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Comparative Study in Treatment of Distal Humerus Fracture with Lateral Column Plate Percutaneous Medial Screw and Intercondylar Screw

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Abstract : Context: Fractures in the distal humerus are complex and challenging injuries for orthopaedic surgeons that can be effectively treated with open reduction and internal fixation. Aims: The study analyses clinical outcomes in patients with intra-articular distal humerus fractures (AO type 13 C3 excluded) treated using a different method of fixation (LCPMS). Subject and Methods: A study was performed, and the author's personal experiences were reported. Thirty patients were treated using an intercondylar screw with lateral column plating and percutaneous medial column screw fixation. Detailed analysis was done for functional outcomes (average arc of motion, union rate, and complications). Statistical Analysis Used: SPSS software version 22.0 was used for statistical analysis. Results: In our study, at the end of 6 months, Overall good to excellent results were achieved in 28 patients out of 30 after analysis on the basis of MEP score. The majority of patients regained full arc of motion, achieved fracture union without any major complications, and were able to perform almost all activities of daily living (which required good elbow joint movements and functions). Conclusion: We concluded that this novel method provides adequate stability and anatomical reconstruction with an early union rate observed at the end of 6 months. Excellent functional outcome was observed in almost all the patients because of less operating time and initiation of early physiotherapy, as most of the patients experienced mild nature of pain post-surgery.

Keywords : intra arricular distal humerus fracture, percutaneous medial screw, lateral column plate, arc of motion
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