

**Conclusions:** intramedular nailing osteosynthesis represents a favorable method for healing the long tubular bone fractures. This method represents reduced surgical traumatism, less hemorrhage, early mobilization and low risk of perioperative complications.

**Keywords:** diaphyseal fractures, long tubular bones, intramedular nailing

## SURGICAL TREATMENT OF FRACTURES IN REGIONAL HOSPITAL



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**Study objectives:** The analysis of the results of fractures surgical treatment in the Orthopedics and Traumatology Department of the Regional Hospital.

**Methods and Materials:** 1689 patients were treated in the Orthopaedics and Traumatology Department of the Regional Hospital during years 2011-2015. The surgical treatment ratio during the period covered by the study increased from 9.7% to 19.2%, as per Hospital provisioning with implants, with an average ratio of 16.3%. The methods of osteosynthesis applied in closed diaphyseal fractures: clavicle with intramedullary nail – 25 (9.5%), arm with plate – 11 (4.2%), forearm – 12 (4.6%) centromedular fixation and 22 (8.4%) plate fixation, femur – centromedular 10 (4%) and plate fixation 2 (0.5%); leg with plate fixation – 7 (2.7%), Ilizarov device – 12 (4.6%); malleolus with plate fixation – 44 (16.7%) nail fixation – 21 (7.9%); leg and hand nail fixation – 81 (30.7%). In open fractures we preferred osteosynthesis with Ilizarov device – 15 (5.8%). Surgical interventions were applied in 2-7 days after trauma.

**Results:** Slow consolidation in diaphyseal fractures at 6 patients (2.2%), pseudarthrosis at 2 patients (0.7%). Septic complications were observed in closed fractures in 2 cases (0.7%) (soft tissues inflammation). Leg open fractures had complications in 6 patients – soft tissues necrosis. These fractures were treated with a tegumentary plasty. Osteitis in 2 patients.

**Conclusion:** A stable osteosynthesis of diaphyseal fractures was obtained by fixation with plates and extrafocal fixation with Ilizarov device. Short term and long term results obtained were classified as good.

**Keywords:** Osteosynthesis, Diaphyseal fractures.

## SELECTIVE ARTHRODESIS IN WRIST INSTABILITIES: INDICATIONS AND SURGICAL TECHNIQUES



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The causes of deforming arthritis of the hand are ligament injuries associated with subluxations and luxations, fractures of the carpal bones, malunions, and osteoarticular diseases as Kienbock disease. There are many surgical interventions to resolve these problems (D. Green)

### Materials and methods

Our experience is based on the treatment of 134 patients with deforming osteoarthritis of the wrist who underwent various selective arthrodesis. The average duration of disease was 3 years. Kienbock disease was diagnosed in 41 patients, pseudoarthrosis of the scaphoid complicated by deforming osteoarthritis - in 68 cases, rotational subluxation of the scaphoid - in 9 cases, trapezium-trapezoid-scaphoid osteoarthritis - in 4 patients and malunion of the radius fracture - in 4 cases.

### Results and discussions

Nowadays deforming arthritis occurred in the wrist more often requires surgical treatment. Arthrodesis directed to obtain an ankylosis of the carpal bones by losing the amplitude of movements allows to achieve a stable joint, without pain and to restore gripping power.

In 68 patients with scaphoid pseudoarthrosis complicated with deforming osteoarthritis, arthrodesis of "four carpal bones with scaphoidectomy" in 49 cases, total wrist arthrodesis in 7 cases, scaphocapitate arthrodesis in 3 cases, removing the first row of carpal bones in 3 cases, scaphoidectomy in 4 cases, radial-scaphoid arthrodesis - in 1 case, and in other scapho-trapezium-trapezoid arthrodesis.

In 41 patients with Kienbock disease, Graner operation was performed in 16 cases, arthrodesis of "three carpal bones" in 10 cases, capitate-scaphoid arthrodesis - in 8 cases, radial-semilunar - in 4 cases, radial-scaphoid arthrodesis - in 1 case, removing the first row of carpal bones - in 2 cases.

Arthrodesis of "three carpal bones" was performed in 4 cases of deforming arthritis of the scapho-trapezium-trapezoid joint. Triple scaphoid arthrodesis, arthrodesis of "three carpal bones" was done successfully on 9 patients with rotational subluxation of the scaphoid.

Total wrist arthrodesis was performed in 4 cases of the intraarticular radial fracture malunion.

Long-term results were followed up in 46 patients: good (18), satisfactory (23). Unsatisfactory outcomes were in 5 cases because of absence of the ankylosis and presence of the pain.

**Conclusion:**

Selective wrist arthrodesis is indicated in deforming arthritis grade II or III of diverse etiology

**Keywords:** pseudoarthrosis of the scaphoid, Kienbock disease, selective arthrodesis

## RESULTS OF THALAMIC CALCANEAL FRACTURE TREATMENT



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**The aim:** Analyzing the results of thalamic calcaneus fracture treatment in dependence of type and treatment method.

**Materials and methods:** There were analyzed 198 clinical cases of calcaneal fractures treated in the clinic "V. Bețîșor" during the years 2014-2016. Patients were divided into 2 groups - I (65 patients - 33%) treated surgically (open reduction and plate and / or screws osteosynthesis, capsulo-ligamentotaxis in the Ilizarov apparatus), II (133 patients-67%) treated conservatively. Men accounted for 81% (160) and women 19% (38). The average age was 45 years, with limits between 20 and 78 years. According to the values Böhler angle fractures were of grade II (101 cases) - 51%, grade I (60) - 30% and grade III (37) - 19%. Average length of stay was 13 days for patients treated surgically, and 7 days in patients treated conservatively.

**Results:** Of the 198 patients were reexamined clinical and radiological and evaluated according to AOFAS Ankle-Hindfoot score Scale at 1-2 years from trauma 22 patients, of which 7 were performed surgical treatment, and 15 were treated conservatively. The results after surgical treatment (7): excellent (90-100 p) - 1 patient, good (72-89 p) - 4 patients, acceptable (41 - 71p) - 2 patients, bad (1-40 p) - 0, after orthopedic treatment (15): excellent - 1 patient, good - 6 patients, 6 patients acceptable, bad - 2 patients.

**Conclusions:**

1. For the specifying the optimal treatment strategy is necessary a classification that could clearly definite the type of fracture.
2. Intra-articular fractures (thalamic) frequently require surgical tactics of treatment, reducing the articular surfaces ideal and stable fixation of the fragments.
3. The dominant principle in the treatment of these fractures is to restore the altered biomechanics of the foot.

**Keywords:** thalamic calcaneal fracture, treatment

## INTRA FOCAL OSTEOSYNTHESIS FOR DISTAL RADIAL FRACTURES IN EMERGENCY – KAPANDJI METHOD



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**Aim:** to present the results of surgical treatment using Kapandji method in emergency.

**Material and methods:** were analyzed the results of surgical treatment in patients with distal radius fractures treated in IEM during 2013-2015. Fractures were classified using Kapandji A. (1988) classification. Emergency surgical treatment was applied in 106 (50.23%) cases, of which 85 (80.18%) was performed Kapandji method. Follow-up results were assessed according W. Gartland and Werley L. score (2000). The study group consisted of 85 patients, of whom women - 52 (61.17%), men - 33 (38.83%). The mean age was 41 years.

**Results:** according A. Kapandji classification in the study group were: type I - 2 cases, type II - 33 cases, type III - 3 cases, type IV - 13 cases, type V - 2 cases, type VI - 1 case, type VII - 1 case, type VIII - 9 cases, type IX - 15 cases, type X - 6 cases. K-wire ablation was performed at 35 days - 15 (17.6%) cases for I, II, IV types, at 40 days - 52 (61.2%) cases for II, V, VI types, at 45 days - 14 (16.5%) cases for III, VII, VIII, IX types and at 50 days - 4 (4.7%) cases for IX, X types. Follow-up results, according W. Gartland and L. Werley score, are positive in 84 (98.8%) cases of 85 patients. Excellent results (0-2 points) were 13 (15.3%) cases, good (3-8 points) - 41 (47.1%) cases, satisfactory (9-20 points) - 31 (36.5%) cases.

**Conclusions:**

Intrafocal osteosynthesis with K-wire – Kapandji method constitutes a minimally invasive procedure favorable for treatment of distal radius fractures.

The method is characterized by minimal intraoperative bleeding, low risk of postoperative complications and a good function and recovery.

**Keywords:** radius, osteosynthesis, Kapandji, emergency