

primary studies - published RCT

Exercise with incorporated expiratory manoeuvres was as effective as breathing techniques for airway clearance in children with cystic fibrosis: a randomised crossover trial.

Code: PM23177226

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

multinational, randomized (2:1), non-inferiority study

Participants

CF patients ≥ 12 years old with chronic *P. aeruginosa* infection.

Interventions

APT-1026 (levofloxacin inhalation solution, LIS) vs tobramycin inhalation solution (TIS) over three 28-day on/off cycles.

Outcome measures

Day 28 FEV1 % predicted relative change was the primary endpoint. Time to exacerbation and patient-reported quality of life were among secondary endpoints.

Main results

Baseline demographics for 282 subjects were comparable. Non-inferiority was demonstrated (1.86% predicted mean FEV1 difference [95% CI -0.66 to 4.39%]). LIS was well-tolerated, with dysgeusia (taste distortion) as the most frequent adverse event.

Authors' conclusions

LIS is a safe and effective therapy for the management of CF patients with chronic *P. aeruginosa* infection.

[http://dx.doi.org/10.1016/S1836-9553\(12\)70125-X](http://dx.doi.org/10.1016/S1836-9553(12)70125-X)

See also

J Physiother. 2012;58(4):241-7. doi: 10.1016/S1836-9553(12)70125-X.

Keywords

Adult; aeroquin; Aged; Anti-Bacterial Agents; Child; Inhalation OR nebulised; levofloxacin; pharmacological_intervention; Tobramycin; Bacterial Infections; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Quinolones; Aminoglycosides; Pseudomonas aeruginosa; Pseudomonas;