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Neurovascular Abnormalities in Gartland III Supracondylar Fractures in Children

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Abstract
The most common elbow injuries in pediatric trauma practice are supracondylar fractures of the humerus. Posteriorly displaced fractures may be angulated or displaced medially or laterally with associated internal or external rotation. We compared two groups of patients, each with grade III supracondylar fractures after Garland. The goal of this study was to see if reduction and pinning maneuvers create neurovascular abnormalities and if there are any differences in terms of neurovascular consequences for reducing grade III Gartland supracondylar fractures of the humerus using reduction in supination or pronation of the forearm. We formed two study groups based on the reduction method used. Concretely: patients who needed reduction in pronation were included in the first group and patients who needed reduction in supination were included in the second group. Patients were added to each group until every group reached 40, to have equal and comparable groups. No statistically significant differences on clinical outcome and neurovascular complications appeared between the two methods of closed reduction. We can say that both methods used are correct.
Key words: supracondylar humeral fracture, neurovascular abnormalities Gartland

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