

primary studies - published RCT

## **Growth in Prepubertal Children With Cystic Fibrosis Treated With Ivacaftor.**

**Code:** PM28143919

**Year:** 2017 **Date:** 1984

**Author:** Stalvey MS

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

randomised cross-over design

### **Participants**

14 patients with cystic fibrosis

### **Interventions**

Treatment A consisted of postural drainage, percussion and vibration; treatment B of postural drainage and periodic application of a face mask with positive expiratory pressure (PEP); treatment C of PEP in the sitting position; treatment D of the forced expiration technique in the sitting position.

### **Outcome measures**

sputum expectorated. Skin oxygen tension, PSO<sub>2</sub> was monitored continuously during and for 35 min after treatment. patient preference

### **Main results**

In terms of sputum expectorated, treatments B and C were superior to treatment D and especially to treatment A ( $p$  less than 0.05). A substantial and prolonged decay in PSO<sub>2</sub> was observed during treatment A, quite different from other patterns seen. During and even following treatment C, an increase in PSO<sub>2</sub> was noted. PEP was well accepted by the patients, who preferred treatment C, and we suggest it is incorporated in chest physical therapy regimens if the therapeutic objective is to increase expectoration.

<http://dx.doi.org/10.1542/peds.2016-2522>

### **See also**

Pediatrics. 2017 Feb;139(2). pii: e20162522. doi: 10.1542/peds.2016-2522.

### **Keywords**

Adolescent; Airway clearance technique; Drainage; Food; non pharmacological intervention - devices OR physiotherapy; non pharmacological intervention - diet; Postural Drainage; Vibration; Positive-Pressure Respiration- PEP- pep mask; forced expiration technique; percussion; Chest physiotherapy; oscillating devices; Active Cycle of Breathing Technique -ACBT-;