

primary studies - published RCT

Effect of high-frequency chest wall oscillation on the central and peripheral distribution of aerosolized diethylene triamine penta-acetic acid as compared to standard chest physiotherapy in cystic fibrosis.

Code: PM16537872

Year: 2006 Date: 2009

Author: Stites SW

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

placebo-controlled, randomized, double-blind crossover study

Participants

18 CF patients

Interventions

patients were randomized to receive either clarithromycin (CM) (Group 1) or placebo (Group 2) for three months. After 15 days, the treatments were crossed over. Bronchoalveolar lavage (BAL) was obtained in the beginning and at the end of each treatment period.

Outcome measures

median cell counts and median cytokine levels. median neutrophil elastase (NE). acute pulmonary exacerbations and median clinical score Median z-scores for weight

Main results

There was no significant difference in median cell counts and median cytokine levels at baseline, after CM use and after placebo use between the two groups. In Group 2, the median neutrophil elastase (NE) level decreased with CM. Patients had less acute pulmonary exacerbations and median clinical score decreased with CM in both groups. Median z-scores for weight increased with CM in Group 2.

Authors' conclusions

A fall in proinflammatory cytokines in BAL was not demonstrated; however, some improvement in clinical status could be shown with three-month CM.

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See also

Chest. 2006 Mar;129(3):712-7.

Keywords

Adolescent; Anti-Bacterial Agents; Anti-Inflammatory Agents; Child; Clarithromycin; pharmacological_intervention; Bacterial Infections; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Macrolides; Anti-Inflammatory Agents - excl Steroids;