

## Shenton's line is preserved in posttraumatic hip pain: Fracture or dislocation?

### A case report

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#### INTRODUCTION:

Hip dislocation usually requires high energy trauma to occur, due to numerous muscle and ligamentous support [3,4]. Anterior hip dislocation less prevalent than posterior hip dislocation as it accounts for about 10%. Anterior hip dislocation can be further divided into Superior (pubic) and Inferior (obturator). Anterior inferior is the commonest type of anterior hip dislocation [1,4]. While anterior inferior hip dislocation is easily recognized on an anteroposterior (AP) radiograph of the pelvis, the radiographic appearance of anterior superior hip dislocation is less straightforward, often leading to an initial misdiagnosis of posterior hip dislocation. Misdiagnosis of the direction (anterior versus posterior) of a hip dislocation can result in failed closed reduction or improper surgical approach to open reduction [2]. We would like to present a case report on a nearly missed anterior hip dislocation following road traffic accident in a young patient.

#### REPORT:

A 38-year-old male has involved with motor vehicle accident under alcohol influence. He is unsure of precise mechanism of injury. Post trauma sustained pain over right hip and unable to ambulate. Local examination revealed right hip tenderness, restricted both active and passive range of motion without external rotation or abduction of thigh. Initial hip x ray showed no loss of congruence in the hip joint or Shenton line. In the first instance, he was suspected of having closed fracture right neck of femur and proceeded with CT scan. Subsequently we discovered patient had right anterior-superior hip dislocation. He underwent a closed manipulative reduction under GA after which a skin traction was applied.

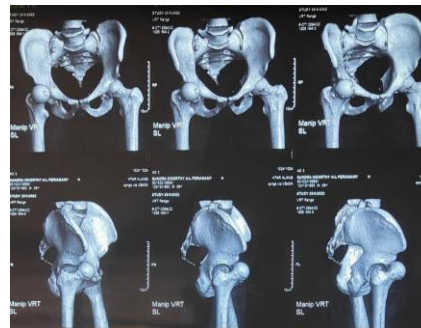
#### CONCLUSION:

Hence when the initial radiographs are in doubt, patient who presents with hip tenderness should be sent for CT scan to rule out hip dislocation

as prompt diagnosis and treatment within 6 hours in this case is essential for better prognosis of the patient. Delayed treatment in anterior hip dislocation may lead to preventable complications such as osteoarthritis and avascular necrosis of femoral head.



**Figure 1 : AP view hip xray in ED showing intact Shenton's line with no obvious fracture**



**Figure 2 : CT right hip showed right anterior superior hip dislocation**



**Figure 3 : Post CMR X-ray**

#### REFERENCES:

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