

Acknowledgements

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Short-course antibiotic regimens in community-acquired pneumonia in children[☆]



Pautas cortas de antibioterapia en neumonías adquiridas en la comunidad en niños

To the Editor:

We have read with interest the recently published consensus document on community-acquired pneumonia (CAP) in children.¹ We thank the authors for their efforts in producing recommendations for a disease that is highly prevalent in the pediatric age and has a very significant impact on the use of antibiotics. However, with regard to the duration of antibiotic treatment, we believe that, given current scientific evidence, a reduction in the length of antibiotic regimens in uncomplicated pneumonias could be considered.

The use of shorter antimicrobial therapies not only reduces costs and improves therapeutic adherence, but also reduces the risk of acquiring bacteria with antibiotic resistance, a problem of increasing concern today.

Several studies in the adult population have demonstrated similar effectiveness with short- and long-term antibiotic regimens in CAP. For example, the clinical trial of Uranga et al.² found that an antibiotic regimen in which the antibiotic was discontinued 48 h after achieving clinical stability, with a minimum duration of 5 days, was not inferior to a full 10-day course.

Several studies have been published in the pediatric population on the treatment of CAP in patients aged 6 months and older with short antibiotic regimens. Same et al.³ retrospectively compared the rate of therapeutic failure in uncomplicated CAP in patients who had received a short antibiotic regimen of 5–7 days (median of 6 days) versus a long regimen of 8–14 days, and found no differences in treatment failure 30 days after the start of therapy.

Along these same lines, Greenberg et al.⁴ conducted a clinical trial in patients with CAP of probable bacterial etiology between 6 months and 5 years of age, in which they demonstrated the non-inferiority of a 5-day regimen of oral amoxicillin versus a 10-day regimen in terms of 30-day treatment failure rate. However, a 3-day regimen of antibiotic therapy increased the risk of treatment failure.

Patient recruitment in the SCOUT-CAP clinical trial (ClinicalTrials.gov: NCT02891915)⁵ on short antibiotic regimens in CAP in children has recently been completed. This is a multicenter, randomized, phase IV trial conducted in the US that has included patients 6–71 months of age, with the aim of comparing the efficacy of beta-lactams in a 5-day or 10-day regimen, to help determine the best duration of antibiotic therapy in these patients.

This growing scientific evidence has prompted recent updates of various clinical practice guidelines in both adults and children to suggest antibiotic regimens with a duration of less than 7 days in the treatment of CAP. These include, in particular, the British NICE guidelines,⁶ which recommend a 5-day regimen with amoxicillin, both in adults and in the pediatric population. Therefore, we believe that a recommendation of treatment regimens of less than 7 days in uncomplicated CAP may be more in line with current evidence.

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Reply to “Short antibiotic regimens in community-acquired pneumonia in children”[☆]



Respuesta a «Pautas cortas de antibioterapia en neumonías adquiridas en la comunidad en niños»

We thank the authors for their interesting comments¹ on the consensus document on the management of community-acquired pneumonia in children.² Our consensus follows the same line of thinking by supporting short treatments, as reflected in the proposed duration of less than 7 days.

The article by Same et al.³ was published on July 11, 2020, 4 months after our consensus document was accepted by this journal,² so we could not take it into account, but it does not contradict our recommendation. The results of this study do not provide any clear conclusion that treatment should be 5 days or less, but rather 5–7 days (with a mean duration of 6 days).

Greenberg et al.⁴ only show the non-inferiority of amoxicillin, in terms of treatment failure at 30 days, in a 5-day versus a 10-day regimen (which is not the period recommended by our pediatric consensus).

However, this is a controversial topic in pediatrics, and the NICE guidelines⁵ recognize that no evidence was identified in children and young people that met the specific criteria of this review: the committee agreed by consensus that antibiotic treatment should be discontinued after 5 days unless the patient is clinically unstable according to clinical judgment. In other words, the level of evidence to unreservedly endorse a 5-day generic treatment in children with CAP is low and based on expert opinion. Therefore, in uncomplicated cases of CAP among the pediatric population, we believe it is more prudent to recommend short treatments with a maximum duration of 7 days, without explicitly and unambiguously limiting them to 5 days, as scientific evidence is insufficient at the present time. We therefore consider that proposing “a maximum duration of 7 days” is more reasonable and in line with current scientific knowledge.

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