

PEER-REVIEW REPORT

Name of journal: *World Journal of Orthopedics*

Manuscript NO: 65047

Title: Developments in diagnosis and treatment of paediatric septic arthritis

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 01202237

Position: Peer Reviewer

Academic degree: MD, MSc, PhD

Professional title: Professor

Reviewer's Country/Territory: South Korea

Author's Country/Territory: Netherlands

Manuscript submission date: 2021-02-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-19 09:45

Reviewer performed review: 2021-06-19 12:25

Review time: 2 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous

statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Thank you for submitting well written review article Need correction of mis typing-- periost - periosteal muL - μL A rare example in the differential diagnosis of septic arthritis is an osteoid osteoma, a benign bone tumour. The proximal femur is the most common site of occurrence.⁵⁴ Osteoid osteoma may occur in all age groups. However, in a retrospective review, more than 50 percent of the cases were in patients from 10 to 20 years of age.⁵⁴ The pain is typically nocturnal and aching, and it responds briskly to nonsteroidal anti-inflammatory drug therapy. Osteoid osteoma may be visible as a lucency with surrounding cortical thickening on plain radiograph and computed tomography or it may be apparent on MRI. Intraarticular or periarticular Osteoid osteoma including proximal femur present with atypical clinical & radiographic features, not consistent with the above description. Need additional comments.

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Provenance and peer review: Invited Manuscript; Externally peer reviewed

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Reviewer's code: 05151642

Position: Peer Reviewer

Academic degree: MD

Professional title: Surgeon

Reviewer's Country/Territory: United States

Author's Country/Territory: Netherlands

Manuscript submission date: 2021-02-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-06-21 08:49

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Review time: 1 Day and 12 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
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statements

Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Reviewer comments_Schultz_Pediatric Septic arthritis Formatting 1) Number the lines of the manuscript, see the manuscript uploaded with line #'s added for reference. 2) Line 38- not a full sentence 3) Line 68- manipulation limits isn't correct English 4) Line 77- image, not imagine 5) Like 99 - "is" seen 6) Line 110, delete 'child' 7) 142- detail that these initial tests are serum samples 8) 143- usually we take two blood cultures, not just one, in case there is a false positive/negative 9) 131- delete 'a' from 'a sepsis' 10) 182- periosteal 11) 233- range of motion is greater, not higher Abstract 1) Core tip is just a summary of abstract? Intro 1) what about risks for systemic bacteremia? Diagnosis 1) what about skin changes? Rashes? Like target sign for Lyme disease? 2) specify which xrays you are getting? AP pelvis? Dedicated hip films? Probably good to have an AP so you can compare the joint space to the contralateral hip 3) line 158- any role for having the OR ready after the MRI to go straight there if needed for an I&D and just use one continuous sedation? 4) 196- do you send synovial fluid for fungus routinely? 5) 199- what about PMN %? Differential Diagnosis 1) Transient synovitis also usually resolves with a dose of NSAIDs in the emergency room 2) 226- what is the typical rash? 3) 234-35- isn't kocher criteria just validated in hips? Not knees? 4) In acute onset of knee pain in peds, you always have to evaluate the hip too. Could be SCFE. Treatment and follow-up 1) 280-Arthrocentesis alone is rarely used for treatment, at least in the US. It is usually done to help with diagnosis, but is not as reliable to get rid of the infection by itself. 2) 305- unless the patient is septic. You can give antibiotics after aspiration, before the OR, or even before aspiration if they are septic. 3) 306- antibiotic choice should be guided by the bacteria and specific sensitivities. Recommend consulting the infectious disease team well. Just saying a few days of IV abx and then oral is too

vague and misleading. How often are you trending CRP levels? 4) Also need to mention the high rate of culture negative septic arthritis in pediatric patients and how this affects your antibiotic choice? Figures 1) Figure 1a- mention it is an AP radiograph 2) Figure 1b mention it is a coronal view 3) 571- I think this shows an effusion and increased signal suggestive of osteomyelitis, it does not show 'hip arthritis'