IGel Supraglottic Airway Device

The iGel supraglottic airway device is an essential tool for EMS providers when managing a patient's airway, especially in situations where endotracheal intubation may be difficult or not immediately feasible.

Here's some thing EMS providers need to know about the iGel:

1. Indications and Contraindications

- **Indications**: Emergency airway management in unconscious patients with absent or inadequate respiratory effort.
    - Alternative to endotracheal intubation during cardiac arrest, respiratory arrest, or when intubation is not possible.
    - Can be used in prehospital settings in combination with anesthesia, sedation, or other airway management situations requiring a secure airway.
- **Contraindications**:Conscious or semi-conscious patients with intact gag reflex.
    - Patients with known esophageal disease or pathology, such as esophageal varices.
    - Patients with a high risk of aspiration or who have ingested a large meal recently.
    - Severe airway trauma or obstruction that may prevent insertion.
- **Device Design and Features**
    - **Supraglottic Airway:** The iGel is designed to sit above the glottis, creating a seal around the laryngeal inlet without inflating a cuff.
    - **Gel-Like Cuff:** The cuff is made of a soft, gel-like material that molds to the patient's anatomy, minimizing trauma and reducing the need for precise sizing.
    - **Integral Bite Block:** Built-in bite block helps prevent the patient from biting down and occluding the airway.
    - **Gastric Channel:** The device includes a gastric channel that allows for the insertion of a gastric tube to decompress the stomach and reduce the risk of aspiration.
    - **Sizing**: The iGel comes in multiple sizes, typically based on patient weight, ranging from neonates to large adults.
- **Preparation and Insertion**
    - **Sizing**: Select the appropriate size based on the patient's weight.
    - **Typical Ranges:**
        - Size 1: Neonates (2-5 kg)
        - Size 2: Pediatric (10-25 kg)
        - Size 3: Small adult (30-60 kg)
        - Size 4: Medium adult (50-90 kg)
        - Size 5: Large adult (90+ kg)

- Lubrication:Cover the back, sides, and cuff of the device with a water-based lubricant.
- Avoid over-lubricating the front of the device to prevent blocking the airway opening.
- Insertion Technique: Position the patient's head in a neutral or slightly extended position.
- Open the patient's mouth and gently insert the iGel along the natural curve of the airway until resistance is felt, indicating it is seated correctly.
- Avoid excessive force during insertion to prevent trauma.
- Confirmation: Confirm placement by observing chest rise, listening for bilateral breath sounds, and using capnography (if available).
- Security: Secure the device with a strap or tape to prevent dislodgement.

4. Maintenance and Monitoring

- **Ongoing Assessment:** Continuously monitor for effective ventilation, chest rise, and oxygen saturation.
- Regularly check for signs of dislodgement, obstruction, or leakage.
- **Gastric Decompression:** If necessary, insert a gastric tube through the gastric channel to decompress the stomach and reduce the risk of regurgitation and aspiration.
- **Ventilation:** Connect the device to a bag-valve mask (BVM) or ventilator, ensuring adequate tidal volume and oxygen delivery.

5. Complications and Troubleshooting

- **Airway Obstruction:** If ventilation is inadequate, reassess the device placement, and consider repositioning or reinsertion.
- **Aspiration Risk:** Despite the gastric channel, there is still a potential risk of aspiration; be prepared to manage this complication if it occurs.
- **Device Dislodgement:** Regularly check the device's position and secure it properly to avoid dislodgement, especially during patient movement or transport.
- **Trauma or Discomfort:** Monitor for signs of airway trauma or discomfort, particularly if insertion was difficult.

6. Removal

- Timing: The iGel should be removed once the patient regains consciousness and airway reflexes, or if endotracheal intubation is indicated.
- Technique: Gently withdraw the device while monitoring for any signs of obstruction, aspiration, or respiratory distress.
- Prepare to manage the airway immediately if complications arise during removal.