POSTERIOR FRACTURE-DISLOCATION OF THE SHOULDER
Report of a Case

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Posterior dislocation of the shoulder is uncommon and may be missed if axillary radiographs are not taken. Its incidence has been variously quoted: Wilson and McKeever (1949) 1.5 per cent of all shoulder dislocations, Wood (1941) 2.6 per cent and McLaughlin (1952) 3.8 per cent. Associated minor fractures, such as avulsion of a small fragment from the infero-medial aspect of the head, were noted by Wilson and McKeever in eight out of twelve dislocations in eleven patients (one dislocation was bilateral). Major fractures associated with posterior dislocations are rare. McLaughlin mentioned two cases: in one the humeral head was badly comminuted and required prompt excision, in the other a fracture through the anatomical neck was combined with posterior rotation of the dislocated head. Most of Wilson and McKeever’s patients were treated by open reduction, either because of delay in diagnosis or because redislocation occurred after closed reduction. Acceptable function may still be restored even in a missed case of major fracture-dislocation by open reduction with internal fixation of the fracture (Durbin 1969). A case of bilateral posterior fracture-dislocation, presumably occurring during hypoglycaemic coma, which needed open reduction was described recently by Prillaman and Thompson (1969).

The purpose of this paper is to describe the successful treatment by closed reduction of an unusual posterior fracture-dislocation of the shoulder. One similar case has been reported (Bell 1965).
A man aged seventeen was thrown from the pillion of a motor cycle, striking his left shoulder. He had multiple abrasions over the shoulder. There was considerable swelling and painful limitation of all movements. No nerve or vascular injury was found. An antero-posterior radiograph showed a fracture of the neck of the humerus and dislocation was suspected (Fig. 1). Under general anaesthesia an axillary view was taken (Fig. 2). This showed the line of fracture to be through the anatomical neck of the humerus and the head to be dislocated and rotated posteriorly. An attempt at reduction failed but this was repeated the next day, nearly twenty hours later.

The manipulation was performed under general anaesthesia with full muscular relaxation. The patient was placed supine. Countertraction was provided by a towel in the axilla. With the arm in neutral rotation, strong traction was applied by an assistant, the patient's elbow being flexed to a right angle. The surgeon then applied direct pressure posteriorly over the displaced fragment. Although a definite click was not heard, reduction was assumed because relatively free passive movement was restored to the shoulder. Radiographs confirmed successful reduction. The arm was bandaged over the chest, the wrist being supported in a collar-and-cuff sling.

Four weeks later the bandage was removed and graduated exercises were started. The patient returned to work three months from the date of injury. Movements of the shoulder were painless and only the terminal degrees of lateral rotation were limited. The fracture was united radiologically. Eighteen months after the accident the patient had no complaints: there was a full range of movement, and he was doing his normal work as a carpenter. A radiograph taken twenty months after the injury showed normal appearances (Fig. 3).

**DISCUSSION**

Conclusions concerning technique cannot be drawn from the experience of one case, but the feature common to this case and that described by Bell is the combination of traction on the limb and direct pressure on the displaced head. Bell stressed the importance of adducting...
the arm across the chest. Success is also dependent on early diagnosis, for which axillary radiographs are mandatory. Such films can conveniently be taken under anaesthesia, thereby avoiding distress to the patient.

SUMMARY

A case of posterior fracture-dislocation of the shoulder is reported, and the method of closed reduction is described.

I would like to express my appreciation to Mr R. H. C. Robins for his encouragement and help in the preparation of this paper and to Miss Coleman, Medical Photographer, West Cornwall Clinical Area, for the illustrations.

REFERENCES


