

study, unipolar hemiarthroplasty was used for the patients who are physiologically older with comorbidities. They were satisfied after surgery, being able to perform their daily activity. Advantages of monopolar and bipolar arthroplasties include short operation time and quick mobilization of the patient, which is very good to prevent complications. Disadvantages of unipolar and bipolar hemiarthroplasty is that they increase biomechanical stresses on the acetabulum with consecutive destruction of the acetabular fosa with developing of cotiloidites. The appearance of cotiloiditis may require surgical re-intervention and conversion to the total hip prosthesis. 85% were patients over 70 years of age, respectively the prostheses used were mostly bipolar and monopolar, but there were also those who required total prosthesis. Total hip replacement is advantageous for active, healthy, lucid patients, with a long life expectancy.

**Conclusions.** The discussions of using total hip arthroplasty vs monopolar or bipolar hemiarthroplasty are still open. Total hip replacement seems to be preferred for avoiding surgical re-intervention with possible patient risks and additional costs. Also these aspects should be evaluated to avoid the risks of prolonged and invasive surgical intervention occurring in total hip arthroplasty.

**Key words:** femoral neck fractures, prosthesis of the hip, arthroplasty

## **186. FRACTURES OF THE DISTAL HUMERUS, CLASSIFICATION, DIAGNOSIS, TREATMENT**

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**Introduction.** Distal humerus fractures are associated with many problems like fracture comminution, osteoporotic bone and complex fracture anatomy. Majority of the distal humerus fractures (96%) have a complex pattern involving both the columns and the articular surface (AO type B and C injuries). Distal humerus fractures comprise 1–2% of all fractures in adults with a reported incidence of 5.7 per 100 000 per year.

**Aim of the study.** To evaluate the intermediate term results (follow up of two years) of distal humerus fractures according to data from medical records, implementation of AO classification (Arbeitsgemeinschaft für Osteosynthesefragen) and its codification, type of implant used in fracture fixation, specific parameters of elbow postsurgical treatment.

**Materials and methods.** We have proposed a study of patients with distal humerus fractures (DHF) which consecutively was treated in department of Hand Pathology with the application of microsurgical techniques (6 Section) of Traumatology and Orthopedics Clinical Hospital, Chisinau in the period 2016-2017. Final outcomes were determined by using Disabilities of Arm and Shoulder and Hand (DASH) score and the Mayo Elbow Performance (MEP) score calculated along with complete range of motion. All results were presented as mean  $\pm$  standard deviation ( $\pm$ SD).

**Results.** According to AO codification of DHF were determinate type A – 10, type B – 6, type C – 40 and in total were investigate 56 patients. The report between sex was 3:1 (42:14) with predomination of female gender. In three cases was achieved close reduction of FHD type A and fixation was obtained with k-wires. In rest patients were apply open reduction and internal fixation according to AO types of FDH in type A – 2 case was use k-wire an tension bands – and one case orthogonal plating; type B – lag screw in 2 cases and k-wires fixation in 4 cases; in type C was the main goal to obtain the triangular stability with restauration of three columns and were used k-wire an tension bands in 20 cases, orthogonal plating in 9 cases and at 11 cases parallel plating. All fractures healed, and radiographic union was observed at an average of 3 months.

Was possible to investigate MEP and DASH scores at 19 patients with a mean of 85±17 and 39±23.

**Conclusions.** Outcome of open reduction and internal fixation of distal humerus fractures can result in high union rates with acceptable outcome DASH and MEP scores.

**Key words:** distal humerus fractures, column, fracture fixation, bone plates

## **187. SEPTIC COMPLICATIOIS OF THE KNEE ARTHROPLASTY. CLINICAL PICTURE. DIAGNOSIS. TREATMENT**

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**Introduction.** Knee prosthesis in 90% of cases permits the removal of the algic syndrome and improve the quality of patients lives for 15 years and more. According to the arthroplasty records in the US, in 2008 were performed 39286 primary total knee arthroplasties and 2458 revision arthroplasties. In the Republic of Moldova more than 12000 patients are registered in the waiting list for endoprosthesis.

**Aim of the study.** Evaluation of septic complications in knee arthroplasty, symptoms examination and diagnostics, developing an antibacterial therapy management program.

**Materials and methods.** A total of 400 analyzed medical records of patients with endoprosthesis knee were evaluated, but the study was conducted on a sample of 16 patients with septic complications after knee endoprosthesis admitted in ward no. 5 Clinical Hospital of Orthopedics and Traumatology between 2011-2017. The study was conducted under a protocol of individual study, and the study criteria included: age, sex, type of surgery, the location of the infection, the pathogen resistance to antibiotics, days of hospitalization and associated risk factors.

**Results.** Morbidity due to septic complications in knee arthroplasty was 4% cases per 100 operations. The prevalence of septic complications was higher among women - 62,5%. Prevalence increased with age, between 50 - 59 years: 25%, between 60 - 69: 50%. More prevalent pathogens agents were Gram-positive microorganisms, constituting 63.6% of the total of 22 strains and Gram negative - 36.6%. The predominant bacteria were *S. Aureus* (31.8%), followed by *S. Epidermidis* (18.8%), *E. coli* (13.6%). The incubation period of purulent septic infections that occurred in these patients was approximately 12 months. It has been demonstrated that the patients from the units of endoprosthesis were treated with combined antibiotic therapy. According to the study, the top choice was the treatment consisting of two antibiotics - 37.5%. And depending on the surgical treatment of septic complications applied to the knee, the highest percentage rests with the ablation of the prosthesis with the application of a cement spacer and arthrodesis with the application of the Ilizarov-type extra-focal synthesis apparatus - 37.5%.

**Conclusions.** It has been demonstrated that antibiotic therapy in the treatment of septic complications of knee joints is given empirically and irrational by combining 2 or more antibiotics, which causes resistance of pathogenic microorganism to antibiotics. To this purpose it is necessary to permanently monitor the circulating causative agents from the hospital and the antibiotic-resistance / sensitivity depending on the type of microorganism.

**Key words:** knee arthroplasty, knee defects, infection, antibiotic treatment

## **188. CONTEMPORARY METHODS OF SURGICAL TREATMENT OF RECURRENT DISLOCATION OF HUMERAL HEAD**

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