

primary studies - published RCT

## Effect of nebulized colistin sulphate and colistin sulphomethate on lung function in patients with cystic fibrosis: a pilot study.

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**Author:** Westerman EM

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

RCT

### Participants

18 CF children, mean age 12 years (range 2.8-15 years) were recruited, with 9 in each group.

### Interventions

Children were randomized either to receive physiotherapy or not following anesthesia and intubation.

### Outcome measures

Respiratory mechanics (C(rs) and R(rs)), tidal volume, and peak inspiratory pressure (PIP) were measured immediately before and after physiotherapy. FEV(1) was measured before and after surgery and post-operative physiotherapy requirements were recorded.

### Main results

Both groups showed a non-significant decline in FEV(1) the day after surgery compared with pre-operative values (-5.8%: physiotherapy and -7.1%: control). Both PIP and R(rs) increased significantly following physiotherapy (within- and between-groups, P

### Authors' conclusions

The unanticipated decline in respiratory function immediately following physiotherapy was short-lived and not discernible in longer term outcomes measured by FEV(1) or physiotherapy requirements post-operatively. If respiratory physiotherapy under anesthesia is considered necessary and the benefits of removing secretions are deemed to outweigh the short-term risks, it may be necessary for the anaesthetist to consider modifying ventilatory support to counteract any short-term negative effects of the treatment.

<http://dx.doi.org/10.1016/j.jcf.2003.12.005>

### See also

J Cyst Fibros. 2004 Mar;3(1):23-8.

### Keywords

Adolescent; Anaesthesia; Child; Intraoperative Care; non pharmacological intervention - devices OR physiotherapy; non pharmacological intervention - surg; pharmacological\_intervention;