

POLICY: 552.53

TITLE: Air Ambulance Provider Optional Scope of Practice – Supraglottic Airway Device (SAD) Placement

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SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

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## **Air Ambulance Provider Optional Scope of Practice – Supraglottic Airway Device (SAD) Placement**

I. AUTHORITY

Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9

II. PURPOSE

To serve as a patient treatment standard for Air Ambulance Provider Paramedics.

III. POLICY

**DO NOT MISS**

- Only Qualified Paramedics meeting the requirements for this optional scope under the definitions may utilize this protocol
- Preparation
  - Equipment ready and functioning including suction
  - Do not use on conscious patients
  - Maintain oxygenation during the apneic period of intubation utilizing High Flow Nasal Canula O<sub>2</sub> @ 1 liter/kg, max=15 liters prior to initiating the procedure
  - Avoid letting the device fold upon insertion
  - Establish a contingency plan if placement is unsuccessful

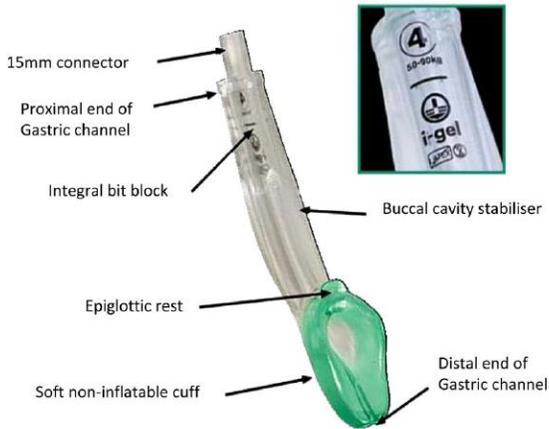
1. **Function:** To place a supraglottic airway when endotracheal intubation is either unsuccessful or deemed a high failure probability.
2. **Circumstances under Paramedics under optional scope may perform function:**
  - A. Setting: Qualified Transport Program Paramedic
  - B. Patient condition: When endotracheal intubation or BVM is not desirable, unsuccessful or inadequate.

- C. Devices allowed include any FDA approved supraglottic airway, including LMA supreme, igel and Air-Q

**LMA Supreme**



**igel**



**air-Q**



**3. Contraindications:**

- A. Responsive patients with an intact gag reflex.
- B. Patients who have ingested caustic substances.

**4. Cautions:**

- A. Patients who have been injured shortly after ingesting a substantial meal.
- B. Patients who have had radiotherapy to the neck involving the hypopharynx (risk of trauma, failure to seal effectively).
- C. Patients with decreased pulmonary compliance due to fixed obstructive airway disease. This may render the device ineffective, because airway positive pressure requirement may exceed seal pressure.

**IMPORTANT: The benefits of establishing ventilation with the Supraglottic Airway Device must be weighed against the potential risk of aspiration.**

**5. Size Selection:**

- A. Confirm the size chosen with the package insert/table as the devices vary slightly.
- B. For pediatric patients utilize a length or weigh- based tape or application and confirm with the package insert/table
- C. Always have one device larger and once device smaller available

**6. Equipment:**

- A. PPE
- B. Monitors
- C. Premedication's (including high flow nasal cannula O2
- D. Suction
- E. Lubricant
- F. BVM
- G. Confirmation devices including capnography
- H. Post SAD placement medications

**7. Procedure:**

- A. For inflatable devices, deflate the cuff
- B. Position patient. Apply in-line cervical spine stabilization (not traction) if indicated or sniffing if allowable.
- C. **Consider fluid bolus 20ml/kg if hypovolemic, asthmatic, COPD, or in shock.**
- D. **Time out:**

**Ensure:**

- **All equipment is ready**
- **All practitioners are ready**
- **What is the next step if this step fails**
- **At what point will we stop and BVM the patient**

- **If any questions remain regarding readiness, do not proceed until everyone and everything is ready**

E. Insert the device

- 1) Lubricate the posterior surface of the mask and airway tube with a water soluble lubricant just prior to insertion.
- 2) Place the head in the neutral or slight “sniffing” position. Head extension may be beneficial in non-trauma patients.
- 3) Hold the device firmly and near the cup to maintain maximum control.
- 4) Press the distal tip against the inner aspect of the upper teeth or gums.
- 5) Slide/Advance the device along the roof of the mouth behind the tongue until it meets resistance with complete insertion to the hypopharynx.
  - i. Be careful it does not get caught on the posterior tongue and fail to advance --- if it does a tongue blade may be helpful
  - ii. Be careful the tip of the device does not fold over as it advances behind the tongue – rendering it dysfunctional

**NOTE:** Never use excessive force – you may need a smaller device

- 6) If it does not seal appropriately attempt to pull it out very slightly and advance it back in.
- 7) The device is now fully inserted. For inflatable devices, inflate the cuff per manufacturer recommendations – see addendum at the end
- 8) **Verify placement of device using a minimum of 4 methods:**
  - Equal lung sounds bilaterally, chest rise and fall
  - Mist present in tube with exhalation
  - Presence of ETCO<sub>2</sub> wave form (ETCO<sub>2</sub> capnography is the standard however in rare circumstances where ETCO<sub>2</sub> not available may use appropriate color change on colorimetric ETCO<sub>2</sub> device.
  - Normal SpO<sub>2</sub> reading

**NOTE: Correct placement** should produce a leak free seal against the glottis with the mask tip at the upper esophageal sphincter. Devices with an integral bite block ensure the bite block is between the teeth.

- 9) Secure the device with tape or a compatible commercial device
- 10) Monitor placement continuously:
  - Monitor ETCO<sub>2</sub> and SpO<sub>2</sub> continuously.
  - Reconfirm placement using a minimum of 4 methods (chest rise, lung sounds, appropriate ETCO<sub>2</sub> reading, appropriate SpO<sub>2</sub> reading, mist in tube, device depth based @ lip line) after every patient move

F. Place Gastric Drainage when indicated/available: To facilitate gastric drainage, a gastric tube may be passed through the drain tube or around the device into the stomach. The gastric tube should be well lubricated and passed slowly and carefully.

**NOTE:** The presence of a gastric tube does not rule out the possibility of aspiration if the device is not correctly located and fixed in place.

G. Perform post-insertion airway management.

**8. Recordkeeping:**

- A. Document full procedure note:
  - 1) Procedural Time Out
  - 2) SGA size
  - 3) If inflatable device - Amount of air used to inflate the cuff
- B. Document frequency of assisted ventilations and patient's respiratory rate (will be the same or higher if over-breathing).
- C. Document VS, SpO<sub>2</sub>, ETCO<sub>2</sub> and SGA placement confirmation at transfer of care.

**REFERENCES:**

1. Instructions For Use – LMA Supreme TM: [www.LMACO.com](http://www.LMACO.com) , Copyright The Laryngeal Mask Company Limited, 2010, 2011. Issue: PAJ-2100-000 Rev F
2. Instructions For Use – air-Qsp <http://cookgas.com/index.php/ifu-english/>
3. Instructions For Use – igel [http://docsinnovent.com/downloads/i-gel\\_User\\_Guide\\_English.pdf](http://docsinnovent.com/downloads/i-gel_User_Guide_English.pdf)