(FI), fasting serum triglycerides (TG), total serum cholesterol (TC), fasting plasma glucose (FPG) and plasma glucose 2 hours after the performance of the oral glucose tolerance test (2-h G). Homeostatic model assessment for insulin resistance (HOMA-IR) index was calculated as fasting insulin concentration (microunits per milliliter) x fasting glucose concentration (milimolar)/22.5.

Results and Discussion. 58.33% of study participants had insulin resistance. Insulin resistant participants had significantly higher level of 2-h G, FI level as well as TG levels ($p<0.05$), compared to non-insulin resistant group. Strikingly, 70.73% of the pubertal adolescents were insulin resistant in comparison to 49.09% of the preadolescents ($p=0.03$). Significantly higher percentage of insulin resistant participants were girls ($p=0.009$). Our study results also showed positive, but weak, correlation of HOMA-IR with the age, FPG, TG and BMI of the participants ($p<0.05$).

Conclusions. In general, insulin resistant obese children and adolescents tend to have worse metabolic profile in comparison to individuals without insulin resistance. It is of note that the highest insulin resistance was also linked with the highest concentrations of triglycerides.

MANAGING MICROCIRCULATORY DISORDERS IN MOUSE MODEL OF ILEUS WITH OPIOID PEPTIDE

*Kovalenko A. A., Kryuchko P. V.**

Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russia
dspavel@mail.ru

Key words: *ileus, opioid peptide, lymphatic system, mouse model*

Background. Ileus is a formidable complication of various diseases of the abdominal cavity organs and the cardiovascular system and may require surgical treatment.

Aim. The pathogenesis involves a violation of the microcirculation of the intestinal wall that is rich in lymphatic vessels.

Material and Methods. Studies were carried out on white mongrel male rats (n=219) weighing 50–250 g underwent surgical removal of small intestinal obstruction after intraperitoneal injection of a lymph-stimulators direct agonist delta opioid receptors, peptide number 171 in the anastomosis and adjacent tissues and the control group. Biomicroscopy of mesentery of small intestine of rat and registration of contractile activity of lymphatic microvessels was carried out using luminescent microscope.

Results and Discussion. The use of peptide number 171 in treatment of ileus restored microcirculation, reduced edema and damage to the tissue of the small intestine and allowed to increase the survival rate of animals irrespective of weight.

Conclusions. Lymph-stimulators direct agonist delta opioid receptors, peptide number 171, helps to reduce the manifestations of ileus, improves microcirculation, prevents damage to the wall of the small intestine. The use of peptide number 171 increases the survival rate of animals with its preliminary introduction.

COMPILATION OF OSTEOSYNTHESIS METHODS IN LARGE LIMB SEGMENTS REPLANTATION

Krinetskaya Y.

Medical faculty, I. M. Sechenov First Moscow State Medical University, Moscow, Russia
Juliakrinetskaya@gmail.com

Key words: *replantation, osteosynthesys, reconstructive surgery, traumatology*

Aim. To compare metalosteosynthesys methods during large limb segments replantation and to discover the most accessible and convenient method of bone fragments fixation which is able to achieve adequate bone consolidation.

Conclusions. Replantation technique has been in use in our country for many years, demonstrating great outcomes. Research relevance is due to nessesity of comparing different osteosynthesys methods, considering adequacy of fracture consolidation, as well as comfort ability of use during different operational phases, incidence of complications, quality and afford ability of used techniques. Comparative analysis of articles, which were released during last 15 years, was made. General techniques which are being used in present day limb replantation were selected, their advantages and disadvantages were ascertained with use of specially selected criteria. Patient stability, condition, age, ability of using another methods, and time of limb ischemia (different groups of patients was made) have been taken into account. All these information is comprised into graphic charts and spreadsheets.

ENDOSCOPIC MUCOSAL RESECTION OF METASTATIC GASTRIC MALIGNANT MELANOMA

*Kudryavitsky E. E.[1], Ryabov K. Y.[2], Perfilyev I. B.[3], Pirogov S. S.[3], Bayramova T. A.[4], Bokova E. O.[5]**

[1] V. M. Buyanov City Clinical Hospital, Moscow, Russia; [2] D. D. Pletnev City Clinical Hospital, Moscow, Russia; [3] P. A. Gertsen Moscow Research Oncology Institute, Moscow, Russia; [4] Russian Medical Academy of Postgraduate Education, Moscow, Russia; [5] Sechenov First Moscow State Medical University, Moscow, Russia
eobokova@gmail.com

Key words: *endoscopic resection, melanoma, surgical treatment, EMR*

Background. Gastrointestinal malignant melanoma is a rarely observed condition. There is no gold standard of metastatic melanoma treatment. By

patients with primary melanoma, surgical excision is preferred.

Aim. Those with malignant melanoma, metastasizing into the gastrointestinal mucosa, can benefit from complete endoscopic resection.

Material and Methods. A 57-year-old man had a cutaneous femoral melanoma excised in 2008. Three years later he underwent subtotal pancreatic resection and splenectomy for a pancreatic tail neuroendocrine tumor. In 2013 a metastasis of the melanoma into the lower third of the gastric mucosa was discovered, the complete endoscopic mucosal resection was performed. In 2015 the neoplasma metastasized into the soft tissues of the back.

Results and Discussion. The recurrence-free period after the endoscopic mucosal resection for metastatic malignant gastric melanoma lasted more than 2 years (27–29 months). For patients with metastatic melanoma surgery remains the method of choice combined with neoadjuvant therapy, or the salvage treatment. Endoscopic resection offers an effective treatment of mucosal malignant tumors. Currently complete surgical resection with intact margins is the first-line treatment of malignant melanoma in patients with one or few solitary metastases. In some studies of sequential complete resections for recurrences the 5-year survival was about 19%. Complete resection shows much better results than the incomplete one (a 75 vs 25% 1-year survival).

Conclusions. Complete endoscopic mucosal resection can be an effective minimally invasive method of metastatic malignant melanoma treatment in the presence of solitary metachronous metastases into mucosa.

MODIFIED RADIOFREQUENCY ABLATION TECHNIQUE IN VARICOSE VEIN TREATMENT

Kulakova A. L., Protasov A. V.

Peoples' Friendship University of Russia, Medical Institute, the Department of Operative Surgery and Clinical Anatomy, Moscow, Russia
Sable@ro.ru

Key words: *radiofrequency ablation, varicose veins, VNUS ClosureFast*

Aim. Of this research is to improve the results of radiofrequency ablation (RFA) for patients with varicose veins (VV), to optimise the number of cycles on different segments of the pathologically changed vein.

Material and Methods. The study involved 74 people, both sexes (40% women, 60% men), ages from 22 to 83 years. The clinical stage of the disease was determined by C-component of the international CEAP classification (1994): 80% — C2, 16% — C3, 4% — C4. All patients underwent preoperative ultrasound examination to determine the presence of veno-venous reflux, to evaluate the diameter of the target great saphenous vein (GSV). According to the standard operation protocol of the VNUS ClosureFast device (VNUS Medical Technologies, San Jose, California), two cycles of treatment are applied on the vein segment closest to the saphenofemoral junction and one for each other target vein segment. However, if the diameter of the GSV is more than 10 mm and up to 12 mm two cycles of treatment are not enough. 20.3% (n=15) patients underwent modified RFA technique: three cycles of treatment for proximal (sapheno-femoral) segment, two cycles for the next 7-cm segments and one cycle for the distal segment.

Results and Discussion. If the diameter of the GSV is more than 10 mm and up to 12 mm the usage of multicycle RFA is justified.

Conclusions. The RFA method is effective in VV treatment of the lower limbs. The number of cycles applied to the target vein segment depends on the diameter of the latter.

ANATOMICO-HISTOLOGICAL STUDY OF THE CONTENTS OF CANALS OF THE MENTAL SPINE

Kytko O. V. [1], *Vasiliev Y. L.* [1], *Saleeva G. T.* [2], *Kuzin A. N.* [3]

[1] Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University); [2] Kazan State Medical University of the Ministry of Healthcare of Russia, Kazan, Russia; [3] A. I. Yevdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia
y_vasiliev@list.ru

Key words: *anatomico-histological study, contents, canal, mental spine*

Aim. To examine the anatomical and radiological features of mental area of the mandible.

Material and Methods. In the course of this anatomical study was made craniometric measurement of 50 corpses, aged 18–70 years without maxillofacial pathology. For histological research were taken neurovascular bundle length of 0.1–0.2 cm of the channel region of mental spine (MS). The material was impregnated with silver nitrate by Christensen.

Results and Discussion. As a result of anatomical and radiological examinations were found 3 types of mental spine channels. I type: a narrow channel having a main direction of the mouth opening and MS down the center of the mandible projection falling into the channel of intraosseous part of the mental nerve; II type: channel having a wavy line from the mouth of the hole MS and down to the center of the mandible, perforating channel of intraosseous part of the mental nerve; III type: crumbly channel having a main direction from the MS foramen and chin pronounced curvature in the lower third, projecting