# Case Report / Olgu Sunumu



DOI: 10.4274/cayd.galenos.2021.74436 J Pediatr Emerg Intensive Care Med 2022;9:187-90

# **Neonatal Septic Arthritis - A Case Report**

## Neonatal Septik Artrit - Bir Olgu Sunumu

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#### **Abstract**

Neonatal septic arthritis is a rare condition, and yet it is an orthopaedic emergency due to the potential of devastating consequences. Signs and symptoms, laboratory test, and imaging studies might not always be typical. A prompt diagnosis and treatment should be made. We presented a 24-day-old premature neonatal patient was brought to the hospital with complaint of redness and swelling of his left shoulder.

Keywords: Septic arthritis, neonatal, shoulder

### Öz

Neonatal septik artrit nadir görülen bir durumdur, ancak yıkıcı sonuçları olma potansiyeli nedeniyle ortopedik bir acildir. Belirti ve semptomlar, laboratuvar testleri ve görüntüleme çalışmaları her zaman tipik olmayabilir. Derhal teşhis ve tedavi yapılmalıdır. Bu çalışmada sol omzunda kızarıklık ve şişlik şikayeti ile hastaneye getirilen 24 günlük prematüre yenidoğan hasta sunulmaktadır.

Anahtar Kelimeler: Septik artrit, neonatal, omuz

#### Introduction

Septic arthritis is a condition in which bacterial infection invades the synovial joint. Septic arthritis in neonate is a rare condition, however, is an orthopaedic emergency.<sup>1,2</sup> It is more prevalent in the knee or hip and less in the shoulder.<sup>3</sup> Failure of early diagnosis and management in septic arthritis could lead to osteomyelitis and septic shock.<sup>4</sup> Unfortunately, initial clinical symptoms and signs may not be specific. Prompt diagnosis and treatment are important in enhancing patient outcomes.<sup>1</sup>

### **Case Report**

A 24-day-old, 1.700 grams, male neonate was admitted. His parents complained of redness and swelling of his left shoulder for two days prior to admission. The complaint was accompanied by fever and he was given paracetamol by his parents. There was no history of trauma. He was born via caesarean section at 31<sup>st</sup>-32<sup>nd</sup> week of pregnancy due to severe pre-eclampsia suffered by his mother. History of unspontaneous breathing after birth was reported. Weight

of birth was 1.455 grams. He was admitted in the neonatal intensive care unit (NICU) at other hospital for unknown reasons for 13 days, by which the patient's parents then declined proposed treatment and the patient was self-discharged. He has an older twin brother who presented healthy.

On physical examination, the patient appeared weak, pulse 147 beats/minute, febrile with a temperature of 38.1 °C. There was swelling, redness, heat on the left shoulder. No deformity or wound was seen. Limitation of motion was also shown. On palpation and on the attempt to make a passive movement of his left shoulder, the patient cried.

Laboratory examination results were obtained as followed: White blood cells (WBC) 25,810/mm³ (reference: 5.0-18.0/mm³), erythrocyte sedimentation rate (ESR) 19.00 mm/hour (reference: 0.0-15.0 mm/h), high sensitivity C-reactive-protein (hs-CRP) 197.46 mg/L (reference: 0.1-4.1 mg/L), procalcitonin 0.41 ng/mL (reference: 0.0-0.05 ng/mL). Left shoulder X-ray showed soft tissue swelling and no sign of fracture or dislocation. Ultrasonography of left shoulder detected the presence of joint effusion.