The Journal of Laryngology & Otology (2015), **129**, *1253–1254*. © JLO (1984) Limited, 2015 doi:10.1017/S0022215115002649

Occurrence of otitis media in children and assessment of treatment options

Dear Editors,

I came across a very interesting article published in your esteemed journal titled 'Occurrence of otitis media in children and assessment of treatment options' by Nwokoye *et al.*¹ The study had been well planned and was very thought provoking. However, I beg to differ from the author's conclusion and would like to highlight the same through your esteemed journal.

The efficacy of antibiotics in otitis media has been a subject of great debate amongst healthcare providers, and there are studies supporting² as well as advising against³ their regular use. Most of the studies have recommended starting antibiotics in high-risk groups such as patients with bilateral acute otitis media and those aged less than two years;⁴ this practice is followed in our institution as well. However, there are still lacunae in our knowledge regarding which patients exactly constitute this 'high-risk' group and further trials can be planned in this regard.

The antibiotic used in the study is amoxicillin or an amoxicillin-clavulanic acid combination, but what is not clear is when the patients were shifted from an amoxicillin regimen to an amoxicillin-clavulanic acid combination. There is still debate and controversy regarding the dosing⁵ and duration of amoxicillin-clavulanic acid for otitis media, with various studies recommending different regimens. Another point which needs to be emphasised is the emergence of organisms resistant to amoxicillin,^{6,7} which can lead to treatment failure.

A suggestion for improving the methodology would be to follow up the patients treated with antibiotics for the development of recurrence and/or complications. Such data would add weight to the authors' conclusion. This can be done in future studies.

With hardly any newer antibiotics being developed, and the emergence of resistant strains, our options for treating patients with infection are becoming limited; therefore, judicious use of antibiotics is vital. A prospective, randomised trial that evaluates the efficacy of antibiotics for otitis media in children, with a longer follow-up period, is required for a definite conclusion.

S S BAKSHI

Department of ENT and Head and Neck Surgery, Mahatma Gandhi Medical College and Research Institute, Pondicherry, India

References

- Nwokoye NN, Egwari LO, Olubi OO. Occurrence of otitis media in children and assessment of treatment options. *J Laryngol Otol* 2015;**129**:779–83
- 2 Cheong KH, Hussain SS. Management of recurrent acute otitis media in children: systematic review of the effect of different interventions on otitis media recurrence, recurrence frequency and total recurrence time. *J Laryngol Otol* 2012;**126**:874–85
- 3 Autret-Leca E, Giraudeau B, Ployet MJ, Jonville-Béra AP. Amoxicillin/clavulanic acid is ineffective at preventing otitis

First published online 2 October 2015

media in children with presumed viral upper respiratory infection: a randomized, double-blind equivalence, placebo-controlled trial. *Br J Clin Pharmacol* 2002;**54**:652–6

- 4 Venekamp RP, Sanders SL, Glasziou PP, Del Mar CB, Rovers MM. Antibiotics for acute otitis media in children. *Cochrane Database Syst Rev* 2015;(6):CD000219
- 5 Thanaviratananich S, Laopaiboon M, Vatanasapt P. Once or twice daily versus three times daily amoxicillin with or without clavulanate for the treatment of acute otitis media. *Cochrane Database Syst Rev* 2013;(12):CD004975
- 6 Hamamoto Y, Gotoh Y, Nakajo Y, Shimoya S, Kayama C, Hasegawa S et al. Impact of antibiotics on pathogens associated with otitis media with effusion. J Laryngol Otol 2005;119:862–5
- 7 Babin E, Lemarchand V, Moreau S, Goullet de Rugy M, Valdazo A, Bequignon A. Failure of antibiotic therapy in acute otitis media. *J Laryngol Otol* 2003;**117**:173–6

The Journal of Laryngology & Otology (2015), **129**, *1253–1254*. © JLO (1984) Limited, 2015 doi:10.1017/S0022215115002650

Authors' reply

Dear Editors,

I have considered the comments, opinion and recommendation of Dr Satvinder Singh Bakshi, and, as part of scholarly discourse to enrich the literature, his perception on the subject should be published. It is, however, important to examine and reiterate some of the issues highlighted.

Dr Bakshi's concern is about identifying the 'high-risk' group of otitis media patients who will require antibiotic intervention. Children aged less than six months are considered high risk because recurring bouts of otitis media may predispose them to complications that include speech difficulties and hearing loss.^{1,2} In our study, we reported the highest incidences of non-resolving acute otitis media following initial paracetamol usage in children aged 7–12 months (43.5 per cent) and 2–5 years (42.1 per cent).³ In chronic suppurative otitis media (CSOM) where microbial aetiology is implicated, it is important that antibiotics be given. However, opinion is likely to vary, as there may be a number of underlying factors. These factors may inform the final decision on whether to give antibiotics, and on choice and treatment regimen.

Two groups of patients were evaluated: acute otitis media and CSOM. Acute otitis media patients in whom symptoms persisted after aural care and paracetamol administration were placed on amoxicillin therapy (80 mg/kg/day in 2 divided doses) for up to 10 days. Only those who did not respond to this initial therapy were further given amoxicillin-clavulanic acid, and only when susceptibility test results favoured the use of this antibiotic. The CSOM patients were randomly placed into three groups; two groups were treated empirically either with amoxicillin or amoxicillin-clavulanic acid, while the choice of treatment for the third group was based on antibiotic susceptibility test results. This latter part of the study aimed to evaluate the effectiveness of empirical therapy for CSOM with first-line antibiotics such