CASE REPORT

Undetected shoulder dislocation with presenting with torticollis

S. Thomas *, A.S. Rajeev, J. Pooley

Upper Limb Unit, Queen Elizabeth Hospital, Gateshead, UK

Accepted 7 November 2006

Case report

We report the case of a 77-year-old lady who was referred from the emergency department with pain and abnormal posture of the neck to rule out cervical pathology (Fig. 1). Detailed history revealed that she had sustained a fall and reported to the accident and emergency department 6 months prior to our examination, which was treated as a soft tissue injury. She was discharged after clinical examination and X-rays. Only X-rays of the shoulder were done, as she did not have any neck symptoms. The patient did not report to the hospital with any further symptoms from the right shoulder during this period till our review. Our examination revealed abnormal neck posture with a deformed right shoulder. The shoulder was minimally tender on palpation and the movements were restricted due to pain. The cervical spine was non-tender.

Radiographs of cervical spine did not show any osseous injury. The shoulder radiographs showed an old undetected right anterior glenohumeral dislocation (Fig. 2). This was confirmed with the previous radiographs done at the time of initial injury (Fig. 3) and a diagnosis of missed old shoulder dislocation was made. The patient underwent an attempted elective open reduction of the shoulder joint, which revealed the head of humerus in contact with the brachial plexus (Fig. 4). The brachial plexus involvement was an incidental finding intra-operatively and the patient never reported any neurological symptoms and our clinical examination also did not reveal any neurological deficits. As the open reduction was unsuccessful, an excision arthroplasty (Fig. 5) was carried out to relieve the pressure on the brachial plexus and to regain a painless functional joint.

Post operatively at 6 weeks, the patient had a painless shoulder with the neck posture corrected to near normal. The patient was followed up for 1 year and is comfortable with the treatment and has a functional shoulder.

Discussion

Old undetected shoulder dislocations have been well documented in literature. However compression of the brachial plexus with shoulder dislocations is rare. Saab and Shears et al. have reported the occurrences of brachial plexus injuries with shoulder dislocations, but presentation of such a case with an abnormal posture of neck is unreported. Stayner et al. have shown that the early diagnosis and treatment of these injuries are mainstays in preventing further morbidity for our...
patients. In this patient muscular spasm caused by the dislocated shoulder and the humeral head pressing onto the brachial plexus could have caused this abnormal neck posture. Goga et al.\(^1\) have shown that in chronic shoulder dislocations open reduction is more successful and they had only one successful closed reduction in their series. This is further recommended by Rowe and Zarins\(^4\) who also had more favourable results with surgical treatment. Pasila et al.\(^3\) have highlighted that complications are more in patients above the age of 50, if the humerus remains dislocated for more than 12 h. Hence, it is prudent that we do a meticulous radiological analysis and systematic examination to avoid such injuries being missed. While reporting this unusual presentation of an undetected anterior glenohumeral dislocation, we aim to reinstate the importance of a proper history, general and radiological examination. When patients present with minor trauma, systematic examination is often not

---

**Figure 1**  Torticollis with deformed right shoulder.

**Figure 2**  Dislocated right shoulder seen on radiograph following our assessment.

**Figure 3**  Right shoulder radiograph done at initial injury showing missed dislocation.

**Figure 4**  Intra-operative photograph showing brachial plexus.

**Figure 5**  Post-operative radiograph following excision arthroplasty.
given necessary importance and if not carried out properly such injuries can be missed.

Conflicts of interest statement

No funding has been received from any sources and no conflicts of interests are stated in the submission of this case report.

References

1. Goga IE. Chronic shoulder dislocations. J Shoulder Elbow Surg 2003;12(5 (September–October)):446–50.
2. Nevisier TJ. Old unreduced dislocation of the shoulder. Orthop Clin North Am 1980;11(2 (April)):287–94.
3. Pasila M, Jaroma H, Kiviluto O, Sundholm A. Early complications of primary shoulder dislocations. Acta Orthop Scand 1978;49(3 (June)):260–3.
4. Rowe CR, Zarin B. Chronic unreduced dislocation of the shoulder. J Bone Joint Surg Am 1982;64(4 (April)):494–505.
5. Saab M. Brachial plexus lesion following an anterior dislocation of the shoulder. Eur J Emerg Med 2004;11(3 (June)):168–9.
6. Shears E, Sunderamoorthy D, Ali SA. Brachial plexus injury after anterior shoulder dislocation: a case report. Acta Orthop Belg 2005;71(4 (August)):489–90.
7. Stayner LR, Cummings J, Anderson J, Jobe CM. Shoulder dislocations in patients more than 40 years of age. Orthop Clin North Am 2000;31(2 (April)):231–9.