedure.** Apply personal protective equipment (gloves, facemask, eye protection).

2. **Prepare patient** in sniffing position; maintain in-line stabilization for trauma.

3. **Preoxygenate patient.** Insert nasopharyngeal or oropharyngeal airway. Ventilate patient at 10-12 breaths per minute.

4. **Prepare equipment.** Prepare suction device, suction catheter, I-gel, ETCO2. Select correct size of device based on chart below. Inspect packaging, expiration date and device.

5. **Device preparation.** Remove device from protective cradle or cage package. Place small amount of water based lubricant on cradle or cage surface. Grasp I-gel at integral bite block and lubricate back, sides, front of cuff. Ensure no bolus of lubricant in cuff bowl or elsewhere on device.

6. **Device insertion.** Position device so the I-gel cuff outlet is facing the chin of the patient. Gently press down on chin to open mouth. Introduce soft tip into mouth of patient toward the hard palate.

7. **Device positioning.** Insert adult device (size 3, 4, 5) to horizontal line on integral bite block and insert pediatric devices (size 1.5, 2, 2.5) until definitive resistance felt. Do not apply excessive force. If early resistance during insertion, perform jaw thrust or rotate device.
8. **Confirm tube placement.** Ventilate patient and auscultate bilateral breath sounds. Monitor ETCO2 with waveform capnography.

9. **Secure device.** Attach support strap to integral ring hook or tape maxilla to maxilla.

10. **Suction gastric channel.** Determine proper size of suction catheter based on chart. Apply water-based lubricant to catheter and gastric channel. Advance tube with suction to optimize cuff seal and reduce aspiration. Contraindications to placing a suction catheter include an upper gastrointestinal (GI) bleed or esophageal trauma.

11. **Reassess the patient.** Repeat vital signs.

12. **Troubleshooting for air leak.** This may be due to over ventilation. Ensure slow and gentle squeezing of bag valve mask (BVM) and limit tidal volume to 5 ml/kg. This may also be due to malposition. Advance the tube, pull back and reseat, or remove and insert a larger size.

13. **Complications from the procedure.** These may include laryngospasm, trauma to the airway structures (larynx/pharynx), and gastric regurgitation or aspiration.

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**I-gel Size Chart**

<table>
<thead>
<tr>
<th>Color</th>
<th>I-gel size</th>
<th>Patient size</th>
<th>Patient weight (kg)</th>
<th>Patient weight (lbs)</th>
<th>Suction catheter size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>1.5</td>
<td>Infant</td>
<td>5-12 kg</td>
<td>11-25 lbs</td>
<td>10 F</td>
</tr>
<tr>
<td>Grey</td>
<td>2.0</td>
<td>Small pediatric</td>
<td>10-25 kg</td>
<td>22-55 lbs</td>
<td>12 F</td>
</tr>
<tr>
<td>White</td>
<td>2.5</td>
<td>Large pediatric</td>
<td>25-35 kg</td>
<td>55-77 lbs</td>
<td>12 F</td>
</tr>
<tr>
<td>Yellow</td>
<td>3.0</td>
<td>Small adult</td>
<td>30-60 kg</td>
<td>65-130 lbs</td>
<td>12 F</td>
</tr>
<tr>
<td>Green</td>
<td>4.0</td>
<td>Medium adult</td>
<td>50-90 kg</td>
<td>110-200 lbs</td>
<td>12 F</td>
</tr>
<tr>
<td>Orange</td>
<td>5.0</td>
<td>Large adult</td>
<td>90+ kg</td>
<td>200+ lbs</td>
<td>14 F</td>
</tr>
</tbody>
</table>