Old post-traumatic malunited humeral head fracture with dislocated shoulder: Delayed effect of an underestimated fall

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ABSTRACT

We present a case of a delayed effect of an old humeral head fracture with dislocated shoulder diagnosed an year after a low energy fall. After the injury, the patient experienced only mild pain and avoided radiological evaluation. The clinical and radiological evaluation showed a malunion of an underestimated displaced humeral head fracture with severe secondary arthritic changes.

Key words: Dislocated shoulder, humeral head fracture, malunion

A 63-year-old, otherwise healthy, Caucasian male, bricklayer by profession, presented to our clinic for the evaluation of chronic left shoulder pain which started an year ago following a fall from short height in his home. The patient experienced mild pain that was relatively relieved with over the counter medications. He avoided radiological evaluation including X-rays. He continued to work despite the mild reduction in range of motion (ROM) at his left shoulder for a couple of months until he started experiencing pain at his affected shoulder joint along with severe restriction of ROM (2 months before presentation). On examination, there was severe reduction of both active and passive ROM at the affected shoulder associated with mild pain, and a positive Neer test and Jobe test. An X-ray of his left shoulder demonstrated an old displaced humeral head fracture healed in varus position, dislocated shoulder, and severe secondary arthritic changes of the head of the humerus and the glenoid [Figure 1a and b]. The patient was referred for evaluation for total joint replacement.

Pain is almost always the most common presenting symptom in most fractures secondary to restriction in ROMs and other associated symptoms [1]. Our case of the shoulder fracture lacked typical symptoms at presentation. The fracture was articular with a severe varus displacement that resulted in



Figure 1 X-rays in anteroposterior view with the arm in abduction (a) and adduction (b), show an old malunited displaced humeral head fracture, healed in varus position, dislocated head of the humerus, and severe secondary arthritic changes involving the humeral head and glenoid

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secondary arthritic changes of the shoulder joint. With no previous shoulder imaging for comparison, it was unlikely to comment if the arthritic changes at his left shoulder were present before the fall or untreated displaced humeral head fracture was the cause of delayed worsening. Prompt evaluation is necessary, especially in elderly age group following a fall that is associated with mild degree of pain to rule out any bony discontinuity and optimization of outcomes [2].

References

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Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Competing Interests

The author declares that he has no competing interests.

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