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primary studies - published RCT

## **A randomised controlled trial of breathing modes for adaptive aerosol delivery in children with cystic fibrosis.**

**Code:** PM21620782

**Year:** 2011 **Date:** 2011

**Author:** McCormack P

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

RCT

### **Participants**

children with CF on long-term aerosol therapy

### **Interventions**

children were randomly allocated to either TIM (target inhalation mode), which optimises patient inhalations through a direct feedback mechanism, or to continue TBM

### **Outcome measures**

The primary outcome was nebuliser treatment times with secondary outcomes being adherence and patient preference

### **Main results**

The ten children allocated TIM reduced their mean (SD) treatment times from 6.9(2.9) to 3.7(2.3) minutes ( $p < 0.001$ ). In contrast, treatment times were unchanged in the ten children allocated TBM. Mean adherence was maintained in the TIM group but declined in patients allocated TBM by  $>5\%$ . All children preferred TIM to TBM.

### **Authors' conclusions**

TIM reduces nebuliser treatment times and may positively impact on adherence, although longer duration studies are required to examine this.

<http://dx.doi.org/10.1016/j.jcf.2011.04.006>

### **See also**

J Cyst Fibros. 2011 Sep;10(5):343-9. Epub 2011 May 28.

### **Keywords**

Inhalation OR nebulised; pharmacological\_intervention; Respiratory Tract Diseases; Respiratory Tract Infections;