

primary studies - published RCT

## Face mask physiotherapy in cystic fibrosis.

Code: PM3524474

Year: 1986 Date: 1992

Author: Tyrrell JC

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

cross-over study

### Participants

9 clinically stable cystic fibrosis (CF) patients

### Interventions

The patients performed: 1) postural drainage with thoracic expansion exercises + forced expiration technique (FET) in the left decubitus position; 2) positive expiratory pressure (PEP)-mask breathing + FET; and 3) physical exercise on a bicycle ergometer + FET. All treatments had the same duration and FET was standardized.

### Outcome measures

Mucus clearance was assessed using a technique based on measurement of the elimination of inhaled radiolabelled particles.

### Main results

Mean clearance of tracer from the right lung by postural drainage, PEP and physical exercise was 18% (range 10-29%), 20% (12-43%), 16% (8-25%), respectively, and from the left lung 20% (8-42%), 15% (5- 23%) and 13% (5-17%), respectively. The differences were not statistically significant. Surprisingly, postural drainage (PD) was the most effective technique in the left, dependent lung in 7 of the 9 patients.

<http://dx.doi.org/10.1136/adc.61.6.598>

### See also

Arch Dis Child. 1986 Jun;61(6):598-600.

### Keywords

Airway clearance technique; Drainage; exercise; non pharmacological intervention - devices OR physiotherapy; Postural Drainage; Positive-Pressure Respiration- PEP- pep mask; cycle ergometer; forced expiration technique; Training; Chest physiotherapy; Active Cycle of Breathing Technique -ACBT-;