

PAEDIATRIC SEPTIC ARTHRITIS WITH PSEUDOPARALYSIS : A CASE REPORT

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Introduction: Paediatric septic arthritis may occur in combination with acute osteomyelitis in the spectrum of osteoarticular infections. Due to their rare incidence, literature on diagnostic and therapeutic approaches are limited. Here, we report a case with a baffling presentation which may present a diagnostic challenge, and illustrate the severity of such infections rapidly leading to devastating sequelae.

Discussion: A 2-month-old baby boy with congenital ASD, presented with acute left upper limb paralysis associated with low-grade fever, without any infective symptoms or recent trauma. Infective markers were markedly raised (WCC 19.8 x 10⁹ cells/L, CRP 37 mg/L). Radiograph were normal, ultrasonography showed diffuse thickening of the left deltoid and biceps muscles representing myositis, but no joint effusion. After Paediatric Orthopaedic consultation, empirical high-dose IV Cloxacillin was started for 6 weeks under a working diagnosis of left shoulder septic arthritis with pseudoparalysis. Left shoulder arthrotomy washout was performed 4 days after admission after optimization for his congenital cardiac disease. Intraoperatively, pus was seen from deltoid and biceps muscles, but not the glenohumeral joint. Fracture of the left proximal humerus was spotted concurrently, inferred as pathological due to acute osteomyelitis and treated conservatively. Blood and pus culture grew *Staphylococcus aureus* sensitive to Oxacillin. Subsequently, clinical improvements were seen in the patient, along with resolving pseudoparalysis, as septic parameters gradually normalise.

Conclusion: The immature immune system of neonates may cause atypical presentation, such as pseudoparalysis only. Blood culture and joint aspiration is necessary to confirm the diagnosis in clinically suspicious patients and advanced imaging may assess possible adjacent OM. Unstable patients with haemodynamic instability or sepsis should be started on immediate empirical antibiotics; longer course is recommended in complicated SA (e.g. concomitant OM). Delay in surgical intervention increases potential damage to the articular surfaces. Adjacent osteomyelitis with physeal injury may rapidly develop leading to subsequent growth disturbance.