

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 O₂ @ 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 weight-based tape or application and confirm with the package insert/table
- C. Always have one device larger and one 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 ETCO₂ wave form (ETCO₂ capnography is the standard however in rare circumstances where ETCO₂ not available may use appropriate color change on colorimetric ETCO₂ device.
 - Normal SpO₂ 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 ETCO₂ and SpO₂ continuously.
 - Reconfirm placement using a minimum of 4 methods (chest rise, lung sounds, appropriate ETCO₂ reading, appropriate SpO₂ 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, SpO₂, ETCO₂ and SGA placement confirmation at transfer of care.

REFERENCES:

1. Instructions For Use – LMA Supreme TM: 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