

were examined by the standard scheme: pelvic X-rays, USG, CT. Pelvic injuries were divided according to M.Tile classification, retroperitoneal hemorrhage – according to zonal Sheldon classification.

Results: Localization and volume of the pelvic retroperitoneal hematoma was determined by the source of bleeding, spreading according to pelvic ring instability, severity of internal organs injuries and pelvic vessels lesions. Pelvic fractures: type A - 75(37,31%), B - 55(27,36%), C - 71(35,32%). It was established that pelvic retroperitoneal hemorrhages were the most common and numerous – in 130 (64,67%) patients. The main sources of pelvic retroperitoneal hemorrhages were pelvic fractures with venous plexus lesions (type B, C, n=126) and urinary bladder injury (n=35). We used conservative treatment in pelvic venous hemorrhages (147 from 152 patients) to stop pelvic bleeding: early pelvic stabilization, patient position without active motions, hemostatic drugs. If conservative treatment was not effective in arterial bleeding (n=5), we used pelvic packing, vessel ligation, etc. Revision of pelvic bleeding was not performed. It was impossible to determine exactly the source of spreading (46,6%) retroperitoneal hemorrhage even by forensic-medical examination. Pelvic stabilization by device for external fixation performed at admission allowed to prevent massive intrapelvic hematomas and complications in patients with pelvic fractures (type B, C).

Conclusions: the particularities of posttraumatic retroperitoneal hemorrhage in pelvic fractures are their massive volume, spreading, predomination of venous bleeding (88%). Conservative treatment was effective in 96,7% of venous pelvic bleeding. Early pelvic stabilization prevents massive retroperitoneal hemorrhages and posttraumatic complications.

Keywords: retroperitoneal hemorrhage, pelvic fractures, early stabilization

TREATMENT OF THE DISTAL FEMUR OPEN FRACTURES



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The aim: Presenting the surgical treatment results in 10 patients with distal femur open fractures with analysis of management a case of septic complication.

Materials and methods: The analyze of surgical treatment results in 10 patients was performed. Gustillo-Andersen classification was used: type I – 1 case, type II – 4 cases, type IIIA – 5 cases, type IIIB – 2 cases (2 patients with bilateral fractures). In all patients the first stage consisted of: primar surgical debridment with applying skeletal traction through the tibial tuberosity with leg "in empty" - 6 cases; stabilization with external fixators- 4 cases; "limited" fixation of joint surface with screws and stabilization with external fixators- 2 cases. The final fixation was used after an adequate soft tissue condition was obtained, in a period of 8 to 25 days with an average of 14,3 days.

Results: In 9 of 10 patients after surgical debridement was primar wound healing .

In 1 patient with type IIIA fracture, which was not performed primar external fixation after final fixation complicated by osteitis of the femur.

After 2 debridements formed a fistula, which was eradicated at 4 months, with internal metal fixator removal and bone defect plasty with composite based on collagen and antibiotic when the fracture was in the stage of consolidation. The functional score (Neer) in medium at all group of patients is 74 points.

Conclusions: The surgical treatment of severe open fractures in 2 stages, with primar surgical debridement with stabilization by external fixators at first and functional stable internal fixation at second is a tactics to obtain optimal functional results and avoid complications.

Keywords: distal femur, open fracture, surgical debridement, osteosynthesis.

CURRENT CONCEPTS IN DISTAL FEMUR FRACTURES TREATMENT



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The aim: Presenting the methods of evaluation and surgical treatment of patients with distal femur fractures treated in Orthopedics and Traumatology Clinic "V. Bețșor" during 2010-2015 years.

Materials and methods: There were analyzed 120 clinical cases with 123 distal femur fractures (3 patients were with bilateral fractures); men - 58 (48.3%) and women - 62 (51.7%) aged between 17 and 90 years, (mean age 53,4 years). Trauma circumstances: traffic accident - 40 cases, habitual trauma - 71, precipitation – 7, industrial – 1, by firearm - 1. Fractures were classified as AO: type A1 – 13 cases, type A2 – 29 cases, type A3 – 39 cases, type B1 – 2 cases, type B2 – 1 case, type C1 – 7 cases, type C2 – 27 cases and type C3 – 5 cases. The definitive osteosynthesis was performed at the period of 0-52 days with

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±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 ± 0,2 l/day, blood products – at 0,68±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