**Introduction.** Mini-sternotomy for plastic surgery or isolated aortic valve replacement requires rapid recovery with diminished convalescence time.

**Aim of the study.** Mini-sternotomy for plastic surgery or isolated aortic valve replacement requires rapid recovery with diminuated convalescence time, improved cosmetic outcome and lower hospital costs. The basic clinical benefit of a mini-sternotomy implies that the lower half of the ribcage remains intact. The basic conduct of virtually all other aspects of the aortic valve replacement procedure remains the same. Therefore, similar long-term results are expected.

**Materials and methods.** In the period April 2014 - April 2019 in Medpark Hospital were operated 76 patients with severe solitary aortic valve defect. All patients underwent inverted J-sternotomy, which extended over the sternum handle to the third right intercostal space, without opening the pleural cavity. The ages of the patients ranged from 23 to 77 years, 50 -men and 26 -women. The patients were kept in the Trendelemburg position, used being the bilateral venous cannulation, the common aortic cannulation. All patients benefited from bioprostheses and mechanical prostheses with diameters between 21 and 29 mm. Three patients underwent conversion to conventional sternotomy.

**Results.** The length of stay in intensive care was significantly shorter with 0.61 days in favor of the mini-sternotomy group. There was no benefit in terms of ventilation duration. There was evidence suggesting a reduction in blood loss and length of stay in the hospital in the mini-sternotomy group. This did not prove statistically significant (the reduction with, on average, by 114.4 ml and 2.03 days less hospitalization). Deep sternal infections were not reported.

**Conclusions.** Mini-sternotomy for isolated aortic valve replacement significantly reduces the length of stay in cardiac intensive care. Other short-term benefits may include lowering blood loss. At the same time, deep sternal infections were not reported, which is a remarkable result. This approach provides greater comfort to patients in the early postoperative period, with a painful syndrome decreased and a greater desire for early discharge from hospital and all its inherent advantages.

**Key words:** Mini-sternotomy, Aortic valve replacement, Trendelemburg position, Bioprostheses prostheses, Mechanical prostheses, J-sternotomy Cardiac Intensive Care

## 247. ADMINISTRATION OF ANGIOTENSIN-CONVERTING-ENZYME INHIBITORS IN THE TREATMENT OF HYPERTENSION

Author: Tudor Ursu

Scientific adviser: Evghenii Cobîleanschii, Associate Professor, Department of Internal Medicine, Occupational Diseases, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction**. High blood pressure is an extremely important public health problem worldwide. According to the WHO, the number of adults with high blood pressure increased to 1.13 billion in 2015. Considering the cardiovascular diseases, the high blood pressure complications accounted for 9.4 million deaths worldwide in 2015. In Moldova, according to statistical data, 58.1% of deaths were caused by cardiovascular diseases in 2018. The data of the National Statistics Bureau demonstrate the prevalence of circulatory system diseases in the structure of population morbidity in 2018 (707,800).

Aim of the study. This study aims to assess the antihypertensive efficacy of various preparations forming the class of angiotensin-converting-enzyme inhibitors in patients with

high blood pressure. Thus, the high blood pressure control is achieved by reaching the target values in the middle-aged patients (130/85) and reducing the pressure to at least 140/90 in the elderly.

**Materials and methods..** The study was performed on 60 patients, who had a blood pressure level of  $\geq 140/90$  when admitted to the hospital. Thirty patients took Lisinopril and other thirty patients took Ramipril. The dynamics of the values was monitored and the blood pressure levels at the time of discharge and hospitalization were compared.

**Results.** We found that of thirty patients taking Lisinopril, systolic blood pressure decreased by 0-10 units in 7 patients (23%), by 11-20 units in 14 patients (47%), by 21-30 units in 6 patients (20%), by 31-40 units in 2 patients (7%), and by 41-50 units in one case. Among patients taking Ramipril, the pressure decreased by 0-10 units in 2 patients (7%), by 11-20 units in 11 patients (37%), by 21-30 units in 9 patients (30%). It decreased by 31-40 units in 7 patients and by 41-50 units in 1 patient. At discharge, 18 patients taking Ramipril had blood pressure <140/90, compared with those taking Lisinopril – 14.

**Conclusions.** Converting enzyme inhibitors are an effective therapeutic class in lowering blood pressure. Ramipril has decreased the pressure values by more units compared to Lisinopril.

**Key words:** converting enzyme inhibitors, high blood pressure.

## **FUNDAMENTAL SCIENCES SECTION**

## **DEPARTMENT OF HUMAN ANATOMY**

## 248. ANATOMICAL VARIATIONS OF THE ARTERIAL CORONA MORTIS

Author: Dan Croitoru

Scientific adviser: Zinovia Zorina, PhD, University Assistant, Department of Human Anatomy *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** The arterial anastomoses of the lower limb magisterial arteries are of great clinical significance in collateral circulation. The obturator artery is one of the branches of the anterior trunk of the internal iliac artery that supplies the pelvis and the thigh. The obturator artery gives off a pubic branch which anastomose with the obturator branch of the inferior epigastric artery, thus determining the anastomosis called "corona mortis" (Kirchner), because its injury in herniotomy can cause a fatal bleeding. A detailed comprehension and knowledge of the morphological, topographic and individual peculiarities of the "corona mortis" will contribute to the avoidance of complications in surgery of the pubic and inguinal regions.

**Aim of the study.** To mark out the anatomical variations of the "corona mortis" using modern imagistic methods.

Materials and methods. We have studied the branches of the external iliac artery and the anterior trunk of the internal iliac artery on 197 selective angiographies that were obtained from the database of the Vascular Surgery Department of the Clinical Republican Hospital *Timofei Moșneaga*, Republic of Moldova. The angiographies on the patients in the study poll were made in order to conclude the severity of the peripheral occlusive syndrome. The age range of the patients was 20-80 years; the median age was 65 years. Depending on gender, 161 angiographies were made on male patients and 36 angiographies on female patients. The origin of the internal and external iliac arteries, their paths, branches and branching type, relations towards the neighboring vascular elements, and arterial anastomoses of the pubic region were