

an average of 12,4 days. There were used surgical approaches: classical antero-lateral – 52, MIPO – 35, MIPPO – 1, TARPO – 16 and medial parapatelar (for retronail) – 19 cases. Fixators used: condylar buttress plate–24, blade–plate 95o – 11, angular stability plate – 65, locked intramedullary nail (retronail) – 18, DCS – 2, screws (for type B fractures) – 3.

**Results:** Consolidation occurred in 94% of cases in a period of from 4 to 9 months. There were 3 cases of deterioration of fixators, solved with osteoplastic re-osteosynthesis; 3 secondary displacements with further vicious consolidation, 4 pseudoarthrosis and 2 septic complications.

**Conclusions:** Individual approach of the distal femur fractures, respecting the AO principles, the right choice of implant and minimally invasive surgical techniques is a optimal tactics to obtain favorable functional results and avoid complications.

**Keywords:** distal femur, osteosynthesis, consolidation.

## SURGICAL TREATMENT OF TIBIAL PILON FRACTURES



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**Objective:** The research of statistical and curative particularities of surgical treatment of tibial pilon fractures.

**Material and methods:** The scientific work is based on a retrospective and prospective study on a group of total 172 patients with tibial pilon fractures treated during the years 2013-2015 in Traumatological Departments of The Emergency Medicine Institute from Chisinau. The diagnosis was confirmed by clinical, radiological in all cases and MRI in 59 cases. The etiology of trauma in 103 cases were fall from height and in 44 cases - car collision. Open fractures was in 42 cases, GA type I – 21, GA type II – 18 and GA type III – 3 cases. Extra-articular fractures was 48 cases, intra-articular – 124 cases, RA type I – 29, RA type II – 54 and RA type III – 41 cases.

**Results:** The surgical treatment was the most indicated, in 125 cases, extrafocar osteosynthesis (Ilizarov) - 33, plate osteosynthesis – 38, screws/pins osteosynthesis – 24 cases, external fixation was used in 29 cases associated with high damage of soft tissue, which later were converted in stabile osteosynthesis. After surgery a part of the patients were evaluated at an interval of 12 to 24 months using. We obtained good results in 18 patients, satisfactory - 20, unsatisfactory - 4 patients.

**Conclusions:** The tibial pilon fractures prognosis in most cases is unpredictable because of intra-articular character with involve articular surface elevation, difficulty reducing and maintaining fragments and frequency of occurrence of various complications. Surgical treatment requires advanced experience of orthopaedic surgeon, and a very good preoperative planing with establish an appropriate time, surgical approach and method of fixation.

**Keywords:** tibial pilon, itra-articular fracture, surgical treatment.

## EXPERIENCE IN TREATMENT OF PELVIC FRACTURES IN MULTIPLE AND ASSOCIATED INJURIES



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**Materials and and methods:** We present treatment results of 623 polytrauma patients with pelvic fractures. There were 411 (66,53%) males and 212 females (33,47%), mean age  $37,59 \pm 1,001$  years ( $p < 0,05$ ). The main cause of trauma was traffic road accident (64,37%), fall from height (25,32%), high energy impact (10,31%). All the patients were complex examined, pelvic fractures were detected according to M.Tile classification. Stabilizing pelvis osteosynthesis by device for external fixation was performed in 52 cases as an antishock measure. Early pelvis osteosynthesis was done in 172 patients for quick mobilization. Other patients underwent delayed osteosynthesis after 7 days, open reduction and combined osteosynthesis was performed in 12 cases.

**Results:** Pelvic fractures type B and C leveled to type A after osteosynthesis by external device. Patient hemodynamic was stabilized. Volume of transfusions decreased, on average, for one patient at  $1,2 \pm 0,2$  l/day, blood products – at  $0,68 \pm 0,2$  l/day ( $p < 0,05$ ). Enlargement of the radiological shadow, the "blurring" of the iliac muscle contours, development of the intenstinal paresis was not observed. All these signs proved the tanpmade effect of eraly pelvis osteosynthesis. Vertical mobilization of the patients with urinary bladder injuries led to normalization of the urine passage and its composition.

External fixation of the polyfocal and rotational unstable pelvic fractures allowed one-step and dosage correction of the pelvic ring and prevented developement of complications. Vertical displacement of the hemipelvis was eliminated by creating of the additional support point up to optimal correction of the bone fragments, and saving the patient mobility.

**Conclusions:** Elaborated surgical treatment of the pelvic injuries, management of the polytrauma patients resulted in