

Airway Clearance Devices

Information

Devon Strategic Care Partnership April 2023

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Airway Clearance Devices

- Are used in some settings for patients with Chronic Obstructive Pulmonary Disease (COPD) and Cystic Fibrosis - Their use is supported by UK National Institute for Health and Care Excellence (NICE) guidance, but only for patients experiencing an exacerbation, as it has not been clear whether they provide any benefit for patients managing their COPD on a day-to-day basis.
- Staff are trained specifically to support these patients with regular airway clearance to support the removal of excess mucous

['The Use of Airway Clearance Devices in the Management of Chronic Obstructive Pulmonary Disease: A Systematic Review and Meta-Analysis of Randomized Controlled Trials'](#)

Emergency Airway Clearance Devices

- The DeChoker and LifeVac are just two examples of devices available

The DeChoker



LifeVac



Evaluation of the DeChoker device

- [Evaluation of DeChoker, an Airway Clearance Device \(ACD\) Used in Adult Choking Emergencies Within the Adult Care Home Sector: A Mixed Methods Case Study - PMC \(nih.gov\)](#)
- Retrospective case study that reviewed a small number of reported choking incidents
- Self selecting bias of care homes participating
- Accuracy of recall of events by care home staff was noted by the expert advisory group.
- Funding for this evaluation was supported by DeChoker UK Ltd and Medilink EM, the East Midlands life science association, through their Advanced Clinical Technology Innovation Support (ACTIS) project (part funded by the European Regional Development Fund) Grant Number 31R16P00452. Northamptonshire Healthcare NHS Foundation Trust's role was as a partner on the ACTIS project,

Resuscitation Council (UK)

“Several suction-based airway clearance devices for the treatment of choking are now available in the UK. We do not currently support their use, as there is insufficient research and evidence on the safety or effectiveness of these devices. We are concerned that the use of these devices could delay established treatments for choking. Appropriately trained healthcare professionals can already use advanced techniques such as suction or laryngoscopy and forceps for the removal of foreign body airway obstructions”

<https://www.resus.org.uk/about-us/news-and-events/rcuks-position-use-suction-based-airway-clearance-devices-choking-victims>

[The ABCDE Approach | Resuscitation Council UK](#)

[Quality Standards | Resuscitation Council UK](#)

July 2022

- Resuscitation Council UK has reviewed its statement in light of the International Liaison Committee on Resuscitation (ILCOR) systematic review on removal of foreign body airway obstruction (April 2021) [Removal of foreign body airway obstruction \(BLS 368\): Systematic Review \(ilcor.org\) and the ILCOR 2022 Evidence Update](#). No new evidence was identified to alter ILCOR's or RCUK position on suction-based airway clearance devices. RCUK recommendations therefore remain unchanged.
- RCUK welcomes ILCOR's call for high-quality clinical research focused on assessing the potential benefits and harms of suction-based airway clearance devices.

Community Resuscitation Officer – NHS position

We have been made aware of a number of companies contacting care homes to advise in the purchase and use of airway clearance devices to manage situations of choking.

Advice to NHS staff:

Should you come across this device , please follow the RCUK guidelines on clearing airway , as shown on your Annual resuscitation training. NHS staff within a care home environment would not be supported to use an emergency airway clearance device.

Within the NHS we adhere to the Resuscitation Council (UK) Guidelines/guidance and quality standards. These form the basis of our resuscitation policies and procedures for training, practice, and resuscitation equipment in primary care and secondary care. This would include management of choking.

Learning from local examples

- Assessments of dietary needs and risks must be in place, regularly reviewed and documented.
- Reduce the risk of choking by ensuring appropriate diet advised by your local SALT team who will advise in line with the International Dysphagia Diet Standardisation Initiative (IDDSI) Delays in commencing basic life support can lead to death
- Crucial time lost in determining the location and use of the airway clearance device
- Competency of all staff that may be expected to use the device
- Emotional trauma for staff and resident/family
- Local policies, process and staff training are critical in understanding the use of the device.

Advice

- Residents at higher risk of choking must have an assessment and management plan in place that all staff are familiar with
- Speech & Language Therapy (SALT) services should be contacted to provide advice and a personalised management plan for the individual
- Consider any consent or best interest issues for the individual

Until there are increased clinical trials & robust research evidence to inform support from national bodies, including the RCUK, the use of these devices to support a choking situation cannot be endorsed.

Consider the information available, evidence, quality of evidence/research and any associated risks before deciding to purchase or use airway clearance devices.