A peculiar case of Morel-Lavelle lesion of upper limb

ABSTRACT

Morel-Lavallee lesions (MLL) are post-traumatic, closed internal degloving injuries that can result in severe complications if not diagnosed early. It is conventionally seen in cases of the high energy injuries of the pelvis and lower limb. The accumulation of extravasated blood, secondary to fracture and soft tissue damage may cause internal degloving injury, skin necrosis, soft tissue damage and acute osteomyelitis. We report here the clinical and radiological features in a 32-year-old male referred from the emergency department of a tertiary hospital who had sustained high energy motor vehicle accident. On examination, there was a fluctuant, mobile, non-tender subcutaneous mass over the distal arm with suspicion of internal degloving injury. Plain radiographs showed no fractures. Ultrasound showed a fluid collection with the presence of septations and echogenic debris within the collection. Extravasation was noted between subcutaneous tissue layer and fascia at the posterolateral aspect of the arm. Wound debridement under general anaesthesia was carried out. Intraoperative findings reported a significant amount of thick serous fluid with necrotic debris. Unhealthy skin and fat layers were debrided. Underlying muscles were found to be healthy. The results of the intraoperative fluid culture and sensitivity showed no growth. Negative pressure vacuum dressing was carried out. After five cycles of vacuum dressing, the wound showed signs of healing with an improved range of motion of the elbow. Orthopaedic surgeons need to be vigilant of the possibility of MLL in the upper limb as a differential diagnosis in the management of high energy trauma.