Airway Management

Signs and Symptoms

- Unconscious, unresponsive
- Ineffective respirations, weak or gasping respiratory effort
- Respiratory rate either extremely low or extremely high
- Pallor, cyanosis, cool skin, diaphoresis
- Poor chest rise
- Diminished breath sounds
- Low SpO_2, (readings may be unreliable)
- Elevated $ETCO_2$
- Abnormal heart rate
- Audible wheezing, stridor

History

- Trauma to airway
- Choking/aspiration
- Prior intubation
- Tracheostomy
- Burns/smoke inhalation

Differential

- Loss of airway due to general consciousness/distress versus obstruction due to trauma/foreign body/swelling.

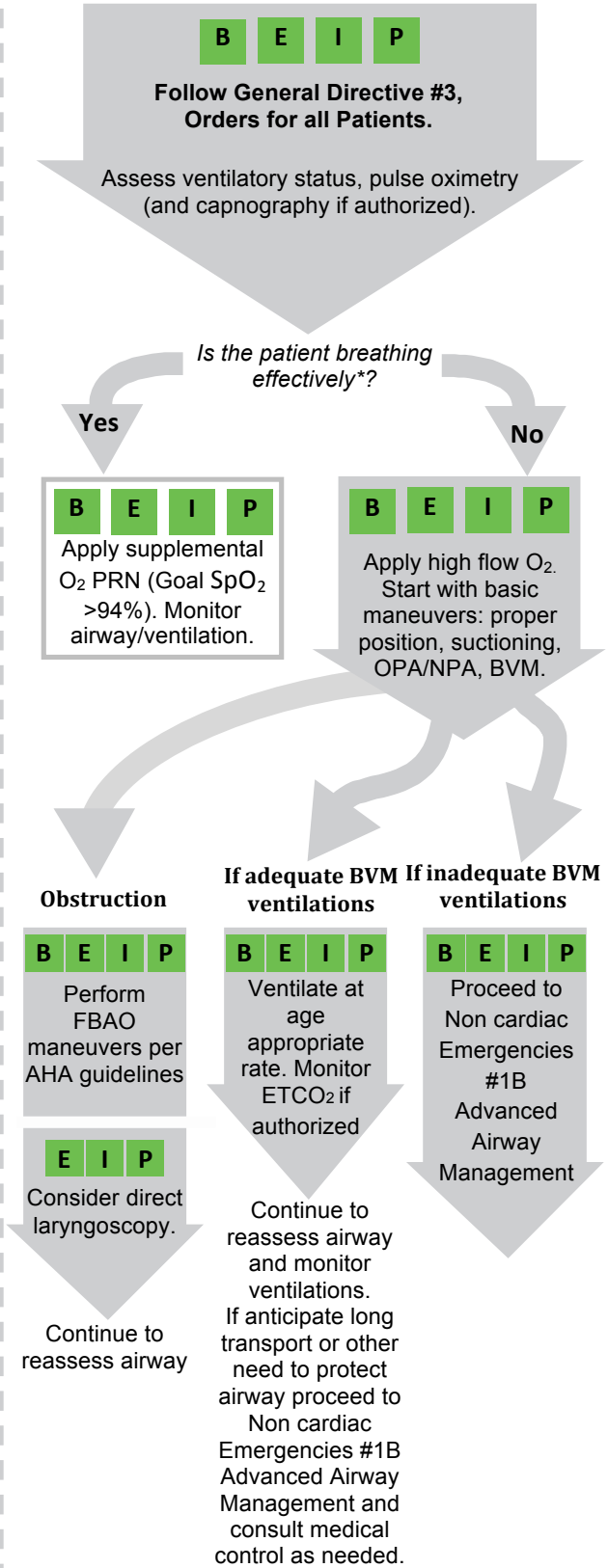
Pediatric Pearls:

- Target pediatric assisted ventilatory rate:
  - 30 for Neonates
  - 20 for Toddlers
  - 15 for School age
  - 10 for Adolescents

WARNINGS

- ! In non-choking adult cardiac arrest patients, quality CPR and early defibrillation are priorities.
- ! Proper tube placement needs to be verified every time patient is moved.

Care: Adults and Pediatrics



Pearls

- Goal is effective ventilation and oxygenation.
- If basic maneuvers/BVM are providing adequate ventilation/oxygenation it is acceptable to continue basic maneuvers only.
- Treat reversible causes as indicated (e.g. Asthma, CHF, hypoglycemia, opiate overdose).
- *When determining effectiveness of breathing, consider respiratory rate (too fast/too slow), and signs of hypoxia/hypoventilation.
- Choking patients with complete or near complete airway obstruction require immediate and aggressive attempts at foreign body removal prior to other resuscitative measures.
- Maintain c-spine stabilization for patients with suspected spinal injury.
- Continuous pulse oximetry should be utilized in all patients with inadequate respiratory function.
- Adult assisted ventilatory rate should be 8-10 per min. to maintain an ETCO2 of 30-35.
- Titrate supplemental O2 to SpO_2 between 94-100% using nasal cannula or NRB mask as needed.
- Patients in respiratory distress, unconscious or with CPR in progress shall receive high flow oxygen regardless of SpO2.

Performance indicators

- Proper sequencing and escalation of airway maneuvers as indicated by patient presentation and response to initial measures.
- Goal to maintain an ETCO2 of 30-35" and SpO_2 between 94-100%.