

EL DORADO COUNTY EMS AGENCY

FIELD PROCEDURES

Effective: July 1, 2011

Reviewed: July 1, 2016

Revised: July 2012, 2018, 2019, 2021, 2024

Scope: ALS/BLS Adult/Pediatric

(on file)

EMS Agency Medical Director

SUPRAGLOTTIC AIRWAY

PURPOSE:

The Supraglottic Airway (SGA) is an airway device that is placed into the oral pharynx and subsequently placed over the glottic opening. This is done in a 'blind' maneuver without the aid of a laryngoscope. This will aid in the oxygenation and ventilation of the patient.

The SGA allows for immediate placement of an airway device when BLS airway management is unsuccessful or oral tracheal intubation is delayed or difficult, or when resources or clinical situation precludes intubation.

The **Air-Qsp** (self-pressurizing) is the supraglottic airway device approved by the El Dorado County EMS Agency.

INDICATIONS:

- Cardiac Arrest
- Respiratory arrest with no immediate reversible cause (i.e. hypoglycemia or opioid overdose)
- Inability to adequately ventilate a patient with a Bag Valve Mask (BVM) and basic airway adjunct.
- An unconscious patient without a gag reflex who is apneic or is demonstrating inadequate respiratory effort

COMPLICATIONS:

- Vomiting
- Aspiration
- Laryngeal trauma including abrasions, hematomas, edema and ulcers
- Bronchospasm, laryngospasm, Pulmonary edema
- Hoarseness, stridor, vocal cord paralysis

CONTRAINDICATIONS:

- Gag reflex present
- Obvious signs of death
- Ingestion of caustic substance
- Airway obstruction by a foreign body
- Traumatic disruption of the airway (crushed trachea, etc.)
- Laryngectomy patient with a stoma
- Valid DNR documentation is present

PRECAUTIONS:

- Spinal injury - maintain in-line stabilization in suspected spine injury patients
- Tube dislodgement (recheck tube placement whenever patient is moved.)
- Aspiration - always have suction available and ready to use
- Known esophageal disease

EQUIPMENT:

- Air-Qsp
- Water based lubricant

SUPRAGLOTTIC AIRWAY

CONTINUED

- BVM
- End tidal capnography
- Suction

PROCEDURE:

- **Patients should be pre-oxygenated.**
 - **BLS airway and ventilation procedures should be instituted.**
 - **Ensure suction is available and operational.**
 - **DO NOT administer medications through Air-Qsp Airway.**
1. Pre oxygenate the patient with BLS airway and BVM. Ready suction equipment.
 2. Select proper tube based on patient's weight (see table below).
 3. Lubricate the external surface including the mask, back of the cuff and ridges.
 4. Position patient's head in sniffing (preferred) or neutral position. For obese patients consider elevating the patient's back and shoulders. Maintain Spinal precautions when appropriate.
 5. Hold the Air-Qsp with the dominant hand at the proximal end (connector) such that insertion will be accomplished in a single, continuous motion.
 6. Use a lateral (45-90°) approach with chin lift
 7. Open the patient's mouth and elevate the tongue.
 - a. Elevating the tongue lifts the epiglottis off the posterior pharyngeal wall and allows the Air-Qsp easy passage into the pharynx.
 - b. A mandibular lift is especially recommended.
 - c. A tongue blade or laryngoscope blade placed at the base of the tongue also works well for this purpose.
 8. Place the front portion of the Air-Qsp mask between the base of the tongue and the soft palate at a slight forward angle, if possible.
 9. Pass the Air-Qsp into position within the pharynx by gently applying inward and downward pressure, using the curvature of the Air-Qsp mask and airway tube as a guide.
 - a. Simply rotate the Air-Qsp forward and inward. Minimal manipulation may be necessary to turn the corner into the upper pharynx.
 - b. Continue to advance until fixed resistance to forward movement is felt. **Correct placement is determined by this resistance to further advancement.**
 - c. Check the Air-Qsp connector to ensure it is fully engaged within the airway tube,
 - d. Check the placement with positive pressure ventilation and confirm with capnography.
 - e. Secure with a tube holder device until the Air-Qsp is removed.
 10. Attach BVM and ETCO₂, ventilate the patient and listen for BL breath sounds with ventilation and confirm placement with ETCO₂.
 11. Re-evaluate the position of the tube at least after each movement of the patient and as indicated by patient's clinical condition.

SUPRAGLOTTIC AIRWAY**CONTINUED**

Tube Size (Color)	Pt Weight	Estimated Age	EMT	EMT-P
4.5-5 (Purple)	70-100 kg	Adult	✓	✓
3.5-4 (Red)	50-70 kg	Small Adult	✓	✓
2.5-3 (Yellow)	30-50 kg	9-14 yrs		✓
2.0 (Orange)	17-30 kg	3 - 8 yrs		✓
1.5 (Green)	7-17 kg	6 mos - 2 yrs		✓
1.0 (Blue)	4-7 kg	Neonate - 6 mos		✓
0.5 (Pink)	2-4 kg	Neonate		✓
0 (Light Purple)	<2 kg	Neonate		✓