Cochrane Database of Systematic Reviews - - Cochrane Review

Airway clearance devices for cystic fibrosis

Code: HTA-32010000118 **Year:** 2009 **Date:** 2011 - updated: 14 SEP 2015 **Author:** Medical Advisory Secretariat

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

Randomised trials comparing oral corticosteroids given for more than 30 days with placebo or no additional therapy in people with CF.

List of included studies (3)

Auerbach 1985; Eigen 1995; Greally 1994

Participants

Children and adults, of any age, with defined CF diagnosed clinically and by sweat or genetic testing. People with CF at all stages of lung disease were included.

Interventions

Oral corticosteroids (any dose)

Outcome measures

Absolute change in per cent predicted FEV1; Absolute change in per cent predicted FVC; Absolute change in weight (kg); Adverse events; Growth retardation (at 4 years); Height at age over 18 years (boys); Height at over 18 years (girls); Mortality; Weight at over 18 years (boys); Weight at over 18 years (girls)

Main results

Of eleven studies identified, three (354 participants) were included: two with four-year follow up and one with 12-weeks follow up. Data were lacking on predefined outcomes; common outcomes were examined at different time-points and presented differently. Meta-analyses were not possible. In one study, oral corticosteroids at prednisolone-equivalent dose of 1 mg/kg alternate days slowed progression of lung disease; at two and four years, % predicted FEV1 in the 1 mg/kg group changed significantly more than in the placebo group (P

Authors' conclusions

Oral corticosteroids at prednisolone-equivalent dose of 1 to 2 mg/kg alternate days appear to slow progression of lung disease in CF; benefit should be weighed against occurrence of adverse events. Risk-benefit analysis of low-dose alternate days corticosteroids is important. No further trials of this intervention are anticipated, and hence the review will no longer be regularly updated. However, if any new data are published, these will be incorporate when available.

http://www.health.gov.on.ca/english/providers/program/mas/tech/reviews/pdf/rev_airway_20091201.pdf

See also

Toronto: Medical Advisory Secretariat, Ontario Ministry of Health and Long-Term Care (MAS) YR: 2009

Keywords

Anti-Inflammatory Agents; Oral; pharmacological_intervention; Respiratory Tract Diseases; Steroids;