Cochrane Database of Systematic Reviews - - Cochrane Review

Elective versus symptomatic intravenous antibiotic therapy for cystic fibrosis

Code: CD002767 **Year:** 2012 **Date:** 2012 - updated: 18 MAY 2012 **Author:** Breen Lil

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

All randomised or quasi-randomised controlled trials describing the use of elective compared with symptomatic intravenous antibiotic policies for any duration or dose regimen. Elective versus symptomatic intravenous antibiotic regimens against any organisms were considered. People with cystic fibrosis of any age or disease severity were included.

List of included studies (2)

Brett 1992; Elborn 2000

Participants

Children and adults with CF, diagnosed clinically and by sweat or genetic testing. People with CF with all stages of lung disease have been included.

Interventions

Elective intravenous antibiotics

Outcome measures

Change in Chrispin-Norman score; Change in FEV1 (% predicted for age) from baseline; Change in FVC (% predicted) from baseline; Change in height z score from baseline; Change in Shwachman score from baseline; Change in weight z score from baseline; Change in weight/height (% predicted) from baseline; Dropout rate; Number of deaths

Main results

Searches identified four studies. Two studies reporting results from a total of 79 participants were included in the review. Differences in study design and objectives meant that data could not be pooled for meta-analysis. Neither study demonstrated significant differences in outcome measures between intervention and comparison groups.

Authors' conclusions

Studies are insufficient to identify conclusive evidence favouring a policy of elective intravenous antibiotic administration, despite its widespread use, neither are the potential risks adequately evaluated. The results should be viewed with caution, as participant numbers are small. Clearly there is a need for a well-designed, adequately-powered, multicentred randomised controlled trial to evaluate these issues.

http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002767.pub2/abstract

See also

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Keywords

Anti-Bacterial Agents; Bacterial Infections; Infection; Intravenous; pharmacological_intervention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections;