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Case Series

Bilateral Clavicle Fractures: A Case Series of 3 Patients

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ABSTRACT

Fractures of the clavicle are a common traumatic injury, accounting for 5-10% of adult fractures. Their incidence is increasing due to the development of sports and high-energy trauma. For a long time, they have been labeled as benign because of their satisfactory evolution often, with a consolidation rate of more than 90%. However, bilateral fractures of the clavicle are rarely encountered in traumatology, with few cases reported in the literature. It constitutes a challenge in the therapeutic. The choice between functional treatment by immobilization of both shoulders, which are difficult for the patient to bear, and osteosynthesis of a very subcutaneous bone with all the risks associated with it, namely infection, skin necrosis, material migration and pseudarthrosis septic. We reported 3 cases of bilateral clavicle fractures over 05 years, one of which was treated surgically and 2 orthopedically. Our work aimed to present the clinical features and functional results of different treatments of this rare clinical entity.

Keywords: *Bilateral clavicle fracture, Functional treatment, Osteosynthesis.*

INTRODUCTION

Clavicle fractures are a common traumatic injury, involving 5-10% of adult fractures. However, bilateral injuries are rarely reported. The incidence of bilateral clavicle fractures is 0.43% of clavicle fractures with an overall incidence between 0.011 and 0.017%.[1-6] Often treated orthopedically in the majority of cases with satisfactory consolidation in almost 95% of cases. But sometimes, synthesis is required.[3] We report three cases of bilateral clavicle fractures collected over five years in the Department Trauma Surgery and Orthopedics at Ibn Rochd Hospital University Center, of which one was treated surgically and two orthopedically. Our work aimed to present the clinical features and therapeutic results of this rare clinical entity.

CASES STUDIES

Case Study 1

A 38-year-old female patient, with no medical history, was reportedly involved in a road traffic accident on 21/07/2017. She was riding a scooter that was hit by a car, with a direct impact on the right side causing the patient to fall and land on her left shoulder, generating severe pain in both shoulders and functional impairment of the upper limbs, associated with a cranial impact and initial loss of consciousness.

The clinical examination showed a conscious patient with ecchymosis on the middle thirds of the anterior face of both clavicles with a menace to the skin of the medial fragment on the left shoulder. The sensation is intact distally in all peripheral nerve distributions. Motor function is intact distally. Distal pulses are present and palpable. No complaints of pain in any other extremity.

The radiological assessment of the right and left front shoulder and the front chest X-ray (Figure 1) showed a displaced complex mid-shaft fracture of the right clavicle and a simple oblique fracture of the middle third of the displaced left clavicle, and the cerebral CT scan was normal.

As the patient refused the proposed surgical approach, Non-operative management was performed with a figure of eight brace for six weeks, followed by functional rehabilitation with partial weight-bearing and strengthening exercises (Figure 2).

At the 3-month follow-up, we noted no pain at the sites of