Pediatric Foreign Body Airway Obstruction

### Standard Approach and Ongoing Assessment

- **Partial Obstruction** (conscious – able to speak or cry)
  - Place patient in sitting position
  - Encourage coughing

- **Partial or Complete Obstruction** (conscious - poor air exchange, cyanosis, stridor, weak or silent cough)
  - Perform abdominal thrusts (if less than 1 year – back blows / chest thrusts) prn until successful or patient becomes unconscious

- **Complete Obstruction** (unconscious)
  - Chest compressions x 2 minutes – clear airway and attempt to ventilate x 2

### Infection Prevention and Control (IP&C) Considerations
- Consider Droplet and Airborne Precautions

### Removal of Foreign Body

- **Removal of foreign body successful?**
  - **Yes**
    - Remove object
      - Direct visualization of foreign body?
        - **Yes**
          - Refer to MFR Dispatch and Communication Process for OLMC contact
        - **No**
          - Chest compressions x 2 minutes – clear airway and attempt to ventilate x 2

  - **No**
    - Continue treatment and assessment until transfer of care to EMS

- **Removal of foreign body successful?**
  - **Yes**
    - Continue treatment and assessment until transfer of care to EMS
  - **No**
    - Perform abdominal thrusts (if less than 1 year – back blows / chest thrusts) prn until successful or patient becomes unconscious
    - Chest compressions x 2 minutes – clear airway and attempt to ventilate x 2
    - Repeat prn

### Additional Information
- **EMR**
- **PCP**
- **SFA**
- **FMR**

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**Infection Prevention and Control (IP&C) Considerations**
- Consider Droplet and Airborne Precautions

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**Medical Control Protocols v 2.1**

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Etiology

Airway obstructions that are caused by the aspiration of food or objects may result in partial or complete airway obstruction. Foreign body airway obstruction can occur at any level from the hypopharynx, above or below the glottis, to the mainstem bronchus.

Pediatric Considerations

Childhood causes of airway obstruction include foreign bodies, anaphylaxis, epiglottitis, croup, bacterial tracheitis, and burns. A thorough assessment and detailed history will allow the practitioner to identify the probable cause of obstruction and refer to the appropriate protocol. Because infants and children have anatomically small airways and limited respiratory reserve, airway obstructions, whether resolved or not, can rapidly develop to respiratory failure; therefore, prompt recognition, appropriate treatment and transport to a hospital reduces patient morbidity and mortality.

Interventions

Partial Obstructions (conscious with good air exchange)

1. Do not intervene as long as air exchange is adequate
2. Keep the patient relaxed and comfortably seated on the stretcher during transport

Partial or Complete Obstructions (with poor air exchange)

1. Perform abdominal thrusts (if less than 1 year perform back blows / chest thrusts); continue until successful or patient becomes unconscious. Immediate intervention is required if patient converts to a complete obstruction

Complete Obstructions (unconscious)

1. Begin the steps of CPR
4. Consider notification of incoming EMS crew

Patient Safety Considerations

- All patients presenting with a history of an airway obstruction requiring intervention (e.g. chest or abdominal compressions or thrusts) AND refusing transport despite recommendations, mandatory OLMC
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Pharmacology

Not applicable

Special Circumstances

In patients greater than 1 year of age, abdominal thrusts are the preferred method; whereas, in infants less than 1 year of age, back blows / chest thrusts are required since abdominal thrusts may damage the infant’s large and unprotected liver.

<table>
<thead>
<tr>
<th>Infection Prevention and Control (IP&amp;C) Considerations</th>
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<tbody>
<tr>
<td>Many airway management techniques known as aerosol generating medical procedures (AGMP) produce splashes of oral secretions, as well as blood, and emesis when they are present. In the presence of an infectious state, oral secretion can transmit harmful pathogens. Personal protective equipment (PPE) that protects the pre-hospital care provider’s eyes, nose and mouth as a minimum is mandatory.</td>
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<td>Most respiratory tract infections are transmitted via the droplet route, in which case a simple face mask with safety glasses or face shield offer excellent protection. Pulmonary tuberculosis is the most likely respiratory tract infection that will be encountered that requires basic or advanced airway management. Airborne precautions are mandatory, in these cases the N-95 respirator with safety glasses or face shield are required.</td>
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<td>During AGMP’s associated with seasonal, pandemic, or avian influenza-like-illness (ILI), Severe Acute Respiratory Syndrome-coronavirus (SARS), Middle East Respiratory Syndrome (MERS), and rare exotic infections airborne precautions must be instituted.</td>
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<td>Often the pre-hospital care provider has no way of knowing what pathogen is the causative agent and must make a quick reactive decision to determine what PPE is required during a time sensitive emergent event.</td>
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<td>Common AGMP performed by pre-hospital care providers:</td>
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<td>• Suctioning</td>
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<td>• Bag-valve-mask ventilation</td>
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<td>• Supraglottic Airway</td>
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<td>All persons participating in any AGMP must:</td>
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<td>• Perform hand hygiene (as time permits)</td>
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<td>• Wear a gown (as time permits)</td>
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<tr>
<td>• Wear safety glasses or face shield</td>
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<tr>
<td>• Wear an N-95 respirator</td>
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<td>• Wear gloves</td>
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