Supraglottic Airway Device Placement –Adult/Adolescent

INDICATIONS:

A supraglottic airway (SGA) is indicated for securing an airway during resuscitation of an unconscious patient. An SGA is an advanced airway technique to assist with oxygenation and ventilation.

An SGA may be placed by an Orange County Accredited Paramedic in the following situations:

- Primary advanced airway for an unconscious adult/adolescent patient lacking a gag reflex in need of airway protection and ventilation.
- Advanced airway if intubation is anticipated to be difficult and rapid airway control is necessary.
- Advanced airway in adult cardiac arrest when attempts at intubation are likely to interrupt continuous chest compressions.
- Advanced airway when intubation has been unsuccessful.

CONTRAINDICATIONS:

- Intact gag reflex
- Known caustic substance ingestion
- Unresolved upper airway obstruction
- Trismus or limited ability to open the mouth such that the device cannot be inserted
- Oral trauma with bleeding, swelling or unstable jaw fracture
- Distorted anatomy that prohibits proper placement (such as oropharyngeal mass or abscess)
- Patients under 50 kg
- Known esophageal disease
- Laryngectomy patient with stoma (open tracheostomy site or tube)
- Ability to maintain adequate ventilation and oxygenation with less invasive method

PROCEDURE:

1. Secure Required Equipment:
   Personal protective equipment (gloves need not be sterile)
   SGA (Appropriate size for patient)*
   Bag-valve-mask
   Stethoscope
   Water-based lubricant
   Means for securing SGA
   Waveform end tidal CO2 capnography
   Pulse oximetry monitoring
   Cardiac monitor
   (Optional size 12F or 14 F gastric tube)

2. Clear airway with suction; pre-ventilate with BVM 100% oxygen and select appropriate size SGA.*

3. If SGA has inflatable cuff, test cuff for leaks and then deflate before insertion.

4. Prepare SGA for insertion and lubricate SGA following manufacturer instructions.

5. Position the head into the "sniffing position". Neutral position for suspected cervical spine injury.

6. Hold mouth open and apply chin-lift maneuver (jaw-thrust for suspected c-spine injury).

7. Introduce the leading SGA soft tip into the mouth in a direction towards the roof of the mouth (hard palate).

8. Glide the device downwards and backwards along the hard palate with a continuous but gentle push until resistance to further advancement is felt.

9. The SGA cuff should be located against at the top of laryngeal framework, and the incisors should be resting on the bite-block region of the SGA.

10. Confirm proper positioning with breath sounds, chest rise, and capnography waveform. Monitor capnography, pulse oximetry, and cardiac rhythm until patient care is transferred to receiving center staff (to assure continued proper positioning).

11. If SGA is of inflatable cuff design, inflate gently to allow for sealing upper airway to allow adequate assisted ventilation.

12. Secure SGA. Optional - insert gastric tube (12F for SGA size 4 / 14F for SGA size 5)

13. If vomiting or forceful gagging occurs, turn patient to side and remove SGA airway device; suction thoroughly and support ventilation further with BVM during transport.

Airway removal

Once a SGA is placed, it ideally should not be removed. Circumstances that necessitate removal of the device may include inadequate ventilation with the device, return of a gag reflex, or vomiting.

Removal of the device may cause vomiting, use the following steps:

1. Position patient on side, maintain spinal motion restrictions as needed.
2. Have suction immediately available and remove the airway.
3. Reassess airway and breathing to evaluate the need for further assisted ventilation.

* Note: The iGel® and LMA Supreme® are supplied in an adult regular (medium) and large size:
Size 4.0 for 50 kg to 90 kg (110 lbs. to 200 lbs.)
Size 5.0 for greater than 90 kg (200 lbs.)