

## **181. DIASTOLIC DYSFUNCTION – PITFALLS OF ETIOLOGICAL DIAGNOSIS IN CKD PATIENTS**

Author: **Diana-Andreea Moldovan**

Scientific adviser: Andreea Varga, MD, PhD, Ioan Țilea, MD, PhD, Associate professor, *George Emil Palade* University of Medicine, Pharmacy, Science and Technology of Targu Mures

**Introduction.** It is acknowledged that patients with chronic kidney disease (CKD) have an increased risk of cardiovascular morbidity. One of the most frequent consequences among the cardiac alterations is the decrease of the heart's performance during diastole. Sometimes it is difficult to indicate the cause-effect relationship taking into account other comorbidities of these patients, which can likewise lead to diastolic dysfunction.

**Aim of the study.** The aim of this study is to investigate the main chronic morbidities found in patients with CKD and diastolic dysfunction.

**Materials and methods.** We performed a retrospective study on 44 patients (21 males and 23 females). Patients with the diagnosis of CKD and altered echocardiographic parameters of the diastolic function were included in the study. Heart failure with reduced ejection fraction and implantable cardiac devices were exclusion criteria. We analysed the data regarding personal features (age, gender, environmental origin, BMI) and the presence of other comorbidities.

**Results.** The mean age of the group was 71,84 years (range from 54 to 86 years), with a distribution of 53.49% in the rural area. The patients were diagnosed with CKD stages 2-5 (18.6% stage 2; 51.16% stage 3A; 27.91% stage 3B; 2.33% stage 5) and diastolic dysfunction (88.37% had impaired relaxation, 6.98% had pseudonormal pattern and 4.65% had reversible restrictive pattern). We found arterial hypertension (AHT) as the most frequent comorbidity, with 95.35% of the patients being affected (2.33% stage 1; 44.19% stage 2; 48.84% stage 3). Hypertensive cardiopathy appeared in 72% of the total number of patients, while chronic ischemic cardiopathy was found in 60.47% of the subjects. Diabetes Mellitus type 2 was diagnosed in 46.51% of the cases. 37.21% of the patients associated obesity of different degrees and 55.81% were overweight.

**Conclusions.** Despite the fact that CKD can lead to diastolic dysfunction, according to our results, patients often associate other comorbidities that can interfere with the pathophysiology process, such as AHT, ischemic cardiopathy, Diabetes Mellitus type 2 and obesity.

**Key words:** diastolic dysfunction, chronic kidney disease, comorbidities

### **DEPARTMENT OF CLINICAL SYNTHESIS**

## **182. COMMUNITY-ACQUIRED VIRAL PNEUMONIAS: ETIOLOGICAL PECULIARITIES**

Author: **Viorica Chihai**

Co-author: Cascaval Virginia

Scientific adviser: Tatiana Dumitras, MD, PhD, Associate Professor, Department of Internal Medicine, Discipline of Clinical Synthesis, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Molecular diagnostic tests have greatly increased our understanding of the role of viruses in pneumonia, and findings indicate that the incidence of viral pneumonia has been underestimated. Depending on the virulence of the organism, as well as the age and comorbidities of the patient, viral pneumonia can vary from a mild, self-limited illness to a life-threatening disease.

**Aim of the study.** The aim of study is to highlight the etiological peculiarities of community-acquired viral pneumonias.

**Materials and methods.** In the study were included the patients admitted to Sfanta Treime Municipal Hospital during the year 2019 with community-acquired pneumonia (CAP) and tested for viral infections. The patients were chosen based on the clinical criteria: the presence of fever, acute onset, asthenia, myalgia, headache, cough, expectoration and dyspnea. The testing methods included detection of respiratory viruses in nasopharyngeal swabs by PCR and microbiological testing by blood and sputum cultures.

**Results.** Of 52 patients with CAP tested, the viral etiology was found in 42.3% (22/50). The most common was influenza A (H1N1) virus – 77.3% (17/22). Other detected viruses were rhinovirus 13.6% (3/22), metapneumovirus - 4.5% (1/22) and influenza A (H3N2) virus – 4.5% (1/22). In the majority of cases CAP had mixed viral and bacterial etiology. The most frequent association was with streptococci (*Streptococcus viridans* and *Streptococcus beta-haemolyticus*). The CAP caused by influenza A (H1N1) virus was frequently associated with severe evolution - 54.5% (12/22) and in 9.1% cases (2/22) it even lead to lethal outcome.

**Conclusions.** Viral etiology of community-acquired pneumonia is frequently detected, especially in patients with severe pneumonia. In many cases there is a mixed viral and bacterial infection.

**Key words:** community-acquired pneumonia, virus, evolution

### **183. SEVERE COMMUNITY-ACQUIRED PNEUMONIA: CLINICAL MANIFESTATIONS IN OBESE PATIENTS**

Author: **Diana Fetco-Mereuță**

Co-authors: Virginia Cașcaval

Scientific adviser: Tatiana Dumitraș, MD, PhD, Associate professor; Livi Grib, MD, PhD, Associate professor, Department of Internal Medicine, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.

**Introduction.** Community-acquired pneumonia is a leading cause of morbidity and mortality worldwide, and is strongly influenced by comorbid conditions. Obesity is associated with higher mortality rate directly proportional to higher body mass index. Obesity is also associated with an increased risk of acquiring infections such as community-acquired pneumonia.

**Aim of the study.** To evaluate the obesity influence on clinical manifestations in patients with severe community-acquired pneumonia.

**Materials and methods.** The retrospective case-control study was based on case histories analysis of patients hospitalized with severe community-acquired pneumonia in the Department of Internal Medicine, Sfânta Treime Municipal Hospital between years 2018 and 2019. The study were included 82 patients aged between 34 and 83 years, divided in two groups: group 1 (41 patients with obesity) and group 2 (41 normal weight patients).

**Results.** Invasive ventilation was necessary in 34% (28/82 patients), 16 patients with obesity and 12 normal weight patients (19% vs 15%) ( $p>0.05$ ). The mean duration of invasive