

Scientific adviser: Grigore Verega, MD, PhD, Professor, Department of Traumatology and Orthopedics.

¹*Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova

²SMPI Institute of Emergency Medicine

Introduction. Reconstruction of defects in the head and neck poses a unique challenge. Unlike other areas of the body, immediate or early closure of head and neck defects is vital for several reasons. Key to success of surgery is choosing an appropriate reconstructive option based on the patient's wishes and necessities. Where possible, free tissue transfer provides the best functional and aesthetic outcomes for the vast majority of defects.

Aim of the study. To present an algorithm to guide choice of flap selection based on our clinic experience and review principles of reconstruction and secondary surgery for head and neck defects.

Materials and methods. Clinical series of patients undergoing head and neck reconstructions in last decade were analyzed and grouped according to the regions: (1) scalp, (2) oral cavity, (3) mandible and (4) neck and choice of reconstruction by different types of free flaps. The study group was consisted from 14 patients, 10 males and 4 females. Average age was 46 years, with age limits 20 - 66 years. According to etiology, there were 8 defects due to cancer, and 6 defects due to trauma. Defect sizes varied up to 32 cm. Associated lesions were in 3 cases.

Results. During last decade in the IEM were performed a total of 12 reconstructions. The radial flap was the donor site in 8 reconstructions, followed by the LD flap - 3, free fibula osseocutaneous flap used in 2 cases and omentum - 1 case. In case of reconstruction of the bone and/or soft tissue (mandibular defects) we recommend to use fibula osseocutaneous flap (2), for medium-sized soft tissue defects (7) - non-innervated radial flap; for large defects and necessity to refill the cavity after bone and muscular resection or in the presence of infected granular wounds/osteitis of cranial bones (2) - LD flap using muscles to cover cavities. In case of massive defects (total or subtotal lack of scalp) it can be used the omentum flap. In case of oral mucosa defects and/or tongue with a possible necessity for further innervation (1), we recommend to use radial flap with reinnervation by suturing lateral or medial cutaneous nerve of the forearm to sensory nerves of the recipient site. 85% of the reconstructions were immediately after excisions or trauma. Surgical re-exploration was necessary in 3 patients; the failure rate from marginal necrosis of the flap was in 2%. Other complications encountered in our group: hematoma – 1 case, venous deficiency – 1 case, arterial – 1 case. In 1 case was performed titanium plate fixation for parietal bone defect after excision. All flaps survived and all donor sites were closed primarily. After a mean follow-up time of 8.1 (5-18) months, there were no problem with the donor or recipient sites.

Conclusions. Head and neck defects can lead to devastating cosmetic and functional deficits with resultant psychological, physical, and nutritional detriment. In our experience, free tissue transfers have been shown to be a successful method for one staged reconstruction in all cases, with flap success rates of 98-99% and low re-explorations rate (2 %). In treatment and choice of reconstruction it is important to determine the goals of reconstruction and to select the most appropriate option for the particular defect.

Key words: free flap, head and neck, reconstruction, algorithm

192. SURGICAL TREATMENT OF POSTTRAUMATIC DISTAL RADIOULNAR JOINT INSTABILITY

Author: **Stefan Cojocari**

Scientific adviser: Anatolie Taran, MD, PhD, Professor, Department of Traumatology and Orthopedics

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Introduction. The distal radioulnar joint (DRUJ) is unique as it is not a joint but a continuation of the forearm joint. The incidence of DRUJ instability after a distal radius fracture is reported to be between 10% - 40%. DRUJ instability is an increasingly recognized clinical problem. Most patients experience no symptoms but in some people it can lead to disabling symptoms such as pain and impaired function. There has been an increasing trend to intervene surgically to treat DRUJ instability but with variable result.

Aim of the study. To evaluate the intermediate term results (follow up of five years) posttraumatic DRUJ instability according to data from medical records, surgically method used in DRUJ instability, follow-up by Mayo wrist score, Disabilities of the Arm, Shoulder and Hand questionnaire (DASH score).

Materials and methods. We have performed a study of patients with DRUJ instability that 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 2013 - 2017. Outcomes were determined by using DASH and Mayo wrist scores. All results were presented as mean \pm standard deviation (\pm SD).

Results. We found 28 patients with posttraumatic DRUJ instability. The report between sex was 18:10 with predominance of female gender. Exist 3 types of surgically methods: direct, indirect and reconstruction of ligaments of DRUJ. At 26 patients was applied direct surgically procedure from them extrinsic interventions: were 4 – Darrach procedure; correction osteotomies of ulna – 9; correction osteotomies of posttraumatic malunion of distal radius – 12; and one intrinsic procedure Sauve-Kapandji. Stabilization by reconstruction of ligaments of DRUJ instability were treated 2 patients. DASH and Mayo wrist scores showed poor results at patients after Darrach procedure with a mean of 55 ± 2 and 60 ± 1 , satisfactory result at Sauve-Kapandji procedure 75 and 80, relatively good results at correction osteotomies of posttraumatic malunion of distal radius 70 ± 2 and 75 ± 1 and excellent result were obtained just at younger patients (6 cases) to which were applied surgically procedure of correction osteotomies of ulna 88 ± 2 and 90 ± 1 , in rest was poor result 50 ± 5 and 60 ± 2 .

Conclusions. Diagnostics of the DRUJ Instability was problematic early in Republic of Moldova. It is necessary to make a study to improve the imaging quality diagnoses of soft tissue pathology, especially for peripheral TFCC tears and TFCC detachment from the fovea for establishing the correct diagnosis and apply an ample reconstruction.

Key words: distal radioulnar joint, instability, stabilisation.

193. SURGICAL TREATMENT OF OSTEOPOROTIC TROCHANTERIC FRACTURES

Author: **Igor Tcaciou**

Scientific adviser: Vitalie Chirila, MD, PhD, Associate professor, Department of Traumatology and Orthopedics

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Introduction. The trochanteric fractures are often encountered in elderly people and make up 3 - 5% of all falls. At the same time, the fracture rate of these fractures increases with age and in patients over 70 years risk for fracture will be ten times bigger than those aged 50-60 years.

Over 50% of women and 45% of men over the age of 50 do physiological osteoporosis, older women have a 50% higher risk than men to make a fracture.

Aim of the study. To establish the correlation between trochanteric fractures and osteoporosis, as well as the implant that will be necessary to be used for the surgical treatment of these fractures.

Materials and methods. In this study were included 34 patients with trochanteric fractures, 14 men and 20 women hospitalized in the 2nd Department at the Clinical Hospital of Orthopaedics