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SURGICAL TREATMENT OF SHRAPNEL FRAGMENTED FRACTURES OF THE DISTAL END OF THE HUMERUS

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Abstract:

The article presents operative methods of treatment of patients with fragmented fractures of the distal end of the humerus in 79 patients. The patients were divided into three groups depending on the method of surgical treatment. The results of treatment of surgical methods of all three groups were studied and conclusions were made.

Keywords: Fragmented fracture, contracture, ankylosis, osteoporosis, osteotomy.

Introduction

Background: Intra-articular fractures of the distal end of the humerus are a severe injury of the elbow joint. Fractures of the distal end of the humerus occur in 0.5-2% of patients with fractures of the musculoskeletal system. According to various authors, injuries of the distal end of the humerus account for 7.8-24% of all fractures of the upper limb [1]. In recent decades, there has been an increase in injuries in general and in particular in this localization often occur in elderly and old patients, and the proportion of this population in the population increases, and the number of patients with this pathology decreases. At the same time, the results of treatment of these patients are adversely affected by systemic osteoporosis and hypotrophy of muscle tissue. The results of conservative treatment of such fractures often give unsatisfactory results [2,3].

Purpose of the work: Study the results of treatment for a fragmented fracture of the distal end of the humerus using reconstructive plates with screws.

Material and methods of research: From 2022 to 2025, 79 patients with closed fragmentary intra-articular fractures of the distal end of the humerus were treated at the Samarkand Regional Hospital of Orthopedics and Consequences of Injuries. Of these, 39 (47%) were men and 42 (53%) were women. All patients underwent an X-ray examination, and on the basis of the X-ray, methods of surgical treatment were determined. To study the effectiveness of the chosen method of treatment, the patients were divided into 3 groups: In Group I, 17 (21.5%) patients underwent an operation to compare bone fragments with fixation with Kirschner wires and external immobilization with a plaster bandage. In Group II, 23 (29.2%) patients were subjected

to an open comparison of bone fragments with fixation with Kirschner wires and external fixation with the Ilizarov apparatus. In Group III, 39 (49.3%) patients were subjected to an open comparison of bone fragments by fixation with reconstructive plates from the medial and lateral sides.

The results of the study showed that group I in 17 patients who had their fragments fixed with Kirschner wires. In them, the fusion lasted up to 5 months, of which 5 cases (29%) were complicated by spoke osteomyelitis. Almost 16 patients (34%) were complicated by contracture, who had to receive physiofunctional treatment for a long time. who were reoperated. Group II: patients who had fragments compared in an open way and fixed with Kirschner wires, external fixation in the Ilizarov apparatus, 2 patients (9%) had inflammation around the wire, reparative regeneration of bone fragments lasted more than 4 months. After the removal of the Ilizarov apparatus, almost all patients had persistent flexion-extensor contractures, which received physiofunctional treatment for a long time.

Conclusions:

The analyses showed that the patients of groups I-II were treated for a long time. The method of fixation with wires did not sufficiently hold the bone fragments, micromovement was observed. Group III of patients in whom bone fragments were fixed with reconstructive plates and with screws showed very successful results: bone fragments are fixed stably; the function of the elbow joint is restored within a month after surgical treatment; no inflammation was observed on the part of soft tissues and bone tissues; The ability to work was restored in 2-2.5 months after the operation. The latter method of treatment has shown the expediency and effectiveness of treatment for intra-articular multifragmentation fractures of the distal end of the humerus.

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