

ACUTE OSTEOMYELITIS IN A CLOSED INTERTROCHANTERIC FEMUR FRACTURE

Teng Hong Ling¹, Aw Wai Onn²

¹Hospital Universiti Sains Malaysia, ²Pusat Perubatan Universiti Malaya

Introduction: Infection is the dread of all Orthopaedic surgeons. In open fracture cases, fracture hematomas are considered contaminated thus reducing infection is at the forefront of our management strategies. There have been few case reports of osteomyelitis in closed fractures. We describe one such rare case of an acute osteomyelitis in a non-immunocompromised patient who sustained an intertrochanteric femur fracture.

Discussion: A 37-year-old male with no known medical illness presented to us after a fall from height. He sustained a closed fracture intertrochanteric left femur and left patella, superficial laceration wound over the left upper eyelid (irrigated and sutured bedside). He was brought into operation theater with the plan of fixing all his fractures. During fixation of left femur, extensive pus collection was mixed within hematoma, extending into intramedullary canal. Internal fixation procedure was abandoned and extensive washout was done. Deep tissue and blood cultures later grew staph aureus. He was treated with intravenous antibiotics, fracture stabilised with ilizarov external fixation. The pathogenesis behind these infections in closed fractures is still unclear with no consensus. In more superficially located fractures such as patellar, skin fissuring or microinjuries allow bacterial infiltration into patellar fracture hematoma. Nosocomial bacterial within lymph nodes during acute fracture may lead to infection. Direct inoculation theory through skin fissuring is unlikely due to large soft tissue coverage around the hip.

Conclusion: Osteomyelitis in closed fractures is indeed a very rare condition however it is one that should not be overlooked. We hope that this case report will contribute ever so slightly to the growing knowledge and awareness of this condition.