primary studies - published, non RCT

Acid and non-acid reflux during physiotherapy in young children with cystic fibrosis.

Code: PM22241570 **Year:** 2011 **Date:** 2011 **Author:** Doumit M

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

Clinical trial not randomized

Participants

Twenty children with CF (8 males), median age 12 months (range 8-34)

Interventions

Children were studied using pH-MII monitoring over 24-hr, during which they received two 20-min sessions of CPT. One session was performed in "modified" drainage positions with no head-down tilt and the alternate session in "gravity-assisted" drainage positions, which included 20 degrees head-down tilt

Outcome measures

Total number of reflux episodes. Children were studied using pH-MII monitoring over 24-hr.

Main results

A total of 1,374 reflux episodes were detected in all children, of which 869 (63%) were acid and 505 (37%) were non-acid. Seventy-two percent of the episodes migrated proximally. During CPT, there was no significant difference between total number of reflux episodes in the modified or gravity-assisted positions, median [inter-quartile range (IQR)] 1 (0-2.5) compared to 1 (0.75-3) episode, respectively, P = 0.63. There was also no significant difference between the number of reflux episodes which migrated proximally, median (IQR) 1 (0-2) compared to 0 (0-2) episodes, respectively, P = 0.75.

Authors' conclusions

In young children with CF, GOR is primarily acidic and proximal migration is common. Physiotherapy in the head-down position does not appear to exacerbate GOR. The impact of GOR on lung disease remains to be elucidated.

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See also

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Keywords

Postural Drainage; Drainage; Airway clearance technique; Chest physiotherapy; non pharmacological intervention - devices OR physiotherapy;