Int. Med J Vol. 5 No 1 June 2006

Bilateral Olecranon Fracture in Adult. A Case Report.

Z Zamzuri , Nazri MY, Aminudin CA, Azril A, Shukrimi A, Hafiz A, and Khalid KA.

Department of Orthopedic, Traumatology and Rehabilitation, Kulliyyah of Medicine, International Islamic University Malaysia, Kuantan, Pahang, Malaysia.

ABSTRACT

We report a case of a 14-year-old Malay male who fell at school and sustained bilateral olecranon fractures. He had undergone an open reduction and tension band wiring to stabilize the fracture. Three months after the surgery, the movement of both his elbows was satisfactory.

Keywords: Olecranon, tension band wiring

CASE REPORT

A 14- year-old Malay male fell at school where both his elbows bore the ground impact. He had bilateral elbow pain for one day. The pain which was accompanied with swelling was temporarily relieved by analgesic. There was no external wound. He could not straighten both of his elbows after the injury. His previous health has been good.

Clinically both of his elbows were swollen and tender on palpation. There was no neurological deficit.

Radiograph of the both elbow showed bilateral olecranon fracture. No dislocations of elbow joint were noted.(**Figure 1**)

Open reduction and internal fixation were done through the posterior approach using a tension band wiring to stabilize the fracture. The checked x-ray was acceptable. (**Figure 2**) He was discharged on day

four postoperatively. At three months, the fracture united and the range of movement of both the elbows (flexion, extension, pronation and supination) was full. At one year, all the metalwork were removed.

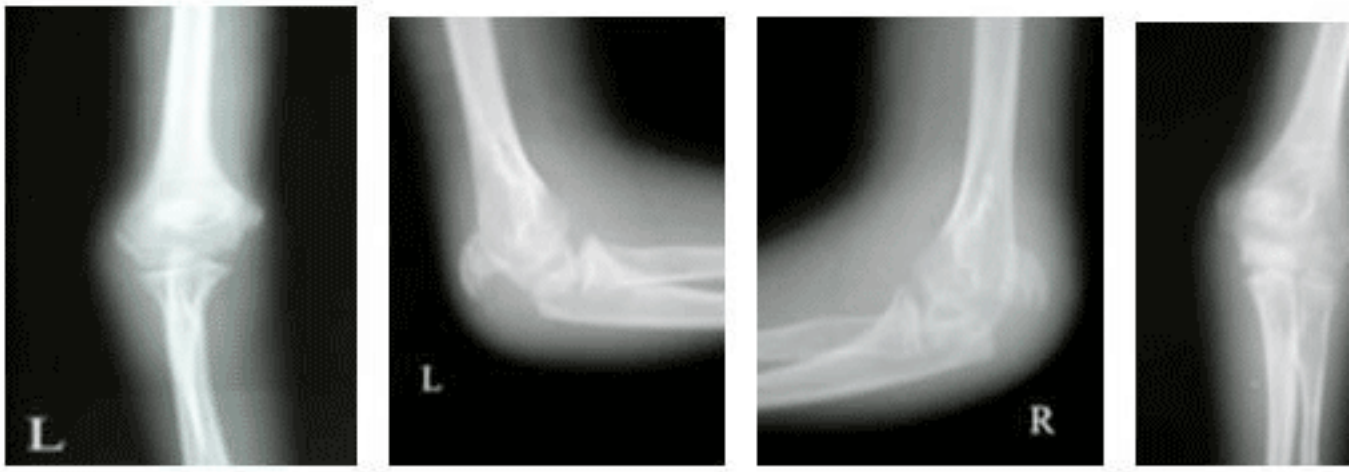

Figure I : Radiograph of the both elbows showing displaced olecranon fracture

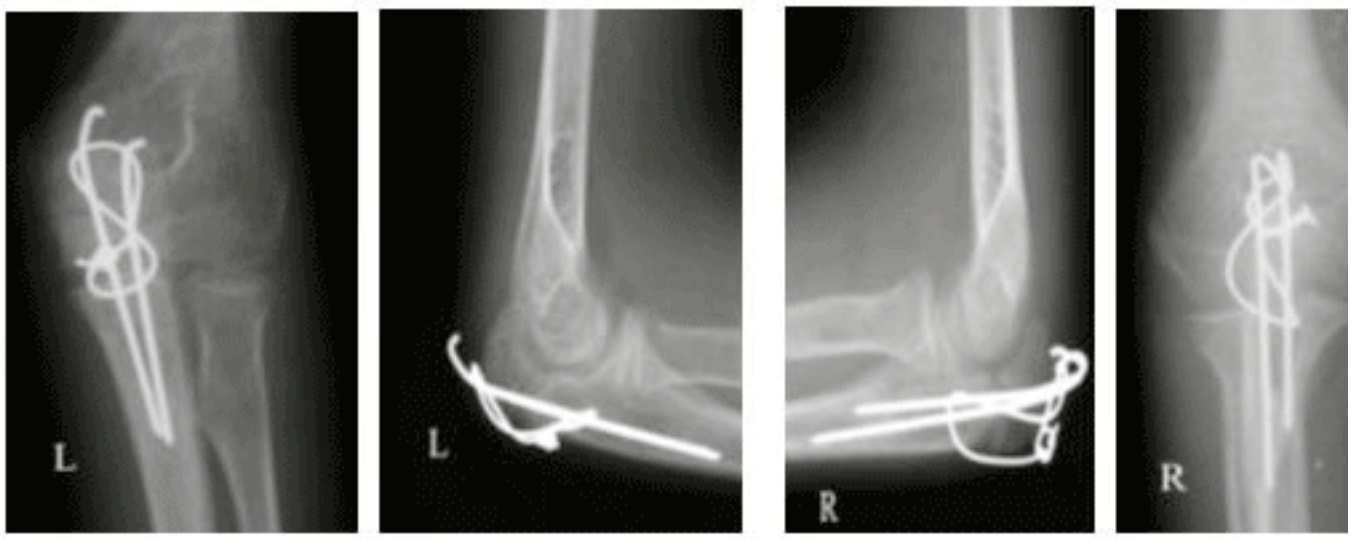

Figure 2 : Radiograph of the both elbows showing tension band wiring fixatio

stabilize the fracture

DISCUSSION

Olecranon fractures are usually caused by application of direct or indirect forces. In this patient direct forces applied to both his elbows at the time of injury caused the fractures. It is uncommon to have a bilateral olecranon fracture .To the best of our knowledge there are no reported cases in the literature of bilateral olecranon fracture in adult. Associated injuries included elbow dislocations, radial head dislocations, radial head fractures and coronoid fractures. Failure to identify the injuries may lead to problems with instability, arthrosis and loss of motion[1].

Nondisplaced fractures with intact extensor mechanisms can be managed nonoperatively. Operative treatment was required for fractures with disrupted extensor mechanism and displacement of more than 1.5 millimeters. In this patient the indication for surgery

was due to the badly displaced fractures. Surgically treated patient after sustaining olecranon fracture had shown to have a good clinical outcome[2].

REFERENCES

1. Ring D, Jupiter JB, Simpson NS 1998:Monteggia fractures in adults .J Bone Joint Surg 80A:1733-1744.
2. Home JG, Tanzer TL, 1981:Olecranon fractures: A review of 100 cases. J Trauma 21:469-472.