SURGICAL MANAGEMENT OF PAEDIATRIC NEGLECTED HUMERAL SUPRACONDYLAR FRACTURE: A SERIES OF 3 CASES IN 3 YEARS

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ABSTRACT

Supracondylar fracture of the humerus is common among the paediatric population. It accounts for 17.9% of all fractures in children.² They commonly present in extension type, in which the distal metaphyses are forced into extension resulting from falls on outstretched hands. Due to the close proximity between the proximal fracture fragment and the surrounding soft tissues in extension-type fracture, various neurovascular injuries are often reported. Incidence of nerve injuries has been reported to be 12-20% while up to 20% of patients having vascular compromise in displaced supracondylar humeral fractures. In our country, it is not uncommon for patients to present late to the hospital after an injury. Devnani reported a case series of 28 children who sustained supracondylar humeral fractures and presented late (mean 5.6 days) to the hospital. We present three cases of paediatric neglected humeral supracondylar fracture and their subsequent surgical management. Case Series, Case 1: NAU, a 5-year-old right-hand dominant girl presented with malunion of the left humeral supracondylar fracture for the one month after a fall from bicycle. She underwent open reduction, corrective osteotomy and cross K wire insertion and subsequently recovered. Case 2: MP, a 5-year-old boy presented with neglected left humeral supracondylar fracture for 8 months after a fall on left elbow while playing. He presented with varus deformity of the left elbow with limited range of movement. He underwent open reduction, corrective osteotomy and lateral K wire insertion. He subsequently recovered with good carrying angle and range of movement of the left elbow. Case 3: MS, a 10-year-old right-hand dominant boy presented with a left humeral supracondylar fracture for 14 days after a fall from monkey bar at school. Clinically, the fracture was immobile with callus formation noted on the plain radiograph. He underwent open reduction, callus removal and cross K wire insertion and subsequently recovered. Surgical correction should be used to treat paediatric patients presented with neglected humeral supracondylar humerus fracture to obtain the best functional outcomes.

Keywords: Surgical Management, Paediatric, Humeral Supracondylar Fracture, Case Report