primary studies - published, non RCT

Evaluation of autodrainage methods in a selected group of cystic fibrosis patients with home environment factors taken into consideration.

Code: PM11093342 **Year:** 2000 **Date:** 2000 **Author:** Orlik T

Participants

17 CF patients, aged 10-18 (x 13.35), who were hospitalised in the Institute of Mother and Child Paediatric Clinical Dept.

Interventions

Four autodrainage methods were compared: 1- force expiratory technique, 2- Flutter(R), 3- Flutter (R) with relaxation, 4- PEP system.

Outcome measures

Every investigated drainage methods were tested by each patient according to a determined procedure. The following indices were measured: weight of coughed up sputum, oxygen saturation (SaO2) before, during and after drainage, peak expiratory flaw (PEF) before and after drainage. Patients' relation to autodrainage methods was estimated on the ground of their subjective assessment in 0-5-point scale.

Main results

The results showed that the force expiration technique and the Flutter(R) with relaxation are the most efficient autodrainage methods determined by their coughed up sputum weight. Patients using these methods coughed up x 1.36g and x 1.319 g sputum. Using Flutter(R) without relaxation, patients expectorated 1.199 g sputum. PEP system turned out the least effective. Patients using the PEP system coughed up x 0.87 g sputum. In comparison, patients using postural drainage with clapping expectorated x 0.63g sputum. PEF decreased during every investigated drainage methods. There were no significant differences in SaO2 values before and after drainage. Concerning the patients' preference in relation to the investigated methods, patients appreciated the most force expiratory technique (68 points). The least appreciated was the PEP system (33 points). For comparison, postural drainage with clapping has been estimated at 48.87 points.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/996/CN-00417996/frame.html

See also

Medycyna Wieku Rozwojowego YR: 2000 VL: 4 DE: CCT NO: 3

Keywords

Home; flutter; oscillating devices; Airway clearance technique; Chest physiotherapy; non pharmacological intervention - devices OR physiotherapy;