POLICY: 552.53

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

EFFECTIVE: 07/01/2019
REVIEW: 07/2024
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

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_2 @ 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:**

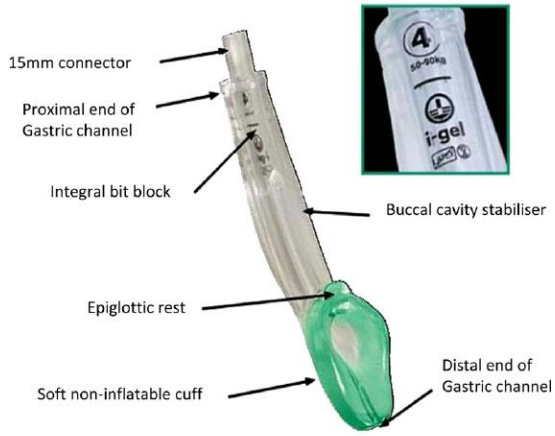
A. Setting: Qualified Transport Program Paramedic

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 $ETCO_2$ wave form ($ETCO_2$ capnography is the standard however in rare circumstances where $ETCO_2$ not available may use appropriate color change on colorimetric $ETCO_2$ device.
    - Normal SpO_2 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 $ETCO_2$ and SpO_2 continuously.
    - Reconfirm placement using a minimum of 4 methods (chest rise, lung sounds, appropriate $ETCO_2$ reading, appropriate SpO_2 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_2, $ETCO_2$ 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