39th Annual Sports Medicine Symposium

Airway Adjuncts

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Disclosures

• No Conflicts or Financial Disclosures
Goals & Objectives

• Develop proficiency in the correct techniques for the insertion and placement of noninvasive airway adjuncts, such as oropharyngeal airways (OPA), nasopharyngeal airways (NPA) and supraglottic airways.

• Demonstrate the ability to safely and effectively secure these devices to maintain a patent airway in various clinical scenarios

• Gain a comprehensive understanding of the indications for using noninvasive airway adjuncts in different patient populations and clinical situations

• Identify contraindications and scenarios where the use of specific adjuncts may be inappropriate or pose potential risks.

At the end of this session/activity, the participant/attendee will be able to:

• Demonstrate mastery of noninvasive airway adjunct techniques.
• Describe indications and contraindications.
• Integrate noninvasive airway adjunct into emergency airway management.
BASIC AIRWAY MANEUVERS
Modified Jaw-Thrust, Head-Tilt/Chin Lift

BASIC MECHANICAL AIRWAYS
Oropharyngeal Airway
Nasopharyngeal Airway

Extraglottic Airways
King LT, LMA, I-gel
NPA’s & OPA’s

Goal:
- Create a patent airway by preventing the tongue from occluding the airway

Indications:
- Unresponsive Patients

Insertion/placement:
- Measurement / appropriate technique

Contraindications
- Intact airway reflexes

Source: (3)Wettsles, K.A. UpToDate.
Supraglottic / Retroglottic Airways

- **Goals:** Maintaining a patent airway while reducing the risk of gastric insufflation and aspiration
- **Indications:** Unresponsive patient
- **Insertion/placement:**
  - Blind insertion technique
  - Isolates glottic opening for ventilation
- **Contraindications**
  1. Intact Airway Reflexes
  2. Caustic ingestion
  3. Esophageal varices
  4. Foreign body obstruction
- **Complications**
  1. Airway trauma (edema)(bleeding)
  2. Air leak(hypoventilation)
  3. Varying aspiration protection

Source: (1) Lang. Prehospital Emergency Care (4)Laurin. UpToDate; (2) Simon L.V. LMA NCBI; (9) NAR (10) Intersurgical
Retroglottic Airway - King LT

- Pharyngeal cuff and an esophageal cuff with an airway port in between
- One lumen and one inflation valve to inflate both cuffs

Placement:
- Test bulbs and lubricate
- Sniffing position
- Insert 90 degrees to the mouth opening until the device is behind the tongue and rotate midline
- Line up the 15mm connector with gums
- Inflate the cuff's
- Begin ventilation while withdrawing the device until there is clear chest rise.
- Secure the device

Source: (7) Ambu-External
Supraglottic Airways - LMA

• One inflatable distal cuff
  • The proximal portion of the cuff covers the glottis. The distal portion of the cuff rests at the esophagus.
  • One oxygen outlet covers the tracheal opening.

Placement
  • Test Bulb / lubricate
  • Sniffing position
  • Enter midline / pressing the cuff against the hard palate
  • Once definitive resistance is met inflate the cuff to manufacturer recommendations to obtain optimal seal
  • Secure the device

Source: (6) Bosson Emed.Medscape (2) Simon L.V. NCBI
Supraglottic Airways - I-gel

- Alternative type of LMA that uses a non-inflatable ‘gel-like’ cuff.
- “Second generation” LMA
- Includes a bite block and gastric ventilation

Placement:
- Lubricate
- Sniffing Position
- Guide the leading soft tip against the hard palate
- Apply downwards and backwards pressure until definitive resistance is met
- Secure device

Source: (5) Anaesth S.A. PubMed Central; (8) Intersurgical I-gel
Resources


