Our experience in treatment of neglected dislocations and fracture-dislocations of the elbow

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Results of treatment of 37 patients (19 men and 18 women) with neglected dislocations and fracture-dislocations of the elbow joint, including 29 patients with the “Terrible triad of the elbow joint” were analyzed. The patients' age was 38.5 ± 11.7 years in average. Patients were divided into three groups according to the type of lesion and time from injury: Group 1 - untreated patients (17), up to 4 weeks after injury; Group 2 - previously operated patients (9), with no signs of dislocation, but with pain, instability and contracture in the elbow; Group 3 - chronic instability or dislocations of the elbow joint (11 patients).


Dislocation reduced, coronoid osteosynthesis and replacement of the radial head performed

Result in 9 months after operation

Case 2. Consequences of previous “terrible triad” treatment.

Previous treatment in other hospitals. The radial head was removed. Ankylosis of the elbow developed.

Elbow mobilization and ulna nerve neurolysis

Ulnar shortening osteotomy and replacement of the radial head

The function of the elbow in 1,5 year

Elbow mobilization and ulna nerve neurolysis

Ulnar shortening osteotomy and replacement of the radial head

Case 3

Multifragmental fracture of proximal ulna and radius - 21-C3

Previous treatment of terrible triad in other hospitals caused chronic elbow dislocation (due to the radial head removal and untreated coronoid process fracture) and elbow contracture.

Elbow mobilization

After dislocation was reduced, substitution of coronoid with bone autograft and transosseous suture of the anterior portion of the capsule was performed.

Replacement of the radial head

Movements in the elbow after surgery

After surgery, we applied a posterior cast on the upper extremity with elbow extended in 30 degrees. Rehabilitation started from the first day after the surgery, and included immobilization in extension (30°) for night and flexion of the elbow (over 90°) during the day period. The average duration of such rehabilitation was 4.52 ± 0.89 weeks. Further development of movements we provide with increasing load on the elbow joint.

In 12 patients with compression-ischemic neuropathy of the ulnar nerve transposition and neurolysis were also performed.

Results: According to MEPS scale we obtained excellent and good results in group 1 in 84% of cases. In groups 2 and 3 with neglected injury and consequences we received excellent and good results in 53% patients, fair - in 31% and poor - in 16% of cases.