

DIAGNOSTIC DILEMA: MONOARTHRITIS IN CHILDREN - SEPTIC ARTHRITIS OR ACUTE RHEUMATIC FEVER?

Carolyn Choong¹, Zulkiflee Osman¹

¹Penang General Hospital

Introduction: Rheumatic fever is still prevalent in developing countries such as Malaysia. School-going children with joint pains and fever may still pose a diagnostic dilemma. We report a case of acute rheumatic fever simulating a typical case of monoarticular septic arthritis to the Orthopaedics team.

Discussion: A 16-year-old Chinese boy, presented with right elbow pain and swelling of one day duration, preceded by fever and rash for 5 days. He had denied any prior trauma or injury. Patient had a mild sore throat just prior to having fever, which resolved spontaneously. Clinical examination revealed a swollen and erythematous right elbow which was warm to touch and had limited range of movements due to pain. There were no other joint involvements. An ill-defined urticaria-like rash was noted over bilateral inner thighs, sparing the trunk and abdomen. Infective blood parameters were raised (TWBC 13.3 / ESR 70 / CRP 238.9) and a bedside diagnostic arthrocentesis which yield seropurulent joint aspirate prompted an emergency diagnostic and therapeutic arthrotomy washout of the right elbow. Intra-operatively, 20cc pus was drained and sent for culture and sensitivity. There was marked improvement in elbow joint range of movement (50-110 degrees actively) post-arthrotomy washout. However, he continued to have on and off fever and had now developed migrating polyarthralgia. Synovial joint culture and sensitivity had no growth after 48 hours. Further investigations revealed raised Anti-Streptolysin O titres (ASOT) which confirmed the diagnosis of Acute Rheumatic Fever (ARF). Luckily for patient, electrocardiogram and echocardiograms were unremarkable. Patient was subsequently transferred out to Medical ward for continuation of care.

Conclusion: Clinical presentations of monoarticular arthritis may initially present as having septic arthritis in the early stages could potentially be having rheumatic fever instead.