

How To Avoid The Diagnostic Trap Of Posterior Shoulder Dislocation - Importance Of Light Bulb Sign Revisited

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INTRODUCTION:

Posterior dislocation or fracture dislocation is commonly missed due to its rarity. Complications such as recurrent dislocations or subluxation, avascular necrosis of humeral head and glenohumeral osteoarthritis are associated with late diagnosis. We would like to highlight two clinical cases and discuss the importance of early diagnosis and raise the awareness of proper approach to shoulder injury to reduce the incidence of misdiagnosis of posterior shoulder dislocation.

CASE 1:

A 28-year-old man who was involved in road traffic accident sustained injury over left shoulder. After three months of delay and seeking medical advice from four different doctors, a missed diagnosis of chronic posterior shoulder dislocation with severe glenohumeral arthritis was found and he needed shoulder arthroplasty surgery.

CASE 2:

A 35-year-old man who was involved in motor vehicle accident, injured left shoulder due to fall on outstretched hand. The shoulder was locked in neutral rotation. Initial xray noted undisplaced oblique fracture of the proximal humerus. The abnormal clinical presentation and light bulb sign on radiograph prompted the surgeon to order a CT imaging and posterior shoulder dislocation was noted. Open reduction and proximal humerus locking plate was subsequently performed with good outcome.



Figure 1. Initial radiograph in Case 1.



Figure 2. Severe glenohumeral arthritis after 3 months of misdiagnosis in Case 1.

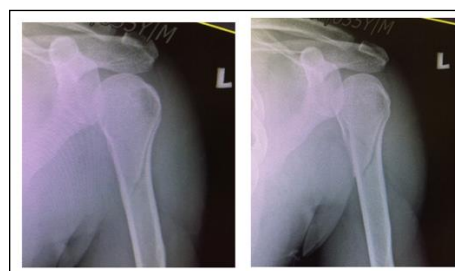


Figure 3. Initial radiograph in Case 2.

DISCUSSIONS AND CONCLUSIONS:

50%-79% of posterior shoulder dislocations were misdiagnosed. [1] There are a few radiographic signs (Light bulb sign, positive rim sign and trough line) that could suggest the diagnosis of posterior shoulder dislocation. [2] In addition to getting the correct clinical history and physical examination, we feel that the 'light bulb' sign is the most recognizable signs of all the described radiographic features, and hence needed to be re-emphasized of its value in managing patients with shoulder injury,

REFERENCES:

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