



Clinical Practice Guidelines: Respiratory/Foreign body airway obstruction

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Date	January, 2020
Purpose	To ensure consistent management of patients with airway obstruction (foreign body).
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
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Population	Applies to all ages unless stated otherwise.
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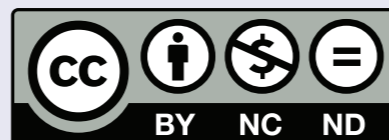
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Foreign body airway obstruction

January, 2020

Foreign Body Airway Obstruction (FBAO) is a life-threatening emergency for adults and paediatrics. Although FBAO is more common in the paediatric population, the mortality rate is higher for adults in the prehospital environment.^[1-2] Common causes of FBAO include liquid or solid foods, small inanimate objects and medication pills. The elderly are more susceptible to FBAO, probably due to a decreased gag reflex. Large food boluses, especially meat chunks are a common cause of FBAO.

FBAO can be a partial or complete obstruction, with partial obstructions allowing either adequate or inadequate air exchange. Inadequate air exchange from severe partial or complete obstructions are managed the same way.

Mild airway obstruction^[3] is a partial obstruction with adequate air exchange characterised by:

- patients themselves will optimise position (e.g. sitting forward)
- effective cough
- crying or verbal responses present
- able to take breath before coughing
- fully responsive

Patients with adequate gas exchange and an effective cough should be given reassurance and encouraged to continue spontaneous efforts. Inappropriate interference can result in a partial obstruction becoming severe or complete.

Severe airway obstruction^[3] is a partial obstruction with inadequate air exchange or complete obstruction characterised by:

- absent or ineffective cough
- unable to vocalise
- worsening stridor
- quiet or silent chest/unable to breath
- cyanosis
- decreasing level of consciousness

In the unconscious, apnoeic patient FBAO is recognised by inadequate airflow and poor chest rise during attempted positive pressure ventilation.^[4]

Clearing a complete FBAO in a conscious patient^[4]

ANZCOR Guideline 4 outlines the recommended procedure for choking.^[4] This is a controversial area, mainly because there is a lack of any scientific evidence for making strong clinical guideline recommendations. The consensus of Resuscitation Science identified that the combination of back blows and chest thrusts, could be used to relieve complete FBAO. If the patient is unconscious, then CPR should be used. The Australian Resuscitation Council (ARC) does not recommend the use of abdominal thrusts as there is considerable evidence of harm caused by this procedure.

Chest back blows and chest thrusts should be alternated after each set of 5 attempts. There is insufficient evidence to determine which should be used first.

Back Blows:

- Are performed by applying a sharp blow to the centre of the patient's back between the shoulder blades, using the heel of one hand.
- The appropriate amount of force will vary between patients, but care must be used not to cause injury.
- Infants may be placed in a head down position to deliver back blows, that is, across the rescuer's lap, while children and adults may be treated in the sitting or standing position.
- After each blow, check to see if the airway obstruction has been relieved. The aim is to relieve the obstruction with each blow, rather than to give all five blows.



Examples of back blow technique

Chest thrusts:

- Are applied at the same point on the chest that is used when providing chest compressions during CPR.
- Are delivered sharper, but at a slower rate, than chest compressions during CPR.
- Must be applied with the patient's back supported, to allow compression of the chest.

It is difficult to state categorically how to achieve back support when using chest thrusts, but the overall principle remains the same; support the back any way you can. Some methods for supporting the patient's back may include:

- Placing your other hand on the patient's back
- If the patient is sitting, use your other hand to support the back of the chair
- Have another person stand/kneel behind as appropriate to provide support
- Lie the patient down on their side, kneel behind them and support their back with your thigh.

If chest thrusts cannot be applied, continue with back blows. If the patient becomes unconscious commence CPR.

Clinical features



History

- clutching of the neck
- sudden dyspnoea, gagging or coughing
- history of playing with/eating small items
- eating a meal

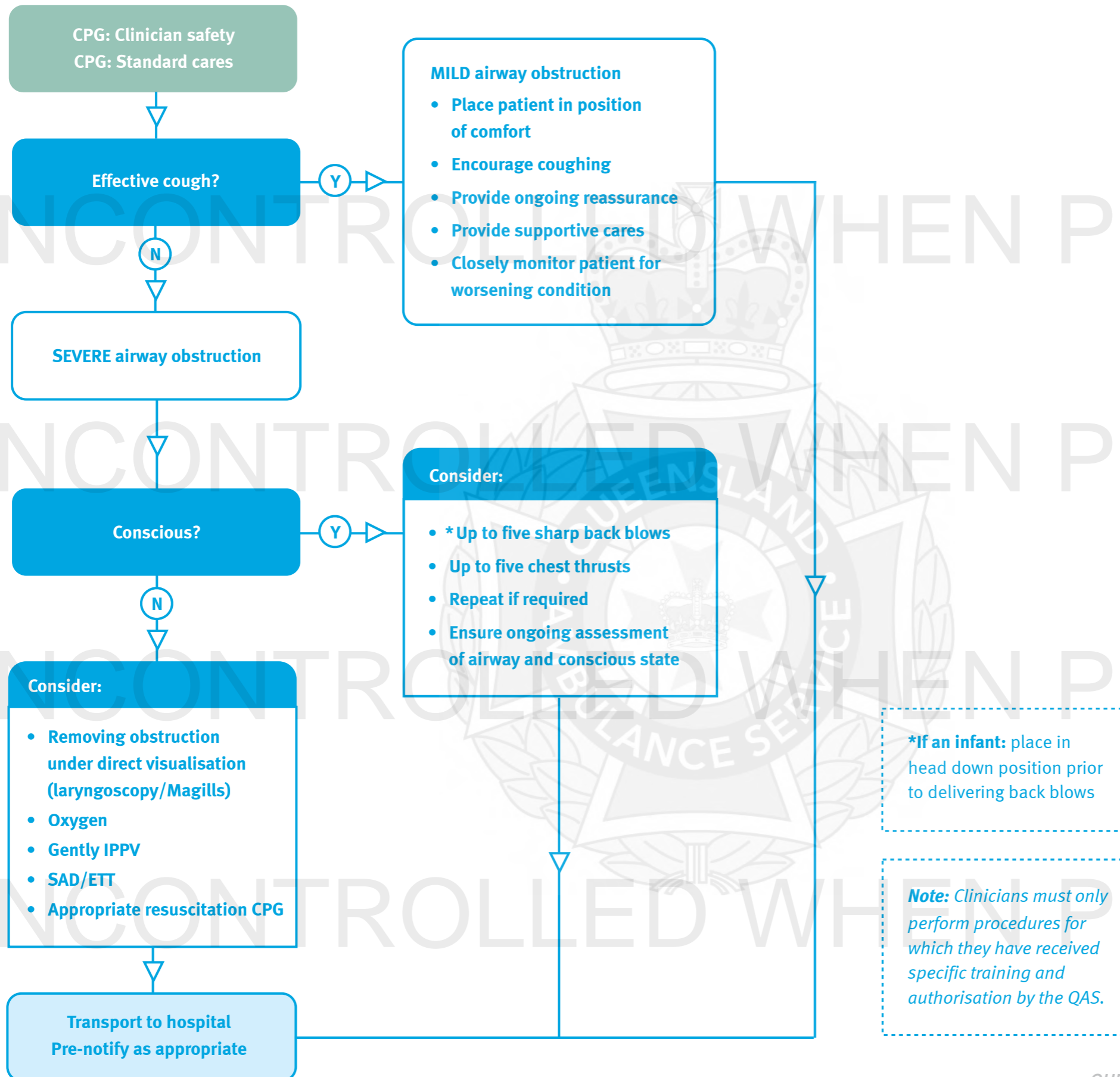
Examination

- respiratory distress with stridor, accessory muscle use, recession and paradoxical breathing
- restlessness
- cyanosis
- unconsciousness
- bradycardia



Risk assessment

- The severity of the foreign body airway obstruction can be assessed by the patient's ability to cough.
- Effective cough indicates a mild obstruction.
- Nil cough indicates a severe obstruction.



**If an infant:* place in head down position prior to delivering back blows

Note: Clinicians must only perform procedures for which they have received specific training and authorisation by the QAS.