

CLINICAL SKILLS: CHOKING IN INFANTS AND CHILDREN

Choking is one of the major causes of airway obstruction in the paediatric population, with subsequent risk of respiratory arrest and death. As such, it may readily be examined in a short OSCE station, with the scenario potentially progressing to test the candidate's skills at paediatric BLS.

Signs of choking on examination

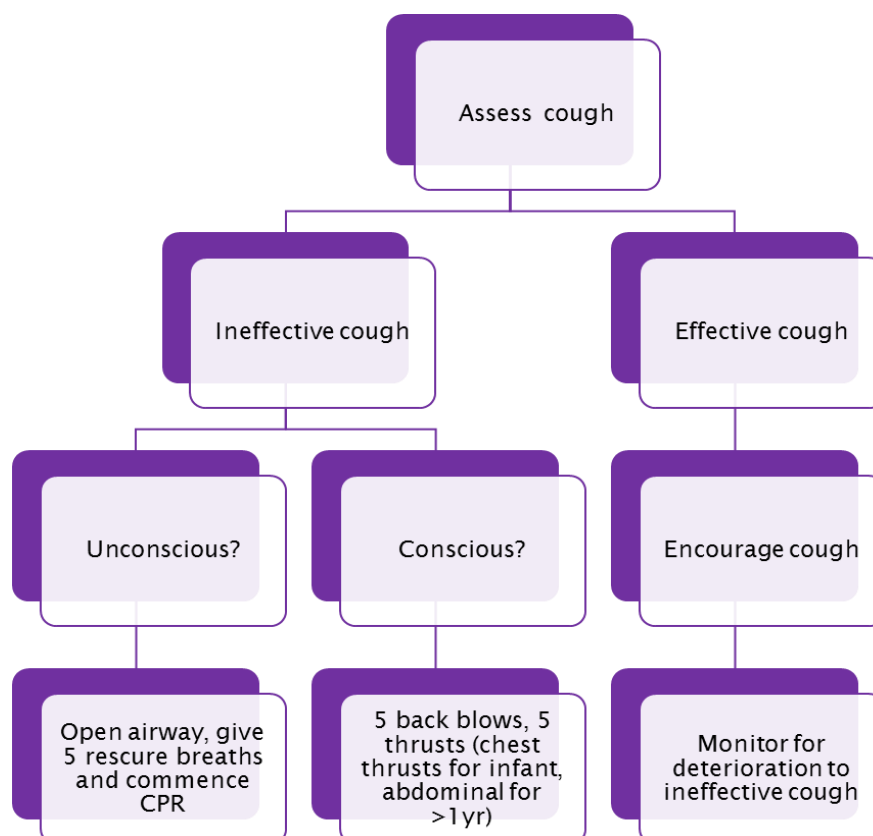
- Sudden onset respiratory distress, coughing, gagging, stridor
- History of playing with or eating small objects, and a lack of signs of other illness
- **Effective cough** - loud cough, breathes between coughs, alert and responsive, able to verbalise/cry. Note that a child's effective cough is superior to any external manoeuvre at relieving obstruction so should be encouraged
- **Ineffective cough** - quiet/silent cough, cyanosis, decreasing level of consciousness, unable to breathe or speak/cry

OSCE-Aid Tip

Quickly assess that this is an emergency and adopt a DR ABC approach; in this case it is an airway issue so the scenario would focus on 'A'.

Choking algorithm

- **D** - assessed the situation for hazards and whether it is safe to approach
- **R** - if unresponsive, proceed to BLS, if responsive proceed to the algorithm below:



Infants (<1yr)

Back blows

- infant prone and head down across your lap
- infant's head supported with your thumb at one angle of the jaw and fingers at the other, taking care not to compress the soft tissues beneath the jaw
- deliver up to 5 back blows with the heel of the hand to the back between the scapulae

Chest thrusts

- turn the infant head down and supine, lying supported along your arm with your hand supporting the occiput
- deliver up to 5 chest thrusts (deeper and slower than chest compressions) with 2 fingers to the lower sternum a finger's breadth above the xiphisternum

Children >1 yr

Back blows

- position child head down ideally – over your lap or supported in a forward-leaning position
- deliver up to 5 back blows with the heel of the hand to the back between the scapulae

Chest thrusts

- stand or kneel behind the child, with your arms beneath their arms and encircling their torso
- make a fist with one hand and place between umbilicus and xiphisternum, grab with the other and pull sharply inwards and upwards up to 5 times
- take care to avoid the xiphoid process or ribs

Reassess

- After completing 5 back blows then 5 thrusts (chest or abdominal), if the child is still conscious but the object remains, repeat the cycle of back blows and thrusts
- If the child becomes unconscious, proceed to BLS – when opening the airway, if an obvious object is **visible** a **single** finger sweep may be performed to attempt to remove it

OSCE-Aid Tip

Aim to relieve the obstruction with each back blow or chest/ abdominal thrust, rather than delivering all 5

Fact: In half of documented choking cases causing airway obstruction more than one technique was needed to relieve the obstruction

References:

Based upon Resuscitation Council Paediatric Life Support Guidelines 2015

(<https://www.resus.org.uk/resuscitation-guidelines/paediatric-basic-life-support/>)