primary studies - published RCT

Randomized controlled trial of biofilm antimicrobial susceptibility testing in cystic fibrosis patients.

Code: PM25453872 **Year:** 2015 **Date:** 2015 **Author:** Yau YC

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

multicenter randomized, double-blind controlled trial

Participants

CF patients with chronic P. aeruginosa infection.

Interventions

14 days of intravenous antibiotic treatment for pulmonary exacerbations chosen based on conventional vs. biofilm antimicrobial susceptibility results

Outcome measures

efficacy of antibiotic treatment for pulmonary exacerbations.

Main results

There were 74 exacerbations in 39 patients. A total of 46% (12/26) exacerbations in the conventional group compared to 40% (19/48) exacerbations in the biofilm group achieved a >. 3 log drop in P. aeruginosa sputum density (difference - 0.03, 95% CI - 0.5 to 0.4, p. = 0.9). Lung function improvements were similar in both groups.

Authors' conclusions

Biofilm antimicrobial susceptibility testing did not lead to improved microbiological or clinical outcomes compared to conventional methods in the treatment of pulmonary exacerbations in CF patients with chronic P. aeruginosa.

http://dx.doi.org/10.1016/j.jcf.2014.09.013

See also

J Cyst Fibros. 2015 Mar;14(2):262-6. doi: 10.1016/j.jcf.2014.09.013. Epub 2014 Oct 30.

Keywords

Anti-Bacterial Agents; pharmacological_intervention; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Bacterial Infections; Exacerbation; Pseudomonas aeruginosa; Pseudomonas; non pharmacological intervention - diagn;