

Comparision of surgical results of Lateral Cross-Pin Fixation versus cross lateral pin and medial in Supracondylar Humerus Fractures in Children

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Introduction: Supracondylar humerus fractures in children is the most common elbow fractures. These fractures account for about 16% of pediatric fractures. Maintain stability in the reduced segment in medial and lateral part is important. The aim of this study was to compare two methods of lateral to medial and lateral cross is pinning.

Methods: In the cross-sectional analytical study, children with supracondylar humerus fractures were evaluated. 140 children in two groups matched for age, sex and type of fracture were treated with one of two methods were investigated. Complications and outcome between the two methods is studied.

Results: 70 children, including 55.7% girl and 44.3% boy with a mean age of 5.04 years by pinning cross-lateral with 70 children, including 54.3% girl and 45.7% boy with a mean age of 3.5 years treated with cross-medial pinning method were compared. Ulnar nerve lesion in the medial and lateral cross technique 4.3% and the lateral cross technique has not been in any cases. The need for further surgery and loss of stability by 2.9% and 1.4% that there was no statistical difference between the two methods. Infection embedded pins 4.3% and 12.9%, which were similar. In cross-lateral pinning cubitus varus in 2.9% and in the medial in one case (4/1%) was observed.

Conclusion: Both lateral and lateral and medial cross-pinning technique to create stability and maintain appropriate reduction were succeed. but the possibility of ulnar nerve is destroyed in cross-lateral and there is more certainty in this respect.

.Key words: Supracondylar humerus fractures, Percutaneous pinning , Closed reduction