FRACTURE OF THE CORACOID PROCESS WITH FRACTURE OF SURGICAL NECK OF HUMERUS

Singh S*, Gupta P K*

INTRODUCTION

Fracture of Coracoid process of Scapula is an uncommon injury that can typically occur as an isolated injury, or in association with scapulohumeral dislocation, acromio-clavicular dislocation and fracture of lateral end of clavicle.¹ The incidence has been assessed at between 2% and 13% of all scapular fractures² with differing types of treatment recommended for this fracture. We present a case of fracture of Coracoid process with fracture of surgical neck of humerus. Such a case has not been reported in English literature previously.

CASE REPORT

A nine-year old boy presented with a painful right shoulder following a fall from height and presented with anterolateral pain and a grossly swollen and bruised shoulder. A discrete tender mass was palpable anterior to the shoulder and tenderness around proximal humerus but acromio-clavicular joint was nontender. There was no hypoaesthesia in the distribution of the axillary nerve. Antero-posterior view did not reveal the fracture but axillary view radiograph showed a displaced fracture at the base of the Coracoid process, type IIIB of Eyres et al³ and undisplaced fracture of surgical neck of humerus. The fracture could not fit into the latest classification of Ogawa et al² as it appeared to be at the site of attachment of coraco-clavicular ligament, which does not fall into either Type I or in Type II fracture. The case was treated conservatively, using a broad-arm sling and gentle active mobilization of the shoulder was allowed after 3 weeks and full movements only after 6 weeks. The fractures healed uneventfully after 6 weeks with no pain and restriction of shoulder movements.

Fig. 1

Fig. 1 : Axillary view showing fracture of neck of humerus and of base of coracoid process.

DISCUSSION

Coracoid process is an uncommon fracture with increasing frequency recently.² It was first reported by Desault in 1798.⁴ The most frequent cause of a Coracoid fracture is an avulsion injury. Contraction of the coracobrachialis and biceps brachialis muscles can result in a separation of Coracoid process due to the action of the conjoined tendon attached to it. Direct trauma may also lead to a fracture of this kind due to the impact of the dislocated humeral head on the scapula. Fracture of Coracoid process due to direct trauma is usually associated with fracture

* B.P. Koirala Institute of Health Sciences, Dharan, Nepal.

Address for correspondence : Dr. Sudhir Singh
B.P. Koirala Institute of Health Sciences, Dharan, Nepal.
Email: susi59@hotmail.com

of lateral end of clavicle, acromio-clavicular disruption. Conservative treatment with six weeks of immobilization is thought to be appropriate in the majority of cases.⁵ Operative fixation is reserved for displaced fractures especially if it involves glenoid cavity. Open reduction and internal fixation with or bone grafts have been advocated for ununited case or isolated Coracoid fractures with infero-lateral dislocation.⁶ Treatment was nonoperative in our case and result was satisfactory.

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