PubMed

Format: Abstract

Full text links

Respir Med. 2018 Mar;136:98-110. doi: 10.1016/j.rmed.2018.01.012. Epub 2018 Feb 6.

Airway clearance techniques in neuromuscular disorders: A state of the art review.

Chatwin M[1], Toussaint M[2], Gonçalves MR[3], Sheers N[4], Mellies U[5], Gonzales-Bermejo J[6], Sancho J[7], Fauroux B[8], Andersen T[9], Hov B[10], Nygren-Bonnier M[11], Lacombe M[12], Pernet K[2], Kampelmacher M[13], Devaux C[14], Kinnett K[15], Sheehan D[16], Rao F[17], Villanova M[18], Berlowitz D[4], Morrow BM[19].

Author information

Abstract

This is a unique state of the art review written by a group of 21 international recognized experts in the field that gathered during a meeting organized by the European Neuromuscular Centre (ENMC) in Naarden, March 2017. It systematically reports the entire evidence base for airway clearance techniques (ACTs) in both adults and children with neuromuscular disorders (NMD). We not only report randomised controlled trials, which in other systematic reviews conclude that there is a lack of evidence base to give an opinion, but also include case series and retrospective reviews of practice. For this review, we have classified ACTs as either proximal (cough augmentation) or peripheral (secretion mobilization). The review presents descriptions; standard definitions; the supporting evidence for and limitations of proximal and peripheral ACTs that are used in patients with NMD; as well as providing recommendations for objective measurements of efficacy, specifically for proximal ACTs. This state of the art review also highlights how ACTs may be adapted or modified for specific contexts (e.g. in people with bulbar insufficiency; children and infants) and recommends when and how each technique should be applied.

KEYWORDS: Homecare; Neuromuscular disease; Non-invasive ventilation; Respiratory failure; Tracheostomy

PMID: 29501255 DOI: 10.1016/j.rmed.2018.01.012

Free full text

Publication type

LinkOut - more resources