

MEDICAL PROCEDURES

Rescue Airway - Perilaryngeal Airway (King LTD)

POLICY# 7700

I) PURPOSE:

The Perilaryngeal Airway Device (King LTD) is a single use piece of equipment intended for airway management. It can be used as a rescue airway when other airway management techniques have failed or as a primary device when advanced airway management is required in order to provide adequate ventilation. The Perilaryngeal airway does not require direct visualization of the airway or significant manipulation of the neck.

Its main use is in cardiac arrest situations (pulseless and apneic patients). In some patients it may be preferable to use initially (e.g. patients who are obese or with short necks, patients with limited neck mobility, difficult visualization due to access to the patient, or blood or emesis in the airway, during cardiac arrest to avoid interruption). It is not necessary to attempt endotracheal intubation before initiating the use of the perilaryngeal airway.

Because it is not tolerated well in patients with airway reflexes, it should not be used in responsive patients unless all other methods of ventilation have failed.

Two intubation attempts with the perilaryngeal airway are permissible. Ventilations should be interrupted no more than 30 seconds per attempt. Between attempts, patients should be ventilated with 100% oxygen for one minute via bag-valve mask device.

The King Airway is available in three sizes and cuff inflation varies by model:

- A. Size 3 (yellow cap) – Patient between 4 and 5 feet tall (40 - 55 ml air)
- B. Size 4 (red cap) – Patient between 5 and 6 feet tall (50 - 70 ml air)
- C. Size 5 (purple cap) – Patient over 6 feet tall (60 - 80 ml air)

II) INDICATIONS:

- A. Cardiac arrest (of any cause)
- B. Inability to ventilate non-arrest patient (with BLS airway maneuvers) in a setting in which endotracheal intubation is not successful or unable to be done.

III) CONTRAINDICATIONS:

- A) Presence of gag reflex
- B) Caustic ingestion
- C) Known esophageal disease (e.g. cancer, varices, stricture, others)
- D) Laryngectomy with stoma
- E) Height less than 4 feet

Note: Airway deformity due to prior surgery or trauma may limit the ability to adequately ventilate with this device (may not get adequate seal from pharyngeal cuff)

MEDICAL PROCEDURES

Rescue Airway - Perilaryngeal Airway (King LTD)

POLICY# 7700

IV) EQUIPMENT:

- A) Suction
- B) King Kit (size 3,4, or 5)
- C) Bag-Valve Mask
- D) Stethoscope
- E) End-tidal CO₂ detection device

V) PROCEDURE:

- A) Assure an adequate BLS airway (if possible).
- B) Select appropriately sized perilaryngeal airway.
- C) Test cuff inflation by injecting recommended amount of air for tube size into the cuffs. Remove all air from cuffs prior to insertion
- D) Apply water-based lubricant to the beveled distal tip and posterior aspect of tube, taking care to avoid introduction of lubricant in or near ventilation openings.
- E) Have a spare perilaryngeal airway available for immediate use.
- F) Oxygenate with 100% oxygen.
- G) Position the head. The ideal head position for insertion is the “sniffing position”. A neutral position can also be used (e.g. spinal injury concerns).
- H) Hold mouth open and apply chin lift unless contraindicated by cervical spine injury or patient position.
- I) With tube rotated laterally 45-90 degrees such that the blue orientation stripe is touching the corner of the mouth, introduce tip into mouth and advance behind base of tongue. **Never force the tube into position.**
- J) As the tube tip passes under tongue, rotate tube back to midline (blue orientation stripe faces chin).
- K) Without exerting excessive force, advance tube until base of connector aligns with teeth or gums.
- L) Inflate cuff to required volume
- M) Attached bag-valve to airway. While gently bagging the patient to assess ventilation, simultaneously withdraw the airway until ventilation is easy and free flowing.
- N) Confirm proper position by auscultation, chest movement, and verification of CO₂ by Capnography. Do not use esophageal detector device (EDD) with perilaryngeal airway.
- O) Secure the tube. Note depth marking on tube.
- P) Continue to monitor patient for proper tube placement throughout prehospital treatment and transport. **Capnography should be done in all cases.**
- Q) Document airway placement and results of monitoring throughout treatment and transport.

Troubleshooting:

- R) If placement is unsuccessful, remove tube, ventilate with BVM and repeat sequence of steps.
- S) If unsuccessful on second attempt, BLS airway management should be resumed.

MEDICAL PROCEDURES

Rescue Airway - Perilaryngeal Airway (King LTD)

POLICY# 7700

APPROVAL

Handwritten signature of Bruce E. Haynes, M.D.

Bruce E. Haynes, M.D.
EMS Medical Director