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# ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Clinical Pediatrics
**ESPS manuscript NO:** 25246
**Title:** Transitioning antimicrobials from intravenous to oral in pediatric acute uncomplicated osteomyelitis
**Reviewer's code:** 01202121
**Reviewer's country:** United Kingdom
**Science editor:** Fang-Fang Ji
**Date sent for review:** 2016-03-01 10:04
**Date reviewed:** 2016-03-05 04:38

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|---|---|---|
| [ ] Grade A: Excellent | [ ] Grade A: Priority publishing | Google Search: | [ ] Accept |
| [ ] Grade B: Very good | [Y] Grade B: Minor language polishing | [ ] The same title | [ ] High priority for publication |
| [Y] Grade C: Good | [ ] Grade C: A great deal of language polishing | [ ] Duplicate publication | [ ] Rejection |
| [ ] Grade D: Fair | [ ] Grade D: Rejected | [ ] Plagiarism | [Y] Minor revision |
| [ ] Grade E: Poor | | [Y] No | [ ] Major revision |
| | | BPG Search: | |
| | | [ ] The same title | |
| | | [ ] Duplicate publication | |
| | | [ ] Plagiarism | |
| | | [Y] No | |

## COMMENTS TO AUTHORS

No mention is made of the role of surgery, and if the antibiotics in the studies looked at were pre or post-operative. A review article should include a critical appraisal of the papers involved. This would greatly enhance the quality of the review.

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# ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Clinical Pediatrics
**ESPS manuscript NO:** 25246
**Title:** Transitioning antimicrobials from intravenous to oral in pediatric acute uncomplicated osteomyelitis
**Reviewer's code:** 00186496
**Reviewer's country:** China
**Science editor:** Fang-Fang Ji
**Date sent for review:** 2016-03-01 10:04
**Date reviewed:** 2016-03-10 15:35

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|---|---|---|
| [ ] Grade A: Excellent | [ ] Grade A: Priority publishing | Google Search: | [ ] Accept |
| [Y] Grade B: Very good | [Y] Grade B: Minor language polishing | [ ] The same title | [ ] High priority for publication |
| [ ] Grade C: Good | [ ] Grade C: A great deal of language polishing | [ ] Duplicate publication | [ ] Rejection |
| [ ] Grade D: Fair | [ ] Grade D: Rejected | [ ] Plagiarism | [Y] Minor revision |
| [ ] Grade E: Poor | | [Y] No | [ ] Major revision |
| | | BPG Search: | |
| | | [ ] The same title | |
| | | [ ] Duplicate publication | |
| | | [ ] Plagiarism | |
| | | [Y] No | |

## COMMENTS TO AUTHORS

The article systematically reviewed published literatures regarding the transition of antibiotics from IV to oral for uncomplicated acute osteomyelitis in the pediatric population. Additionally, the authors presented proposed algorithm of the transition to oral antibiotics from intravenous therapy for pediatric patients with acute uncomplicated osteomyelitis. The topic is important. However, the systematical review should include the procedures of literature retrieval, including and excluding standards of these literatures, as well as the quality control. We suggested the authors use the following paper as reference. Optimization of sympathectomy to treat palmar hyperhidrosis: the systematic review and meta-analysis of studies published during the past decade. Surg Endosc. 2011 Jun;25(6):1893-901

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# ESPS PEER-REVIEW REPORT

**Name of journal:** World Journal of Clinical Pediatrics
**ESPS manuscript NO:** 25246
**Title:** Transitioning antimicrobials from intravenous to oral in pediatric acute uncomplicated osteomyelitis
**Reviewer's code:** 00506500
**Reviewer's country:** Israel
**Science editor:** Fang-Fang Ji
**Date sent for review:** 2016-03-01 10:04
**Date reviewed:** 2016-03-17 14:43

| CLASSIFICATION | LANGUAGE EVALUATION | SCIENTIFIC MISCONDUCT | CONCLUSION |
|---|---|---|---|
| [ ] Grade A: Excellent | [ ] Grade A: Priority publishing | Google Search: | [Y] Accept |
| [Y] Grade B: Very good | [Y] Grade B: Minor language polishing | [ ] The same title | [ ] High priority for publication |
| [ ] Grade C: Good | [ ] Grade C: A great deal of language polishing | [ ] Duplicate publication | [ ] Rejection |
| [ ] Grade D: Fair | [ ] Grade D: Rejected | [ ] Plagiarism | [ ] Minor revision |
| [ ] Grade E: Poor | | [Y] No | [ ] Major revision |
| | | BPG Search: | |
| | | [ ] The same title | |
| | | [ ] Duplicate publication | |
| | | [ ] Plagiarism | |
| | | [Y] No | |

## COMMENTS TO AUTHORS

Comprehensive, well-written and balanced review of the current recommendations for managing acute pediatric osteomyelitis. I included my minor remarks in the following file: Abstract Background: Osteomyelitis is a bacterial bone infection that generally requires prolonged antibiotic treatment and potential surgical intervention. If left untreated, acute osteomyelitis can lead to chronic osteomyelitis and overwhelming sepsis. Focal complications from osteomyelitis in pediatric patients include bone growth disturbances, limb-length discrepancies, abnormal gait, arthritis, and fractures. Early treatment is necessary to prevent these complications, and with improvements in disease management and antibiotic therapy, the standard of care is progressing to a shorter duration of intravenous antibiotics and transitioning to oral therapy for the rest of the treatment course. Methods: We systematically reviewed the current literature on pediatric patients with acute osteomyelitis to determine when and how to transition to oral antibiotics from a short course of IV therapy. Discussion: When is an appropriate time to switch to oral antibiotics is a challenging question surrounding the treatment of acute osteomyelitis in pediatrics. Studies have shown that switching to

oral therapy after a short course (i.e. 3-7 days) of intravenous therapy has similar cure rates to continuing long-term intravenous therapy. Studies have also shown an increased risk of complications with prolonged intravenous use. Parameters that help guide clinicians on making the switch to oral therapy include a downward trend in fever, improvement in local tenderness, and a normalization in C-reactive protein concentration. Conclusion: Based on the available literature, we recommend transitioning antibiotics to oral after three to seven days of intravenous therapy for pediatric patients (except neonates) with acute uncomplicated osteomyelitis if there are signs of clinical improvement, and such regimen should be continued for a total antibiotic duration of four to six weeks. Keywords: Antimicrobials, C-reactive protein, intravenous, oral, osteomyelitis, pediatrics Core tip: When is an appropriate time to switch to oral antibiotics is a challenging question surrounding the treatment of acute uncomplicated osteomyelitis in pediatrics. With improvements in disease management and antibiotic therapy, the standard of care is progressing to a shorter duration of intravenous antibiotics and transitioning to oral therapy for the rest of the treatment course. This review aims to evaluate the current literature in order to help clinicians make sound decisions on when and how to transition from IV antibiotics to oral therapy in pediatric patients with acute uncomplicated osteomyelitis. INTRODUCTION Osteomyelitis is an infection of the bone. These infections can spread to the bone numerous ways including trauma, cellulitis, septic arthritis, or bacteremia. Acute osteomyelitis in children is most commonly hematogenous in origin.1 In high-income countries, acute osteomyelitis occurs in about 8 of 100,000 children per year, but it is considerably more common in low-income countries.2 Boys are two times more prone to acute osteomyelitis than girls.2 While Kingella kingae is by far the most common causative organism of acute osteomyelitis below the age of 4 years [Chometon S, Benito Y, Chaker M, Boisset S, Ploton C, Bérard J, Vandenesch F, Freydière AM. 2007. Specific real-time polymerase chain reaction places Kingella kingae as the most common cause of osteoarticular infections in young children. Pediatr. Infect. Dis. J. 26:377-381.], Staphylococcus aureus (Staph. aureus) is the predominant pathogen in older children, followed by respiratory pathogens such as Streptococcus pyogenes and Streptococcus pneumoniae.3 Osteomyelitis can be classified into three separate categories: acute, subacute, and chronic. Osteomyelitis is considered as acute if the