

Closed Lateral Pinning Case of Pediatric Displaced Supracondylar Fracture

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Fractures of humeral supracondyle represent fifty-five to eighty percent of pediatric elbow fractures; which often happen for children below seven years old; the incidence has been described as 177 per 100000 and mostly due to a fall on an outstretched hand but it may occur owing to direct trauma to the elbow in sport as well [1].

Management of Displaced supracondylar fractures of humerus have always been a challenge in practice. Closed reduction and percutaneous pinning was initially described by Swenson and later popularized by Flynn, *et al.* It is the gold standard treatment but a simple method with good biomechanically stable results [2].

However, managing Gartland type 3 and 4 fracture by closed reduction and pinning would be preferred technique because of lower rate of complications [1,2].

Here we present a ten year old taekwondo player boy who referred to our emergency department with deformed left elbow swelling who was injured while training. On physical exam, the elbow range of motion was completely limited; the limb neurovascular was normal. Internal medicine consultation was not remarkable.

After primary assessment and stabilizing measurement conducted, the patient was transferred to the operating room. Reduction was checked under fluoroscopy and clinico-radiological assessment of reduction was done by calculation; fixation with 3 lateral pinning was conducted (Figure a and b).



Figure a: Initial photography of humeral Supracondyle fractures in a ten-year old boy in the ER department.

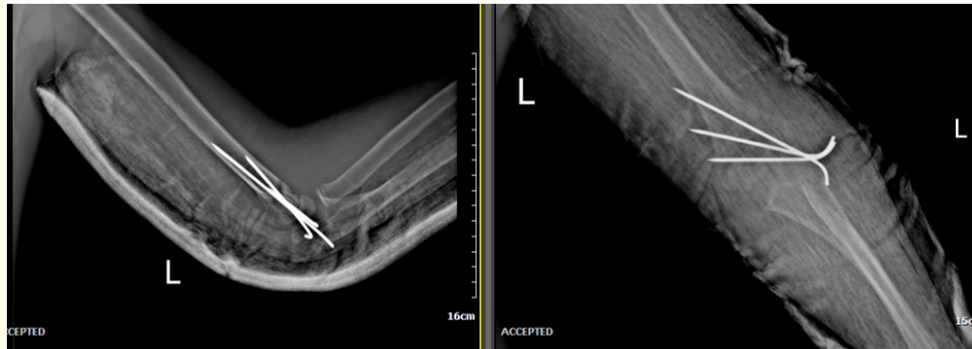


Figure b: Postoperative x-ray of the mentioned case.

After surgical steps finished, long arm splint in ninety-degree elbow flexion was applied for the patient and he was discharged on the second postoperative day with normal limb neurovascular condition and general health.

We also report a previous case [3] with somehow the same presentation managed closed pinning intervention and the outcome was excellent.

So, if this closed lateral pinning is applied the complications decreases with this taken into account that approaching such type of fracture in closed manner would be difficult but desirable.

Bibliography

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