**Antibiotics for acute infective conjunctivitis in children**

Peter Rose and colleagues (July 2, p 37) compared the efficacy of chloramphenicol eye drops with placebo eye drops for the treatment of acute infective conjunctivitis in children. They found that “most children presenting with acute infective conjunctivitis in primary care will get better by themselves and do not need treatment with an antibiotic”. Their recommendations should represent a major sea change in management, but we have some reservations.

The trial is subject to selection bias since only an estimated 29% of all children presenting in the study period were recruited. There is evidence that substantial numbers of children with more severe conjunctivitis did not enter into the randomisation stage, and these are the very children who were likely to benefit the most from antibiotic treatment.

Furthermore, since chloramphenicol reduces the number of pathogenic bacteria in the eye, failure to treat could result in a higher risk of transmission. Without antibiotic treatment, children would need to be isolated from their peers for longer, causing greater inconvenience and possibly a loss of earnings for the family.

Had an objective primary outcome measure been used, independent of the children’s parents, with stratification of conjunctivitis by severity, we feel the study findings would have been more robust.

We declare that we have no conflict of interest.

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**Authors’ reply**

We agree that it is impossible to know whether children with the most severe disease have been excluded, although the response rate of 29% does not imply that this is the case. The rate reflects the circumstances of recruitment in routine general practice surgeries in the UK. The clinics are invariably busy and recruitment in this case was restricted to office hours (whereas children with conjunctivitis frequently present in evenings and weekends). On direct questioning, no general practitioner reported excluding a child on the grounds of severity.

Moreover, we are not convinced that exclusion on the grounds of perceived severity would have exerted a major influence on our results. Most clinical signs and symptoms correlate poorly with microbiological cause. Clinically severe cases often have a viral origin. Our own unpublished data confirm this: neither the degree of redness, the presence of pus, nor the presence of pain are strong predictors of the presence of a bacterial pathogen. Consequently, the effect of chloramphenicol was not strongly related to the degree of redness of the eye at presentation. The cure rate at day 7 in children treated with chloramphenicol was 88% in those with no or mild redness compared with 78% in those with moderate or severe redness (difference 10%, 95% CI –5 to 24). And there was no evidence of a difference in the estimated effect even if the analysis was restricted to children with moderate and severe redness (difference in 7 day cure between chloramphenicol and placebo groups –1%, 95% CI –19 to 18).

There are few published data on the transmission of bacterial conjunctivitis in a primary care setting. Our trial did not investigate this aspect of the disease. However, it is difficult to argue that children should be treated with antibiotics to reduce transmission when the predominant pathogens in our series (Haemophilus influenzae and Streptococcus pneumoniae), are common commensals in the nasopharynx of children, and are frequently passed between them. A case might be made for exclusion of children with viral infection, but transmission would not be reduced by antibiotic treatment.

The assertion that assessment by children’s parents does not provide a robust outcome measure is an interesting point: should the main outcome measure be the one with most scientific rigour or the one with most practical use? Parental assessment has face validity, and in practice it would be the parent who would decide to return to their doctor if the conjunctivitis did not resolve. However, cure rates in our trial were also assessed by research nurses at day 7. Although these data are not as complete as the parental assessment, the results were similar: nurses assessed that 79% in the chloramphenicol group and 78% in the placebo group were cured by day 7.

We declare that we have no conflict of interest.

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It is paradoxical that the study on the lack of efficacy of chloramphenicol eye drops in acute conjunctivitis should be published at almost the same time as the announcement by the UK’s Medicines and Healthcare products Regulatory Agency (MHRA) that this agent could be sold through pharmacies without prescription. As part of the MHRA consultative procedure, the Specialist Advisory Committee on抗微生物 Resistance (SACAR) opposed the proposal, stating that “although reclassifying chloramphenicol is unlikely to have a significant impact on resistance levels no convincing benefit is presented for the change”. This assertion is borne out by the study by Peter Rose and colleagues.