primary studies - published RCT

Risk of persistent growth impairment after alternate-day prednisone treatment in children with cystic fibrosis Comment in: N Engl J Med 2000 Mar 23;342(12):887-8.

Code: PM10727589 **Year:** 2000 **Date:** 2000 **Author:** Lai HC

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

multicenter trial

Participants

224 children 6 to 14 years of age with cystic fibrosis

Interventions

151 had been randomly assigned to receive prednisone (either 1 or 2 mg per kilogram of body weight) and 73 to receive placebo.

Outcome measures

growth six to seven years after alternate-day treatment had been discontinued was evaluated. data on growth up to 1997 from the Cystic Fibrosis Foundation Patient Registry and the data to sex- and age-specific norms from the National Center for Health Statistics were standardized. z scores to compare growth patterns among treatment groups were used.

Main results

In 1997, 68 percent of the patients were 18 years of age or older. The z scores for height declined during prednisone therapy; catch-up growth began two years after treatment with prednisone was discontinued. Among the boys, the z scores for height in those treated with prednisone remained lower than the scores for those who received placebo (P=0.02). The mean heights for boys 18 years of age or older were 4 cm less in the prednisone groups than in the placebo group, an equivalent of 13 percentile points (P=0.03). Among the girls, differences in height between those who were treated with prednisone and those who received placebo were no longer present two to three years after prednisone therapy was discontinued.

Authors' conclusions

Among children with cystic fibrosis who have received alternate-day treatment with prednisone, boys, but not girls, have persistent growth impairment after treatment is discontinued.

http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/418/CN-00291418/frame.html

See also

N Engl J Med. 2000 Mar 23;342(12):851-9.

Keywords

Child; pharmacological_intervention; Prednisone; Steroids; Anti-Inflammatory Agents;