

Foreign body airway obstruction

Amir Hossein Jafari-Rouhi, M.D, MSc

Associate Professor of Pediatrics

Pediatric Pulmonologist

Tabriz University of Medical Sciences

Introduction:

- ✓ **95% of cases are <5Y/O children.**
- ✓ **60% of cases are <1Y/O child. (infants)**
- ✓ **Liquids are the most common cause.**
- ✓ **Solid objects are not uncommon cause.
(Toy, Nut, Grape, Food, Candy,...)**

How we can suspect to foreign body aspiration

A child with sudden onset respiratory distress with :

- ✓ **coughing**
- ✓ **gagging**
- ✓ **abnormal breath sounds (Stridor, Wheezing)**

Foreign body airway obstruction signs

Mild vs Severe signs

✓ Mild:

The child can cough and make some sound

✓ Severe:

The child can not cough and make some sound

Relief of FBAO

- ✓ **When we should intervene?**
- ✓ **Which method of intervention must be chosen?**

Prehospital scenario (1)

A 9 mo infant suddenly begins to coughing and becomes agitated during feeding. Infant can cry and breathe.

✓ What do you do?

Relief of FBAO

If FBAO is mild :

- ✓ **Do not interfere**
- ✓ **Allow the victim**
- ✓ **Observe for signs of sever FBAO**

Prehospital scenario (2)

A 11 mo infant presents with coughing, cyanosis and agitation suddenly during playing with his toy. His mother sees the baby cannot breathe well and cough.

✓ what should she do?

After 1 min the baby was become unconscious.

✓ what must she do next?

Relief of FBAO

If FBAO is severe :

- ✓ **The victim is responsive**
- ✓ **The victim is unresponsive**

Relief of FBAO

If patient is responsive :

- ✓ **The victim is infant**
- ✓ **The victim is child**

Back Blows

Place the infant stomach-down across your forearm and give five thumps on the infant's back with heel of your hand







Blind Finger Sweep

Sweep your finger through the child's or infant's mouth to remove debris



Heimlich manure



Relief of FBAO

If patient is unresponsive :

- ✓ **Perform CPR**
- ✓ **But should look into the mouth before giving breath**
- ✓ **Should not blind finger sweep**

Finger Sweep



Rescue Breath



Tilt the infant's head back, cover nose and mouth with your mouth and exhale into the infant's mouth.

CPR



Prehospital scenario (3)

A 6 y/o boy suddenly becomes agitated and has nausea, vomiting, coughing when he was eating candy. He is trying seriously to open his airway and to expel the candy.

✓ What is your intervention?

After 2 min, you see the boy's effort is voiceless and ineffective and he is drowsy but is conscious.

✓ What you do next.

Then he becomes unconscious.

✓ Do you change your intervention?

Heimlich manure



Finger Sweep



Rescue Breath

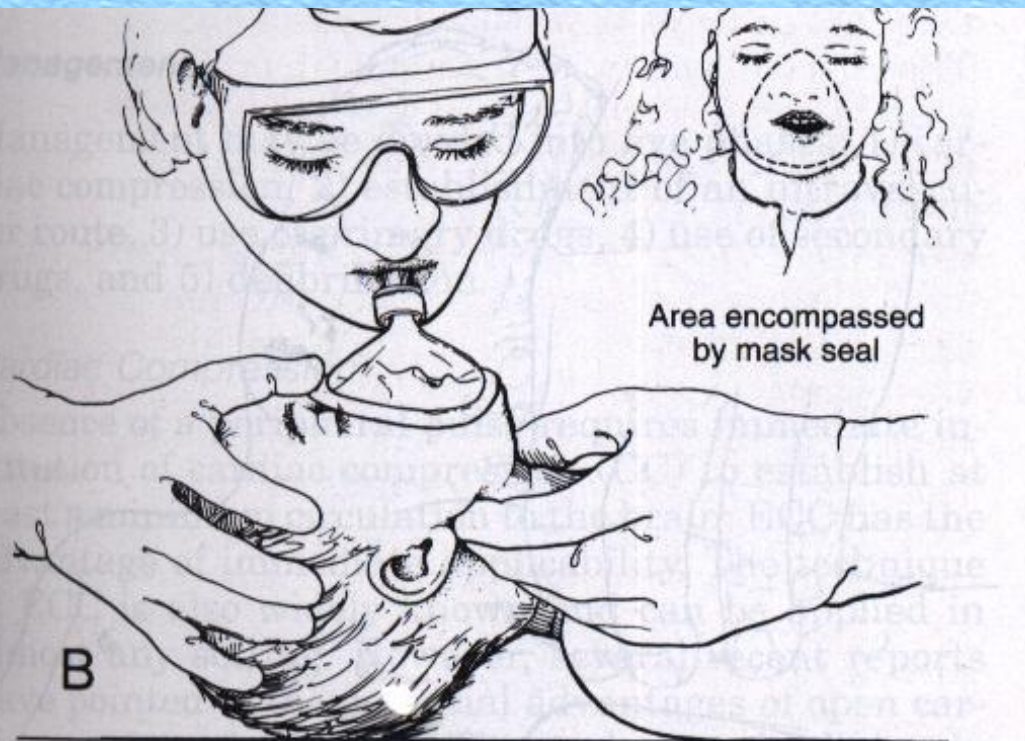
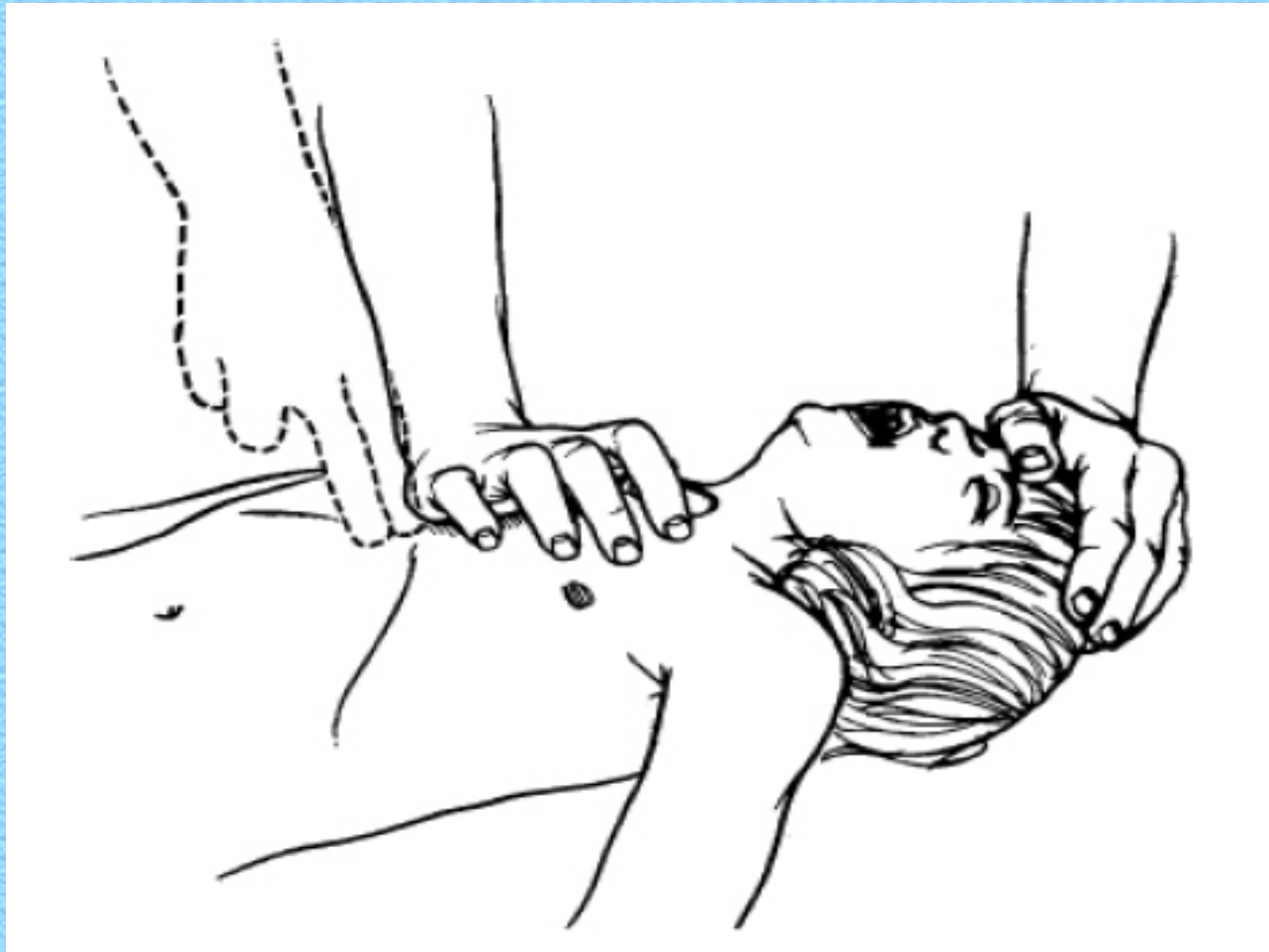


FIGURE 1.14. Basic life support—airway and breathing. **A.** Positioning of head to open airway and evaluation for spontaneous ventilation. **B.** Expired air (mouth to mask) ventilation.

CPR







Emergency Department scenario

- In visit time, a 4y/o child was eating nuts become cyanotic, voiceless coughing and then he is unconscious.
 - What should we do as ED staff?

Relief of FBAO

- If BLS measures fail :
 - ✓ Attempting to ventilation
 - ✓ Orotracheal intubation
 - ✓ To dislodge the FB to a distal bronchos
 - ✓ To intubate around the FB
 - ✓ Cricothyrotomy in older child and tracheotomy or needle cricothyrotomy with transtracheal jet ventilation in younger children and infant
 - ✓ heliox

□ Question?

Transtracheal Jet Ventilation

