All patients were treated surgically, due to the fracture of a limb, average age was 51 years, with age limits 43-78 years. The patients were classified according to the age of diabetes, glycemic control at the moment of hospitalization, superior or inferior limb.

**Results.** All 64 patients had a surgical intervention, including intramedullary nailing, ORIF, ring fixator (Ilizarov) or external fixator. 58 (90.6%) patients were hospitalized due to inferior limb fracture, from anamnesis mostly because of falls. 46 patients - with uncomplicated diabetes, and without end-stage organ disease and glucose level less than 10 mmol/l demonstrated improved outcomes, faster tissue healing (they were discharged from hospital approx after 9 days) and a lower rate of complications (only 6 of them). The other 18 patients with preoperator glucose above 10 mmol/l, 14 of them had malunion/delayed union/nonunion or impaired wound healing. The average period of hospitalization was 17 days. Patients with diabetes over 13 years - had a higher glucose level and higher complication rate.

Conclusions. In diabetes, the regeneration of soft tissues is a big challenge, and what at first glance appears to be a routine fracture it may be turned into a difficult case requiring additional strategies to avoid limb loss. Regardless of which treatment method one chooses for a fracture in a patient with diabetes, an important component to preventing complications is tight glycemic control and minimal incisions because maintaining a proper physiologic glucose levels helps encourage wound healing, reducing also and the days of hospitalization.

**Key words:** fracture; diabetes; glucose; complications.

## 114. SURGICAL TREATMENT OF UPPER LIMB TUNNEL SYNDROMES

Author: **Dorina Trofăilă** Co-author: Stefan Cojocari

Scientific adviser: Ion Vacarciuc, MD, PhD, Associate Professor Department of Orthopedics and Traumatology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** People usually are affected by entrapment neuropathies, sometimes past without some health problem, other evolet to chronic stage, especially common among individuals with predisposing occupations or caused by main medical conditions.

**Aim of the study.** Analyzing the intermediate term results (follow up of two years) of entrapment neuropathies of upper limb according to data from medical records, classification and surgery tactics.

Materials and methods. We have proposed a study of patients with carpal tunnel syndrome, neuropathy of ulnar nerve at the elbow and wrist level, which consecutively was treated in department of Hand Surgery with the application of microsurgical techniques, of Traumatology and Orthopedics Clinical Hospital, Chisinau in the period 2018-2019. Final outcomes was determined by using Disabilities of Arm and Shoulder and Hand (DASH) score and the wrist MAYO score. All results were presented as mean  $\pm$  standard deviation ( $\pm$ SD).

**Results.** Were determined 289 clinical cases of of entrapment neuropathies of upper limb. Most of them were female with a prevalence of 3:1 (W:M=217:72). The average age is 58,1 years (max 88, min 17 SD  $\pm$ 11,68). From rural area population were the main part of patients - 158 patients (54,67%). Average hospitalization was 6 days(max 12, min 1), 33 cases were practiced with 1 day surgery, also in mild cases 2(56 cases), 3(118 cases), 4(56) days after surgery patients, rest patient with severe stages 5 or more days (26 cases) with additional kinesiotherapy. According by stage entrapment neuropathies of carpal tunnel syndrome were

85 cases - stage II, 149 - stage III and 18 cases - stage IV. With entrapment, neuropathies of ulnar nerve at the elbow were 28 cases and 3 cases at the wrist level. Common entrapment neuropathies of median and ulnar nerve of the wrist zone were determined in 6 cases. Main type of treatment in carpal tunnel syndrome were decompression of carpal tunnel with resection a part of anterior transverse ligament of the wrist - 237(82%), and when at the sonographic examination compression zone were more the 40% of pattern nerve has been apply neurolysis (15 cases). Surgery of cubital tunnel syndrome has been consist of transposition of ulnar nerve in 18 cases and with neurolysis in 10 cases. Guyon tunnel syndrome were treated with neurolysis in all 3 cases. Carpal tunnel and Guyon tunnel syndromes of the hand were treated by neurolysis(6 cases). All had well evolution after surgery at an average of 1,5-3 months. Was possible to investigate MAYO and DASH scores at 40 patients with a mean of 82±1 and 12±00. Conclusions. A good surgery management of entrapment neuropathies of upper limb involved to take decision that making to avoid later entrapment neuropathies complications.

**Key words:** Entrapment neuropathies, tunnel syndrome, neurolysis

## 115. SURGICAL TREATMENT OF IDIOPATHIC SCOLIOSIS

Author: Justina Buga

Scientific adviser: Caproș Nicolae, MD, PhD, Professor, Department of Orthopedics and Traumatology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Scoliosis is a complex deformity of the spine with a sideways curvature and vertebral torsion, with changes into neuro-muscular and connective tissues, with functional and organic disorders of different severity, with damage of the human psyche and psychosocial disability. The incidence of scoliotic deformities in adolescents is 14-17% and in idiopathic ones is 15,3% of the population with a ratio by gender women and men 3,5:1. The treatment of scoliosis is still far from being perfect, even though there are numerous contemporary methods of conservative and surgical treatment, performed at posterior and anterior structures of the spine.

**Aim of the study.** The purpose was to study and analyse the importance, efficiency, complications, the advantages and disadvantages of the new surgical procedures of correction, reconstruction and stabilization of the vertebral column of patients with scoliotic deformities of the spine, also to improve the outcome results in the surgical treatment all being based on a complex clinic-imagistical study.

**Materials and methods.** In order to fulfill the tasks, were analysed the results of surgical treatment applied during the period of 2017-2019 to the patients between 13 and 64 years old. To perform comparative analysis of surgical treatment all patients have been divided depending on age, sex, the surgical method, the type of spine deformity, the curative strategy, the implanted metallic construction, surgical approach.

**Results.** The average duration of intervention: 207,1±7,9 min. Intraoperative hemorrhage: 638,2±3,7 ml. The angle of deformity of the primary curvature: 46,60 – preoperative, postoperative correction: 22,20. The postoperative correction kept: 28,70.

Conclusions. The treatment of choice of severe forms of scoliosis remains the surgical correction of the spine. This allows the angle of scoliosis deformations to be reduced, correction of pulmonary, heart, vessels position. The efficiency of surgical treatment is appreciated not only by the cosmetic data obtained, but also by the re-establishment of the