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*primary studies - published RCT*

## **The Flutter VRP1 as an adjunct to chest physiotherapy in cystic fibrosis.**

**Code:** PM7809441

**Year:** 1994 **Date:** 1994

**Author:** Pryor JA

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

RCT cross-over design.

### **Participants**

Single centre UK trial. 24 (14 male, 10 female) randomised, but only 20 included in the study. Age range 16 - 36 years; mean age 24.4 years. Stable as according to no clinical findings. Positive sweat test for CF. 4 participants withdrew (3 males, 1 female); 2 had to have drug regimens changed; 2 withdrew due to technical problems with oximeter and sputum collection.

### **Interventions**

ACBT vs Flutter and ACBT, 2 supervised treatments per day then alternate treatment on following day. In addition 2 different postural drainage positions were used, but no statistical difference noted between treatments.

### **Outcome measures**

Respiratory function, wet sputum weight and participant satisfaction.

### **Main results**

The claims could not be substantiated and the possibility of sputum retention was of concern when the Flutter was used as significantly more sputum (P

[http://dx.doi.org/10.1016/S0954-6111\(05\)80066-6](http://dx.doi.org/10.1016/S0954-6111(05)80066-6)

### **See also**

Respiratory medicine YR: 1994 VL: 88 NO: 9

### **Keywords**

Adult; Airway clearance technique; Combined Modality Therapy; flutter; non pharmacological intervention - devices OR physiotherapy; Active Cycle of Breathing Technique -ACBT-; Postural Drainage; Chest physiotherapy; oscillating devices;