primary studies - published RCT

Long-term comparative trial of two different physiotherapy techniques; postural drainage with percussion and autogenic drainage, in the treatment of cystic fibrosis.

Code: PM20836133 **Year:** 2010 **Date:** 2010 **Author:** McIlwaine M

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

2-year cross-over trial

Participants

36 CF patients, aged 12-18 years, with Shwachman score 65-98

Interventions

Patients were matched as pairs and members of each pair were randomly assigned to two groups. For the first study year, Group A performed PD while Group B performed AD. At the end of 1 year Groups A and B crossed over physiotherapy techniques.

Outcome measures

Clinical status and pulmonary function (FVC, FEV(1), FEF(25-75)) were measured at 3 monthly intervals. Only results from the first year of the study are reported, as 10 out of 17 patients who had completed performing AD for the first year refused to change back to PD for the second year.

Main results

During the first year of the study, both the AD and PD groups demonstrated improved pulmonary function with no significant difference between the two groups. Change in FVC and FEV(1) percent predicted for Groups A and B was 0.47 +/- 1.65(se) versus 2.35 +/- 1.51(se) and 2.09 +/- 2.2(se) versus 0.92 +/- 2.25(se). However, CF patients exhibited a marked preference for the AD technique.

Authors' conclusions

Results suggest that both AD and PD are effective methods of performing physiotherapy for CF patients and that the benefits of either technique are enhanced by measures which encourage adherence.

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See also

Pediatr Pulmonol. 2010 Nov;45(11):1064-9.

Keywords

Adolescent; Airway clearance technique; Child; Drainage; non pharmacological intervention - devices OR physiotherapy; Percussion; Postural Drainage; Chest physiotherapy; Autogenic drainage;