primary studies - published RCT

Glucocorticoid treatment reduces exhaled nitric oxide in cystic fibrosis patients.

Code: PM11491175 **Year:** 2001 **Date:** 2001 **Author:** Linnane SJ

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

double-blind, placebo-controlled study with crossover

Participants

10 CF patients (8 males) completed the study.

Interventions

Treatment comprised prednisolone or placebo for 5 days with a 9 day washout.

Outcome measures

After each treatment, exhaled NO was measured, spirometry performed and blood collected for measurement of serum nitrogen dioxide/nitrous oxide (NO2/NO3).

Main results

Following prednisolone treatment (mean +/- SD) exhaled NO concentration (3.1 +/- 1.6 parts per billion (ppb)) was significantly reduced versus placebo treatment (4.9 +/- 4.2 ppb; p

Authors' conclusions

These findings support the hypothesis that glucocorticoids suppress nitric oxide production in cystic fibrosis airways by reducing inducible nitric oxide synthase expression or by inhibiting recruitment of neutrophils, cells which express inducible nitric oxide synthase.

http://erj.ersjournals.com/content/17/6/1267.full.pdf

See also

The European respiratory journal : official journal of the European Society for Clinical Respiratory Physiology YR: 2001 VL: 17 NO: 6

Keywords

Adult; Steroids; pharmacological_intervention; Prednisolone; Anti-Inflammatory Agents;