primary studies - published RCT

Effect of azithromycin on systemic markers of inflammation in cystic fibrosis patients uninfected with Pseudomonas aeruginosa.

Code: PM22595153 **Year:** 2012 **Date:** 2012 **Author:** Ratjen F

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

double blind randomized controlled trial (Saiman 2010 - PM20442386)

Participants

CF patients 6-18 years of age uninfected with Pseudomonas aeruginosa

Interventions

oral azithromycin

Outcome measures

White cell counts and differential, serum myeloperoxidase (MPO), high sensitivity C reactive protein (hsCRP), intracellular adhesion molecule 1 (ICAM 1), interleukin 6 (IL-6), calprotectin, serum amyloid A (SAA), and granulocyte colony stimulating factor (G-CSF) were measured at baseline, after 28 and 168 days of treatment in patients receiving either oral azithromycin or placebo.

Main results

Inflammatory markers were similar in both groups at baseline. HsCRP, MPO, SAA, and calprotectin, as well as the absolute neutrophil count (ANC), significantly decreased from baseline to Day 28 in the azithromycin group as compared to the placebo group (p

Authors' conclusions

In patients not infected with P. aeruginosa, oral azithromycin significantly reduced neutrophil counts and serum inflammatory markers within 28 days of initiating treatment.

http://dx.doi.org/10.1378/chest.12-0628

See also

Chest. 2012 May 17.

Keywords

Adolescent; Anti-Bacterial Agents; Azithromycin; Bacterial Infections; Child; Hospitalization; Hospital care; Infection; pharmacological_intervention; Pseudomonas aeruginosa; Pseudomonas; Respiratory Tract Diseases; Respiratory Tract Infections; Macrolides; Anti-Inflammatory Agents; Organization; Anti-Inflammatory Agents - excl Steroids;