

The aim of the study: evaluation of the results of the treatment of open fractures of tubular bones in patients treated in the department of Orthopedics in the IEM from Chisinau.

Material and methods: during the period 2015-2016, 48 patients were examined and treated for open fractures of the tubular bones. Out of the total number of patients, 91,7% of patients underwent surgical treatment. The sex ratio being: women – 21 and men – 27 persons, the average age was 48 years (21-85 y.o.). The distribution by fractured segments is: humerus -8, forearm bones -13, femur -5, shin bones -22 cases. The AO and Gustilo-Anderson classifications were applied. In 4 cases there were applied nonsurgical treatment. In the rest of the patients treated surgically, the distribution of methods of osteosynthesis was: ORIF -9; osteosynthesis by K-wires -9; Ilizarov's method -11; external fixation -2 cases; locked intramedullary nailing -6; tension band wiring -2; amputation (MESS score 9 points) -1 case.

Results: Immediate results were appreciated according to postoperative radiological appearance, in 97,91% cases all the fractures united in axial alignment, it was appreciated as positive results. Follow-up results valued according to radiological appearance, full range motion of the traumatized limb, and the quality of life: excellent and good in 42 cases, satisfactory – 2 cases and unsatisfactory – 4 cases. There were determined the following complications: joint stiffness -2 cases, femoro-patellar artrosis – 1 case, slow fusion -1 cases, infectious complications -2 cases, amputation – 1 case.

Conclusions: There is a big incidence of open fractures of tubular bones. A lot cases of open fractures were treated in surgical way. The treatment for open fractures in the department of Orthopedics in IEM shows good results.

Keywords: open fracture, tubular bones, surgical treatment.

FAILURE OSTEOSYNTHESIS IN A OPEN DIAPHYSEAL FEMORAL FRACTURE (CASE STUDY)



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The aim: presentation of a treatment strategy in a clinical case of open femoral fracture with septic manifestations.

Materials and methods: Patient, male of 21 years old, in august 2014 as a result of an accident (motorcycle), he suffered an open diaphyseal fracture of the right femur (Gustillo-Andersen type II). Within 24 hours the patient was operated in a district hospital: surgical debridement and plate osteosynthesis. In postoperative period appeared clinical signs of septic process that was confirmed by laboratory tests. After a month he was transferred to our clinic. On clinical and radiological examination was revealed instability of osteosynthesis, micromicromobility at the fracture site and compressive hematoma on the right femur. We performed repeated debridement and bridge-plate osteosynthesis. In postoperative period the wound healed primary and inflammatory signs disappeared. The patient walked with crutches without loading operated leg during 3 months. At repeated control there was no radiological signs of consolidation. A bone plasty was proposed to patient, that he refused and followed dosed loading on the operated leg. At 5 months he presented with misalignment of bone fragments. Finally patient underwent repeated autoosteoplastic osteosynthesis with angular stability plate. Postoperative evolution was normal, patient initiated partial support after 2,5 months and total to 5 months.

Results: At 6 months after the last intervention clinical and radiological evolution was favorable.

The pain disappeared at total weight bearing, the volume of mobility of knee at the same side are complete. There are signs of bone consolidation.

Conclusions: Although the final outcome of treatment is considered as good, the method of osteosynthesis remains questionable.

Keywords: femur, open fracture, osteosynthesis

MANAGEMENT OF THE HIP PERIPROSTHETIC FRACTURES



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The purpose of the study: The analysis of the treatment methods in periprosthetic fractures after hip arthroplasty, with correlation between the experience of the authors and literature data.

Methods: During the years 2010-2014 in our clinic were performed 67 revision surgical procedures of periprosthetic fractures after the hip replacements. Of these 25 were males and 42 were females; the mean cohort age was 64 year, ranging from 54

ap to 79 years. Elapsed time from the primary arthroplasty up to the revision of the periprosthetic fractures varied from 2 months up to the 13 years. Cases were staggered according to Vancouver classification. We have encountered fractures of type AG in 4 cases, type AL - 3 cases, type B1 - 12 cases, type B2 - 14 cases, type B3 - 7 cases, type C - 27 cases. Fractures of the type A have been treated with simple wire fixation (4 cases) tension band wiring (3 cases). Fractures of the type B1 were treated by the plate osteosynthesis; type B2 and B3 - by revision arthroplasty. In fractures type C we performed the osteosynthesis by the plates with angular stability in 15 cases or regular plates with association of the bone grafts in 12 cases.

Results: In fractures of the type A we found one case of osteosynthesis instability, which was well tolerated by the patient. Fractures of the type B represent one of the biggest problems. Especially type B1 and B2, when was difficult to differentiate if the stem was stable or not. In 3 cases we did mistakes in appreciation of the type B1 and performed the osteosynthesis. In all these cases occurred the instability of the stem, that led to the revision arthroplasty procedure. In cases of the fractures type C we met the problem of the associated osteoporosis. This led to technical difficulties in achieving stable osteosynthesis by regular plates.

Conclusions: The results confirm that correct classification, compliance with treatment protocols of the hip periprosthetic fractures and strict differenciation between different types of the fractures can lead to good functional result.

Keywords: periprosthetic fractures, Vancouver classification, revision hip arthroplasty

RESULTS OF SURGICAL TREATMENT OF NEER 4-PART FRACTURE-DISLOCATIONS OF PROXIMAL HUMERUS



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Purpose: to analyze results of ORIF surgical treatment of Neer 4-part fracture-dislocation of proximal humerus (FDPH).

Material and methods: in period 2013-2015, in IEM's Orthopedics Department were treated 11 patients with Neer 4-part FDPH, injury's nature being specified by Rx and CT-scan. All patients underwent ORIF, in 6 cases with T-plate and 5 cases-Philos plate, at 9-40 hours after trauma. Gender distribution: 6 women and 5 men, with age limits: 28 and 67 years. Right thoracic limb was fractured in 7 cases, left - 4 cases. All dislocations were anterior. Patients were monitored 6-18 months. Deltoido-pectoral approach was performed in 8 cases and transcoracoid - 3 cases, being used in marked displacement of humeral head to prevent neuro-vascular complications. Long bicipital tendon was used as anatomical landmark between greater and lesser tubercle, which were fixed to plate with non-absorbable threads. Diaphysis was impacted in order to obtain primary stability. Functional outcomes were assessed using Constant score and analog pain scale.

Results: at 6-8 months was determined 120° flexion angle (in 90-135° diapason), average abduction angle - 100° (in 70-140° diapason). Average Constant score was 72 points (in 60-85 diapason). Mild pain was determined in 7 cases, moderate - 4 cases. In 8 cases fracture was at surgical neck's level, in 3 cases - anatomical neck's level. In 1 case was detected transient axillary nerve injury, screw's migration from humeral head - 1 case, humeral head's AN - 5 cases and vicious consolidation - 3 cases.

Conclusions:

1. Successful treatment of given injury is provided by anatomic reduction and stable fixation, with maximum maintaining of fragments blood supply.
2. Humeral head's AN doesn't exclude good functional outcome, unlike fragments vicious consolidation.
3. Transcoracoid approach allows avoiding of severe neuro-vascular complications, ensures convenient fragments reposition and fixation.

Keywords: fracture-dislocation, proximal humerus.

PARTICULARITIES OF POSTTRAUMATIC RETROPERITONEAL HEMORRHAGE IN PELVIC FRACTURES



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Aim: To study the particularities of posttraumatic retroperitoneal hemorrhage in pelvic fractures.

Material and methods: We present the analysis of patients with pelvic fractures and retroperitoneal hemorrhages (n=201). The average age of patients was 38,26±15,03 years. Clinical examination (n=152) and forensic-medical examination (n=49) was carried out for evaluation of the volume and source of retroperitoneal hemorrhages. Patients with stable hemodynamic