

Coracoid Fracture in Paediatric Patients Case Report and Revision of The Literature

Giorgio Marrè Brunenghi*

U.O. Orthopedics and Traumatology Giannina Gaslini Institute Genoa – Italy

* Corresponding Author

Giorgio Marrè Brunenghi, U.O. Orthopedics and Traumatology Giannina Gaslini Institute Genoa, Italy, 10, Passo X Dicembre, 16134 Genova (Ge) Italy, Tel: +393357593927, E-mail: giorgiomarre@gaslini.org

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Abstract

The coracoid fracture in paediatric patients is extremely rare. It might be underlined only with specific radiographic projections. The clinic case set out in this article shows that the conservative treatment in paediatric patients, as reported in literature, is the choice's treatment.

Keywords: fracture, coracoid, paediatric patients.

Introduction

The coracoid fracture is absolutely a rare event. Even more rare in paediatric patients [1]. The literature, in fact, reports few cases: most of them in adulthood [2], whereas are limited the reports below the 14 years of age [3].

Clinic case

Male, 7 years and 9 months old; fell from the dad's motorbike hitting on the floor the right shoulder. Reached the emergency room immediately after the trauma. At the clinical examination presented swelling and deep pain at the pressure on the coracoid and all over the shoulder; the motility was good but it reawaken/stirred pain in particular in abduction. The standard x-ray carried-out in the emergency room suspecting a fracture of the clavicle or humerus (figureure 1 a-b) underlined a light discontinuity at the base of the right coracoid, centering of the humeral head and continuity of the acromio-clavicular joint. Are requested the specific and comparative projections of the left shoulder (figureure 2 a-b) that highlights the separation of the coracoid base with small compound fracture. Is decided for a conservative treatment by applying Desault bandage for 25 days. At the removal, the clinic examination shows light pain at the mobilization of the shoulder and at the pressure on the coracoid. The radiographic exam points out good consolidation of the fracture and his realignment (figureure 3 a-b). At the clinic follow-up after 20 days after the removal of the bandage, the patient does not complain any pain and presents a complete motility of the shoulder.

Discussion

The coracoid fracture is reported mainly in adulthood, rarely isolated [4-5], much more frequently associated to others injuries such as the dislocation of the acromio-clavicular joint in different scales [3, 6] dislocation⁶ or instability of the shoulder⁷, fracture of the clavicle or of the glenoid cavity [2], injury of the rotator-cuff⁶ or fracture of the acromion⁵.

Two classifications are proposed depending on the level of the fracture. Ogawa⁶ divides into two types related to the joint of the coraco-clavicular ligament: the type I behind them and the type II front of them. This subdivision it would be useful, according to the author, for the purpose of the treatment:

type II fractures, stables, would have more indication to the conservative treatment while the type I, more unstable, would have a surgical stabilization.

Saragaglia⁷ divides them into 3 types recognising to each of them a particular traumatic association: fracture of the coracoid base (associated to a dislocation of the acromio-clavicular joint), fracture of the horizontal part (associated to an instability of the shoulder) and fracture-avulsion of the coracoid apex (injuries apparently isolated).

It has a low visibility in standard x-rays [7], [1] and so it has to be researched with specific projections such as the "Stryker-notch view" [8].

Conclusion

The coracoid fracture is absolutely a rare event especially in paediatric patients. In these patients, conservative treatment must be taken in consideration particularly in isolated trauma.



Figure. 1a: standard x-ray carried-out in the emergency room

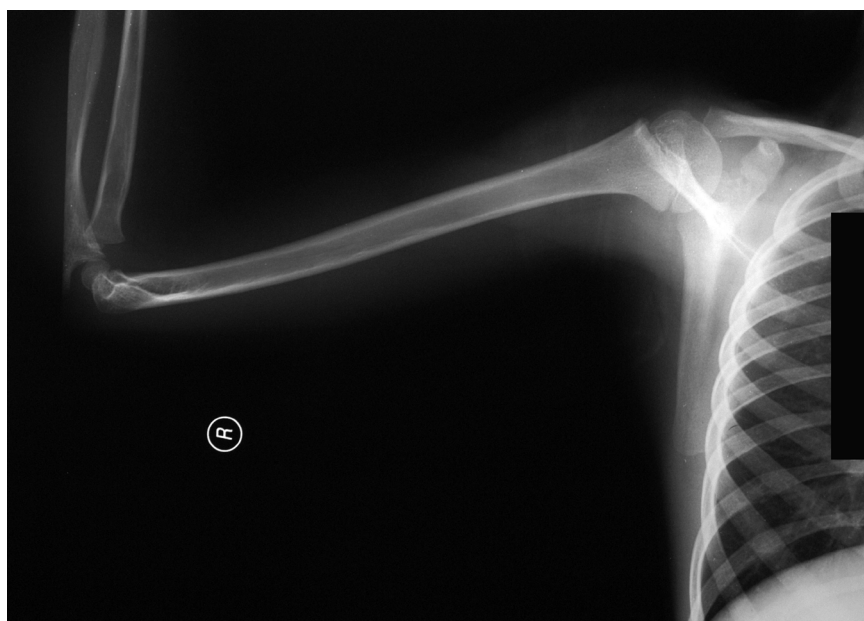


Figure. 1b: standard x-ray carried-out in the emergency room



Figure. 2: specific projections of the left shoulder



Figure 3 a: good consolidation of the fracture and his realignment



Figure 3 b: good consolidation of the fracture and his realignment

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