

primary studies - published RCT

## **Biological effects of a dietary omega-3 polyunsaturated fatty acids supplementation in cystic fibrosis patients: a randomized, crossover placebo-controlled trial.**

**Code:** PM16325968

**Year:** 2006 **Date:** 2010

**Author:** Panchaud A

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

RCT. 20 centres. Electronic randomisation, stratified by age

### **Participants**

166 individuals, aged 7 years or older, CF confirmed by sweat chloride or genotype.

### **Interventions**

PD, flutter device (FD) and vest.

### **Outcome measures**

change in pulmonary function, time to need for intravenous (IV) antibiotics, use of pulmonary therapies, adherence to treatment, treatment satisfaction, and quality of life. Clinical outcomes were assessed quarterly over 3 years

### **Main results**

Enrollment goals were not met, and withdrawal rates were high, especially in postural drainage (51%) and FD (26%), compared to vest (9%), resulting in early termination. FEV(1) decline, time to need IV antibiotics, and other pulmonary therapies were not different. The annual FEF(25-75%) predicted rate of decline was greater in those using vest ( $P = 0.02$ ). Adherence was not significantly different ( $P = 0.09$ ). Overall treatment satisfaction was higher in vest and FD than in postural drainage ( $P$

### **Authors' conclusions**

The study was ended early due to dropout and smaller than expected decline in FEV(1). Patients were more satisfied with vest and FD. The longitudinal decline in FEF(25-75%) was faster in vest; we found no other difference in lung function decline, taken together this warrants further study. The slow decline in FEV(1) illustrates the difficulty with FEV(1) decline as a clinical trial outcome.

<http://dx.doi.org/10.1016/j.clnu.2005.10.011>

### **See also**

Clin Nutr. 2006 Jun;25(3):418-27. Epub 2005 Dec 2.

### **Keywords**

Adolescent; Adult; Airway clearance technique; Chest Wall Oscillation; Child; Drainage; non pharmacological intervention - devices OR physiotherapy; Postural Drainage; flutter; oscillating devices; Chest physiotherapy;