

Recommendations for Relief of Choking in Adults and Infants

RECOMMENDATIONS

The North American guidelines from the Heart and Stroke Foundation and the American Heart Association for the teaching of relief of choking in victims of 1 year of age and older are as follows:

Relief of Choking for Responsive Victims 1 year of age and Older

It is recommended that abdominal thrusts are applied in rapid sequence until the obstruction is relieved (Class IIb, LOE B). If abdominal thrusts are not effective, the rescuer may consider chest thrusts (Class IIb, LOE B). If the victim is pregnant or obese, perform chest thrusts instead of abdominal thrusts.

Relief of Choking for Unresponsive Victims 1 year of age and Older

For victims who are initially responsive and then go unresponsive, in these circumstances you probably know that an airway obstruction exists.

For unresponsive victims, start cardiopulmonary resuscitation (CPR) and check in mouth every time you give a breath. If you see an object and it can be easily removed with your fingers then do so. After about 5 cycles or 2 minutes of CPR, activate the emergency response system if this has not already been done.

Relief of Choking for Responsive Infants

Deliver 5 back slaps forcefully between the infant shoulder blades in the head down position supporting the infants head and body on your forearm. If unsuccessful, 5 quick chest thrusts over the lower half of the breastbone at a rate of 1 per second with the intention of creating enough force to dislodge the object repeat the sequence alternating between backslaps and chest compressions if the infant become unresponsive begin CPR.

Relief of Choking for Unresponsive Infants

Perform CPR and check the airway each time you open the airway if you can see the object and it is easy to remove it then remove it do not perform blind finger sweeps. After 2 minutes of CPR, activate the emergency response system (call 911 or your local emergency number) if not already activated.

BACKGROUND AND RATIONALE

The International Liaison Committee on Resuscitation (ILCOR) conducted a robust and rigorous evidence evaluation which addressed the following question:

In adult and paediatric patients with foreign body airway obstruction (out-of-hospital and in-hospital) (P), does the provision of abdominal thrusts, and/or back slaps, and/or chest thrusts, compared with no action (C), improve outcome (O) (e.g. clearance of obstruction, return of spontaneous circulation (ROSC), survival)?

<http://www.ilcor.org/en/consensus-2010/questions-2010/>

(NOTE: P= Population I=Intervention C=Comparator O=Outcome)

The ILCOR evaluation resulted in only 8 publications of fair to poor methodological quality spanning 32 years of publication (3 papers in 2000-2010, 1 in 1985, and 4 in the 70's), with no relevant studies on the effectiveness of back blows or chest thrusts.

It is important for stakeholders to understand that this situation of 'lack of evidence of a treatment effect' is not the same as 'evidence of a lack of difference'

(<http://www.americanheart.org/presenter.jhtml?identifier=3070257>). At most, the body of knowledge suggests that there is **clinical equipoiseⁱ** in this situation, with stronger evidence for the role of abdominal thrusts. This does not mean that 'evidence now supports the combination of techniques as more successful than only using one method'.

The final North American guideline recommendations were informed by the ILCOR and HSFC/American Heart Association (AHA) Education and Implementation Team Committees who provide expertise and input on the ideal content and format for resuscitation education. These committees considered the evaluation evidence and maintained the focus of simplifying the optimal interventions that would encourage early and effective choking relief for as many victims as possible. Although the evidence findings reveal that chest thrusts, back slaps, and abdominal thrusts are feasible and effective for relieving severe FBAO in conscious (responsive) adults and children 1 year of age and older, the final recommendations take into account the wide range of rescuers, victims, available resources, and need for simplicity in training.

It is important for instructors and stakeholders to understand that the HSFC recommendations take into account the ILCOR scientific evaluation and the previously mentioned variables including the need for simplicity of training.

ⁱ Clinical equipoise means a genuine uncertainty on the part of the expert medical community about the comparative therapeutic merits of each arm of a clinical trial. The tenet of clinical equipoise provides a clear moral foundation to the requirement that the health care of subjects not be disadvantaged by research participation.