primary studies - published RCT

Bronchopulmonary disease in children with cystic fibrosis after early or delayed diagnosis.

Code: PM12917228 **Year:** 2003 **Date:** 2003 **Author:** Farrell PM

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

randomized controlled trial with unique unblinding/surveillance

Participants

screened group = 56 patients; standard diagnosis (control group) = 47 patients

Outcome measures

When the youngest patient was 7 years of age, we compared outcomes using pulmonary function data and quantitative chest radiology.

Main results

In the screened group, diagnosis was made at a younger age of 12.4 weeks, compared with the diagnosis in control group at the age of 95.8 weeks, but included a significantly greater proportion of patients with deltaF508 genotypes and pancreatic insufficiency. The first chest radiograph showed significantly fewer abnormalities in the screened group; but, over time, the two groups converged, and after 10 years of age the screened patients showed worse chest X-ray scores associated with earlier acquisition of Pseudomonas aeruginosa. No differences were detected in any measure of pulmonary dysfunction, which was generally mild in each group

Authors' conclusions

Although CF neonatal screening provides a potential opportunity for better pulmonary outcomes, it appears that respiratory infections and pancreatic status are the dominant factors in pulmonary prognosis.

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See also

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Keywords

Adolescent; Bacterial Infections; Child; Gastrointestinal Diseases; Infant; Infection; Neonatal Screening; Newborn; non pharmacological intervention - diagn; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; screening; diagnostic procedures;