

TRAUMATIC HETEROTOPIC OSSIFICATION IN BILATERAL FEMUR FRACTURE : A CASE REPORT

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Introduction: Heterotopic ossification (HO) commonly presents as restricted range of motion (ROM) and pain after a preceding trauma. Although there are ways to predict and prevent the formation of HO, it remains as one of the major cause of morbidity.

Discussion: A 21-year-old obese gentleman was involved in a motor vehicle accident whereby he sustained open fracture distal third left femur (Gustilo I), closed fracture distal third right femur, bilateral closed upper limb fracture, and mild head injury. He underwent reamed interlocking nail of bilateral femur within the first 24 hours. He then developed fat embolism syndrome at day 2 post operation leading to prolonged ventilation. A few months later, he presented with pain and severe limitation in bilateral hip and knee ROM. There were palpable hard masses around the hips and knees; bilateral hip joint were fixed at 10° of flexion while the knee joints were fixed at 30° of flexion. His plain radiographs showed extraskeletal bone formation around the hips (Brooker grade III) and femoral fracture sites. Excision of bilateral hip and femur HO was done in stages while the patient strictly adhered to physiotherapy regime. He successfully gained functional ROM of bilateral hip and knees; was able to drive and return to work.

Conclusion: There was a positive correlation between formation of HO and head injury, ISS, and ventilator and ICU days. Although not life-threatening, HO could contribute to poor functional outcome in trauma patient. Therefore, measures to prevent formation of HO such as early mobilization, NSAIDs, and sometimes radiation therapy should be initiated in all trauma patients with known risk factors.