primary studies - published RCT

Chest physiotherapy in infants with cystic fibrosis: to tip or not? A five-year study.

Code: PM12567389 **Year:** 2003 **Date:** 2003 **Author:** Button BM

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

RCT

Participants

20 newly diagnosed infants with CF (mean age, 2.1 months; range, 1-4)

Interventions

standard postural drainage chest physiotherapy (SPT) or a modified physiotherapy regimen without head-down tilt (MPT). Parents kept a detailed symptom and treatment diary for the following 12 months.

Outcome measures

Serial chest radiographs, taken at diagnosis, 12 months, 2(1/2) years, and 5 years after diagnosis, were assessed using the Brasfield score. Pulmonary function tests were compared between groups after 5 years.

Main results

Of the 20 infants, 16 (80%) completed the review at 12 months, and 14 (70%) at 2(1/2) and 5 years. Patients receiving SPT had more days with upper respiratory tract symptoms than those on MPT (70 +/- 32.8 vs. 37 +/- 24.9 days; P = 0.04) and required longer courses of antibiotics (23 +/- 28.5 vs. 14 +/- 11.2 days; P = 0.05). Chest x-ray scores were similar at diagnosis but were worse at 2(1/2) years for those receiving SPT (P = 0.03). Forced vital capacity and forced expired volume in 1 sec (FEV(1)) at 5-6 years was lower for SPT than for MPT (P

Authors' conclusions

MPT was associated with fewer respiratory complications than SPT in infants with CF.

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See also

Pediatr Pulmonol. 2003 Mar;35(3):208-13.

Keywords

Airway clearance technique; Drainage; Hospitalization; Hospital care; Infant; non pharmacological intervention - devices OR physiotherapy; Postural Drainage; Organization; non pharmacological intervention - psyco-soc-edu-org; Chest physiotherapy;