

An Unusual Case Presentation of Persistent Osteomyelitis in a Healthy Adolescence

¹Anandh R, ¹Tan YY; ¹Imma II

¹Hospital Queen Elizabeth, Jalan Penampang, Kota Kinabalu, Sabah.

INTRODUCTION

Osteomyelitis is an inflammatory process of the bone and its structures secondary to infection¹. It possess a complex challenge both in diagnosis and management. Our management goal is to achieve favourable functional outcome to prevent sequelae associated with osteomyelitis. Here we present a 14-year-old boy presenting with persistent osteomyelitis in previously healthy adolescence.

REPORT:

A 14-year-old boy presented with one week history of left knee pain and swelling post trauma, followed by fever and myalgia. Clinical examination suggestive of septic knee with distal thigh collection. Plain radiograph revealed no obvious osteomyelitic changes, proceeded with Magnetic Resonance Imaging (MRI) which showed a circumferential subperiosteal collection over distal thigh extending to the knee joint and bone marrow edema. Incision and drainage with knee arthrotomy washout performed. Tissue and blood culture yielded Methicillin-resistant *Staphylococcus aureus* (MSSA). Patient was discharged home well after completion of 6 weeks beta-lactam antibiotic.

Three months later, the patient presented with pathological distal femur fracture after trivial injury. After multiple wound debridement, removal of unhealthy bone and local antibiotic, the patient can ambulate with Ilizarov external fixation and infective markers is normalizing on intravenous cloxacillin.

CONCLUSION:

Ensuring a comprehensive approach to osteomyelitis management involves early diagnosis and multiple wound debridement and drainage. MRI and blood investigation facilitate early diagnosis, appropriate antibiotic therapy and timely surgical intervention².



Figure 1- 1a and 1b: Plain radiograph upon initial presentation. 1c and 1d: MRI left knee during initial presentation. 1e and 1f: second presentation after trivial fall.



Figure 2: Intra-operative photo showed pre- and post pus drained from subperiosteal collection.

REFERENCES:

1. Mauffrey C. Manoj Ramachandran: Basic orthopaedic science, the Stanmore guide: ISBN: 978 0 340 88502 4, Hodder Arnold, 304 pages.
2. Sipahioglu S, Askar H, Zehir S. Bilateral acute tibial osteomyelitis in a patient without an underlying disease: a case report. Journal of medical case reports. 2014 Dec;8:1-4.