primary studies - published, non RCT

Evaluation of a novel sputum clearance technique--hydro-acoustic therapy (HAT) in adult patients with cystic fibrosis: a feasibility study.

Code: PM21084546 **Year:** 2010 **Date:** 2010 **Author:** Jarad NA

Study design (if review, criteria of inclusion for studies)

prospective crossover study

Participants

18 CF patients

Interventions

6 sessions of physiotherapy over 6 separate days. These consisted of 2 sessions of either HAT, flutter valve or and sitting in the bath with sounds without vibration (placebo) for 30 minutes each

Outcome measures

The efficacy was investigated by measuring the weight of wet and dry sputum after each session and by change in spirometry values. The preference was assessed by a questionnaire completed by patients at the end of the study about their preference of which type of physiotherapy received.

Main results

The weight of both dry and wet sputum produced was similar in the 3 arms of the study. Spirometry values but not oxygen saturation were reduced after HAT and flutter therapy sessions. HAT therapy was preferred to flutter and placebo in terms of breathlessness, ease of sputum production and relaxation. Of the patients, 70% stated that they would choose HAT as their preferred physiotherapy method compared to 0% for flutter (X(2) = 20.3, p

Authors' conclusions

HAT was found to be safe, well tolerated and favoured by the majority of CF patients.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/377/CN-00771377/frame.html

See also

Chronic respiratory disease YR: 2010 VL: 7 NO: 4

Keywords

Adult; hydration; Hydrotherapy; pharmacological_intervention; flutter; oscillating devices; Airway clearance technique; Chest physiotherapy; non pharmacological intervention - devices OR physiotherapy;