prolapse of one of the hemorrhoids after laser treatment, surgical lifting of these formations was additionally performed. In 10 patients, surgical intervention was performed under local tuminescent anesthesia + initial short-term intravenous anesthesia, and in 5 operated patients, the analgesia option was exclusively tuminescent local infiltration. The vast majority of laser treatments had no postoperative complications. On days 12-13 after surgery, only 1 patient showed the presence of non-abundant rectal hemorrhage, which required repeated intervention in the form of surgical hemostasis of one of the zones of the rejected necrotic tissue of the anal canal. 98% of those operated with the use of laser technologies were transferred to outpatient treatment on 2-3 days after surgery, the remaining 2% – on 4-5. In the long-term period, none of the operated patients complained, and there were no requests for medical help regarding the treated pathology.

Conclusions. Laser surgical technologies have a number of advantages over significantly more invasive and poorly predictably effective traditional interventions in the surgical treatment of hemorrhoidal disease. Based on the obtained treatment results, clinical manifestations and statistical data of the postoperative period, laser methods have objectively become promising alternative options for surgical treatment of hemorrhoidal pathology in anorectal anatomical zone.

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«NON-INSULIN-BASED» INSULIN RESISTANCE INDEXES IN PREDICTING OBSTRUCTIVE SLEEP APNEA AMONG ATRIAL FIBRILLATION PATIENTS

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Relevance. The triglyceride glucose (TyG) index, the TyG-Waist Circumference (TyG-WC), the TyG-Body Mass Index (BMI)) are surrogate indexes of insulin resistance (IR) and are discussed to be linked with the risk of obstructive sleep apnea (OSA) and its severity [1-3]. There are facts that they are related to mortality among OSA participants [4], are independently associated with atrial fibrillation (AFib) recurrence after ablation [5]. There do not exist studies focusing on the link between the “non-insulin-based” IR indexes in predicting OSA among AFib patients, leaving uncertain their diagnostic ability in such subpopulation.

Target. To study and compare the value of “non-insulin-based” resistance indexes (TyG, TyG-BMI, TyG-WC) in predicting OSA among AFib patients.

Research methods. A total number of 143 AFib patients (mean age 55, 68±8,12 years; 70,63% males), who underwent overnight cardiorespiratory monitoring, were included in this study. The anthropometric and laboratory studies were performed, including the calculation of “non-insulin-based” resistance indexes (TyG, TyG-BMI, TyG-WC). All statistical analyses were performed using Statistica 10.0 (with $p<0,05$ representing significance), program RStudio 1.1.183.

Results and their discussion. Patients in the OSA group exhibited higher levels of TyG index ($p<0,001$), TyG-BMI index ($p<0,001$), and TyG-WC index ($p<0,001$) compared to the non-OSA group. In univariate regression analysis were measured the TyG index, the TyG-WC index and the TyG-BMI index for the prediction of OSA. The odds ratios for the TyG-WC, the TyG, and the TyG-BMI indices were 1,027 (1,020-1,036), 155,712 (35,227-943,861), and 1,055 (1,038-1,074), respectively. The TyG-WC index occurred to be the most strongest predictor of OSA in AFib patients (AUC of 0,906 (95% CI: 0,853-0,906)). Closely behind, with an AUC of 0,887 (95% CI: 0,828-0,887), was the TyG-index. However, the TyG-BMI index’s diagnostic capacity was comparatively weaker, as evidenced by its AUC of 0,822 (95% CI: 0,741-0,822).

Conclusions. TyG index, TyG-WC index and TyG-BMI index were associated with OSA presence in AFib patients. The TyG-WC index was detected the strongest predictor compared to other explored “non-insulin-based” insulin resistance indexes.

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