Boxer's knuckle is the eponym describing injuries to the sagittal band at the metacarpophalangeal joint, resulting in subluxation or dislocation of the extensor tendon, classically in boxers. This condition is often devastating because it can cause severe morbidity not only in professional athletes but also in manual workers. The unique anatomical position of the extensor apparatus system predisposes fingers to this type of injury. With better understanding of the anatomy and pathology of this injury, good functional outcome can be anticipated with appropriate treatment. Two cases of extensor tendon subluxation in non-athletic patients are presented here. The anatomy, diagnosis and current management of this particular injury are discussed. (Hong Kong j.emerg.med. 2006;13:161-167)

Case 1

An 81-year-old lady presented in January 2005 to our emergency department for sudden onset of pain at the left hand. She experienced pain after swinging her left hand. She denied any direct impact or punching injury at the left hand. There was no previous injury noted. Examination of the left hand revealed mild swelling at the left 3rd metacarpophalangeal joint (MCPJ). The finger was held at about 15 degrees of flexion at the MCPJ and active movement was limited. The extensor tendon was found drifted ulnarily even when the fingers were extended (Figure 1). No neurovascular compromise was found on the left middle finger. X-ray of the left hand showed a small crack at the base of the proximal phalanx (Figure 2).

The medical officer on duty referred the patient to the occupational therapy department for a metacarpal brace. At the follow-up visit one week later, it was found that her finger was splinted in a traditional functional position and the extensor tendon was actually subluxed ulnarily even in the splint! Radial extensor hood injury with dislocation of the extensor tendon was diagnosed. She was admitted to the orthopaedic ward for operative repair. However, she refused operation and preferred conservative treatment. Nine months after the injury, her hand function was generally satisfactory except minor degree of painless ulnar drifting of the extensor tendon on flexion of the MCPJ.