

## Ankle Septic Arthritis in Children

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### INTRODUCTION:

Septic arthritis in children most commonly involves the hip and knee joint. Incidence of ankle septic arthritis is uncommon, hence, there are limited studies regarding its clinical presentation, diagnosis and outcome.

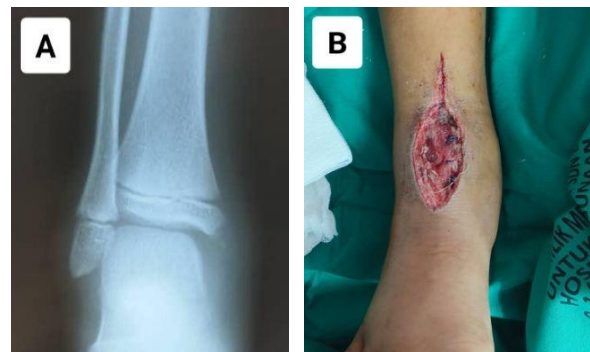
### REPORT:

A 10-year-old boy presented to us with limping gait due to a sudden onset of right ankle pain associated with intermittent high-grade fever. His right ankle appeared swollen and warm. It was tender on palpation with limited range of motion.

Blood parameters showed leukocytosis ( $20/\text{mm}^3$ ) and markedly elevated ESR (105mm/h) and CRP (220mg/dL). Plain ankle radiograph showed osteomyelitic changes of the right medial malleolus. The child had undergone right ankle arthrotomy washout.

An anterior approach between anterior tibialis and common extensors into the ankle joint was made. Frank pus was drained from the ankle joint, and the medial malleolus was curetted. He had undergone several washouts and the wound was partially closed for secondary healing intention and observation.

All cultures revealed Methicillin-Sensitive Staphylococcus aureus (MSSA) and he was treated with Cloxacillin. The child regain ambulation status prior to discharge and completed Cloxacillin for 6 weeks. The child was ambulating well during follow up.



**Figure A:** Plain radiograph of right ankle showing widening of medial joint space with bone absorption of medial malleolus.

**Figure B:** Anterior approach to the ankle joint.

### CONCLUSION:

Septic arthritis of the ankle joint in pediatric is rare. Kocher Criteria may be reliable to diagnose ankle septic arthritis despite its primary intended use for hip septic arthritis. Anterior approach to the ankle joint offers thorough pus drainage and adequate bony exposure to eradicate infection especially when the etiology is the sequelae of acute osteomyelitis. Wound healing by secondary intention following arthrotomy washout when general soft tissue condition is not favorable for primary closure. Emergent surgical drainage and targeted antibiotic treatment remain the mainstream of treatment in septic arthritis.

### REFERENCES:

1. Rehman N, Zgoda M, Osman MK. Septic arthritis of ankle joint in the paediatric age group: a retrospective study. *Int J Res Orthop* 2020;6:442-6
2. Erkilinc M, Gilmore A, Weber M. Current Concepts in Pediatric Septic Arthritis. *J Am Acad Orthop Surg* 2021;29:196-206