AIRWAY MANAGEMENT

OVERVIEW:

Airway management is the first priority for the EMT. There are a multitude of procedures and adjuncts to manage a patient's airway. This protocol is a guideline for the proper use of these procedures and adjuncts when airway management needs to become more aggressive and/or invasive. Use this guideline in conjunction with the Oxygen Therapy guideline.

INDICATIONS:

- Patients that are unable to maintain their own airway
- Patients that are displaying signs or symptoms of inadequate oxygenation

CONTRAINDICATIONS:

- None

PROCEDURE:

EMR

Methods of Assessment:

- Auscultation - breath sounds in upper and lower lobes bilaterally including axillary areas & of the abdomen if patient is intubated
- Observe inspiration and expiration ratio, use of accessory muscles, or changes in respiratory patterns/rate
- Consider use of non-invasive monitoring equipment:
  - Capnography
  - Pulse Oximetry
  - ECG
- Patient position - Tripod, sitting upright
- Passive Delivery Systems
  - Nasal Cannula
    - Flow rate should not exceed 6 LPM
  - Non-Rebreather Masks
    - Recommended when higher flows and greater concentrations of oxygen are needed
    - Can deliver near 100% oxygen concentration with good facial fit
  - Remove mask from patient's face when oxygen supply is disconnected
    - Always have a clear view of patient's mouth and nose
    - Use only when patient is able to maintain their airway
- Airway Maintenance Devices
  - Nasopharyngeal Airway (NPA)
    - For patients with gag reflex
  - Oropharyngeal Airway (OPA)
    - For patients that do not have a gag reflex
  - Bag Valve Mask (BVM)
    - For use in conjunction with the adjuncts above
    - Properly position patient's head, watch patient's chest rise and fall and auscultate lungs to ensure proper oxygenation.

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- Assess airway support already in place, if adequate leave in place, if inadequate then remove and continue.
- If no gag <u>AND</u> no immediately reversible cause (hypoglycemia, opiate OD, etc.) consider King Airway. See 'King Airway' protocol.

EMT

AIRWAY MANAGEMENT CONT.

PARAMEDIC

- If no gag reflex AND;
  - No immediately reversible cause for respiratory depression/arrest (⇩ BG, opiate OD, etc.) OR
  - Expected course dictates (i.e. airway burns) then, Intubate
- If no muscle tone (code situation) may proceed with ETI via direct laryngoscopy w/o pharmacology
- Otherwise, Rapid Sequence Intubation (see 'RSI' protocol)
- Following successful ETI confirm via: direct cord visualization, EID, lung sounds, ETCO2, and SpO_2 (see 'Endotracheal Intubation' protocol).
- If ETI failed, including re-attempts (max 2 attempts) then proceed with King Airway. See 'King Airway' procedure.
- If airway not maintainable via other means noted above then; Cricothyrotomy
- Consider NG or OG if gastric distention.
- COMPLETE AIRWAY OBSTRUCTION
  - Remove foreign body with magill forceps
    - If unable to remove foreign body, laryngeal trauma or epiglottitis, consider cricothyrotomy and transtracheal jet insufflation.

PARAMEDIC

CONSIDERATIONS:

- Patients who need positive pressure ventilation should be intubated as soon as possible
- Endotracheal intubation provides the best means of airway control and is the preferred airway of choice for Paramedic level providers. **Never the less, there may be situations in which the use of an alternative device is clinically indicated and appropriate "first line".** In these situations, clear documentation of the clinical decision making rationale is required.
- When faced with a difficult airway situation, providers should consider the use of the following techniques: BURP, eschmann, two-provider laryngoscopy.
- **KING Airway Sizes**
  - Size 2 (**Green**) 35" to 45" tall or 12 to 25 Kg (25 to 35 mL cuff inflation)
  - Size 2.5 (**Orange**) 41" to 51" tall or 25 to 35 Kg (30 to 40 mL cuff inflation)
  - Size 3 (**Yellow**) 4' to 5' tall (45 to 60 mL cuff inflation)
  - Size 4 (**Red**) 5' to 6' tall (60 to 80 mL cuff inflation)
  - Size 5 (**Purple**) >6' tall [70 to 90 mL cuff inflation