Steroids do not improve RSV-related wheeze in children

Respiratory syncytial virus (RSV)-related lower respiratory tract infection is common in infants and is often followed by recurrent wheeze and morbidity. This double-blind placebo controlled trial investigated whether early glucocorticoids prevent recurrent wheeze.

The 243 participants were infants (aged <13 months) admitted to hospital with RSV (confirmed by immunofluorescence) from 19 clinical centres. They were randomised to receive beclometasone or placebo for 3 months and were followed up for 1 year. The primary outcome measure was number of days with wheeze.

No significant difference was found in the number of days or proportion of infants with wheeze. However, a temporary small relative reduction (32%) in wheeze was noted in the steroid group compared with the placebo group in the first 6 months in those infants who did not require mechanical ventilation (p = 221). Secondary outcome measures did not show evidence of side effects or a positive effect on health-related quality of life. The authors conclude that steroids have no major effect on recurrent wheeze post-RSV infection, and general early use is not advocated. They suggest that future studies investigate ventilated infants separately. Interestingly, this research supports other work which shows that inhaled steroids provide a partially effective strategy in children with postviral episodic wheezing, further research is warranted.


R P H Tofts

Correspondence to: Dr R P H Tofts, Intern, Internal Medicine, Cleveland Clinic, Weston, Florida, USA, rtofts@doctors.org.uk


Bennedich Kahn L, Gustafsson LE, Olgart Hodglund C. Brain-derived neurotrophic factor enhances histamine-induced airway responses and changes levels of exhaled nitric oxide in guinea pigs in vivo. Eur J Pharmacol 2008;595:78–83.


Steroids do not improve RSV-related wheeze in children

R P H Tofts

Thorax 2009 64: 769
doi: 10.1136/thx.2009.126086

Updated information and services can be found at:
http://thorax.bmj.com/content/64/9/769

These include:

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/