

primary studies - published RCT

The effects of biofeedback assisted breathing retraining on lung functions in patients with cystic fibrosis.

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

Parallel RCT.

Participants

N = 26. Aged 10 - 41 years. Groups matched by age and severity of disease using Shwachman-Kulczycki scoring system prior to randomisation.

Interventions

1. Biofeedback assisted breathing re-training (n = 13). 2. Biofeedback assisted relaxation training (n = 13). 8 sessions over 4 weeks. Delivered by psychology and biofeedback students under supervision.

Outcome measures

Evaluation at: 1. 3 pre-study assessments, 18 months prior to study commencement; 2. baseline; 3. post-study; 4. follow-up. Lung function: 1. FVC; 2. FEV1; 3. FEF 25-75%

Main results

Results revealed a significant improvement in FEV1 and mean forced expiratory flow during the middle half of forced vital capacity (FVC) for the biofeedback group, while the control group showed no change. A similar trend was noted for FVC.

Authors' conclusions

These data suggest that respiratory muscle feedback and BRT may improve lung function in patients with CF.

 $\underline{\text{http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/047/CN-00098047/frame.html} \\$

See also

Chest. 1994 Jan;105(1):23-8.

Keywords

Adolescent; Adult; Biofeedback- Psychology; Child; non pharmacological intervention - devices OR physiotherapy; non pharmacological intervention - psyco-soc-edu-org; Relaxation Therapy; Biofeedback- hypnosis- and relaxation; Behavioural interventions;