

*primary studies - published, non RCT*

## **Changes in Pulmonary Function and Controlled Ventilation-High Resolution CT of Chest After Antibiotic Therapy in Infants and Young Children with Cystic Fibrosis.**

**Code:** PM25762451

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

retrospective diagnostic survey

### **Participants**

Infants with cystic fibrosis. The sample included 21 infants, mean age  $85.2 \pm 47.6$  weeks.

### **Interventions**

Infant pulmonary function tests (IPFT) and controlled ventilation-high resolution computed tomography (CV-HRCT) of chest done before and after 2 weeks of IV antibiotics over the last 12 years were compared. CV-HRCTs were compared using the modified Brody scoring system.

### **Outcome measures**

CV-HRCTs were compared using the modified Brody scoring system.

### **Main results**

Mean change in weight was  $0.4 \pm 0.38$  kg ( $p = 0.001$ ). Significant changes in IPFT included mean % predicted FEV(0.5) (+13.5 %,  $p = 0.043$ ), mean % FEF(25-75) (+30.2 %,  $p = 0.008$ ), mean %RV/TLC (-11.2 %,  $p = 0.008$ ), and mean %FRC/TLC (-4.5 %,  $p = 0.001$ ). Total Brody scores improved from a median of 10 to 5 ( $p$

### **Authors' conclusions**

IPFT and CV-HRCT can be used as objective measures of improvement in lung disease for infants with CF treated with antibiotics.

<http://dx.doi.org/10.1007/s00408-015-9706-x>

### **See also**

Lung. 2015 Jun;193(3):421-8. Epub 2015 Mar 12.

### **Keywords**

Child; computed tomography; non pharmacological intervention - diagn; diagnostic procedures;