(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