

AIRWAY OBSTRUCTION

I. PATIENT CARE GOALS

- 1. Provide effective oxygenation and ventilation.
- 2. Recognize airway obstruction due to a foreign body.
- 3. Provide necessary interventions to quickly and safely manage the airway obstruction.

II. PATIENT MANAGEMENT

A. Assessment

- 1. History Assess for:
 - a. Time of onset of symptoms.
 - b. Associated symptoms.
 - c. Choking or other evidence of upper airway obstruction.
- 2. Physical Examination Assess for:
 - a. Abnormal respiratory pattern, rate and/or effort.
 - b. Use of accessory muscles.
 - c. Ability to speak words or sentences.
 - d. Quality of air exchange, including depth of respiration and equality of breath sounds.
 - e. Abnormal breath sounds (wheezing, rhonchi, rales, or stridor).
 - f. Cough.
 - g. Skin color (cyanosis or pallor), presence of diaphoresis.
 - h. Mental status, including anxiety.
 - i. Hypoxia.

B. Treatment and Interventions

1. Partial Obstruction

- a. <u>Good Air Exchange</u>: The patient is responsive and can cough forcefully although frequently there is wheezing between coughs. Encourage patient to continue spontaneous coughing and breathing efforts.
- b. Do not interfere with the patient's own attempts to relieve the obstruction.



2. Complete Obstruction

- a. <u>Poor or No Air Exchange</u>: The patient may have a weak or ineffective cough, high-pitched noise while inhaling, increased respiratory difficulty, cyanosis, clutching the throat, unable to speak or cry.
- b. Responsive patients
 - i. <u>Infants</u> (less than 1 year old) should receive a sequence of 5 back blows and 5 chest thrusts until the object is removed or the patient becomes unresponsive.
 - ii. <u>Children</u> and <u>adults</u> should receive abdominal thrusts until the object is removed or the patient becomes unresponsive.
 - iii. For pregnant or obese patients, perform chest thrusts to the lower half of the sternum until the object is removed or the patient becomes unresponsive.
- c. <u>Unresponsive patients</u>
 - i. Begin CPR starting with chest compressions at a rate of 30 compressions to 2 breaths.
 - ii. Before delivering breaths, look in the mouth. If there is an object visualized, remove it if possible.
 - iii. Advanced airway obstruction interventions (ALS):
 - If there is no chest rise during ventilation attempts and no obvious foreign body is seen in the mouth, use the laryngoscope to visualize the upper airway. If a foreign body is visualized above the vocal cords, remove it using the Magill forceps and suction.
 - 2. If no upper airway foreign body is identified under direct visualization with the laryngoscope and ventilations are ineffective, there may be a tracheal foreign body below the vocal cords.
 - 3. Perform endotracheal intubation and re-attempt ventilation.

C. Patient Safety Considerations

- 1. Avoid blind finger sweeps.
- 2. Avoid abdominal thrusts in infants.

III. NOTES/EDUCATIONAL PEARLS

A. Key Considerations

1. Patients with airway obstruction may initially be responsive when encountered by EMS and then become unresponsive. In this circumstance EMS will know that airway obstruction is the cause of the patient's symptoms.



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2. Patients with airway obstruction may be unresponsive when initially encountered by EMS. In this circumstance EMS will probably not know that the patient has airway obstruction until repeated attempts at ventilation are unsuccessful.

B. Pertinent Assessment Findings

1. Ongoing assessment of the airway obstruction and if the patient is responsive or unresponsive is critical.