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Lung alert

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 beclomethasone 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 (n = 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.

- Ermers MJJ, Rovers MM, van Woensel JB, *et al* on behalf of the RSV Corticosteroid Study Group. The effect of high dose inhaled corticosteroids on wheeze in infants after respiratory syncytial virus infection: randomised double blind placebo controlled trial. *BMJ* 2009;**338**:b897.

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