

primary studies - published RCT

## **Comparison of effects of 3 and 7% hypertonic saline nebulization on lung function in children with cystic fibrosis: a double-blind randomized, controlled trial.**

**Code:** PM22374985

**Year:** 2012 **Date:** 2015

**Author:** Gupta S

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

Open-label, randomized, controlled trial

### **Participants**

72 clinically stable CF subjects (FEV1 $\geq$ 40% predicted)

### **Interventions**

Subjects randomized to HDI or routine care

### **Outcome measures**

IL-6, IL-8, TNF-alpha, IL-1-beta, free neutrophil elastase, and white cell counts with differentials change from baseline in induced sputum.

### **Main results**

IL-6 was the only biomarker with significant within-group change: 0.13log10pg/mL mean reduction among ibuprofen-treated subjects ( $p=0.04$ ); and no change in the control group. IL-6 change between groups was statistically significant ( $p=0.024$ ). No other inflammatory biomarker differences were observed between groups after 28days.

### **Authors' conclusions**

Although we studied only one agent, HDI, these results suggest that one month may be inadequate to assess anti-inflammatory candidates using markers from induced sputum.

<http://dx.doi.org/10.1093/tropej/fms004>

### **See also**

J Trop Pediatr. 2012 Oct;58(5):375-81. doi: 10.1093/tropej/fms004. Epub 2012 Feb 28.

### **Keywords**

Ibuprofen; Anti-Inflammatory Agents; pharmacological\_intervention; Anti-Inflammatory Agents - excl Steroids;