

prevalence of obesity, prior myocardial infarction and diabetes mellitus ($p>0.05$). Patients with HFmrEF more often had hypertension (33 (73%) vs 32 (91%), $p=0.04$) than patients with HFpEF. In both groups there was rather high number of patients with stable angina (20 (44%) vs 14 (40%), $p>0.05$), but patients with HFrEF more often had CCS class 3 (10 (22%) vs 1 (3%), $p=0.01$). Also, patients with HFrEF were characterized by higher class of HF (NYHA Class IV in 13 (28%) vs 1 (3%), $p<0.001$), while in HFmrEF patients NYHA class II was more common (15 (43%) vs 4 (9%), $p<0.001$).

Laboratory markers of patients in both groups had no significant differences except for urea (8.1 [6.2; 9.1] vs 6.9 [5.5; 7.7] mmol/L, $p=0.026$) and NTproBNP level (6155 [1549; 6256] vs 2495 [1716; 2661] pg/mL, $p=0.031$), which were significantly higher in patients with HFrEF. It's interesting to note that creatinine and estimated GFR levels were comparable ($p>0.05$).

Conclusion. Patients with HFrEF had higher class of stable angina and HF NYHA class ($p<0.01$), however patients with HFmrEF more often suffered from hypertension ($p<0.05$). Reliability of the obtained results should be further checked on larger samples of patients.

DELAYED RE-EMERGENCE OF MYCOPLASMA PNEUMONIAE AFTER COVID-19 PANDEMIC

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Introduction. After a three-year decline during the COVID-19 pandemic, *Mycoplasma pneumoniae* infections re-emerged on a global scale in 2023-2024. This case series examines the incidence and severity of *M. pneumoniae* infections among children and adolescents in the post-pandemic period. Furthermore, it explored the variations of biomarkers in *M. pneumoniae* infections observed in pediatric and elderly populations following the COVID-19 period.

Aim of the study. The primary objective of this retrospective case series is to determine a clear association between biomarkers *Mycoplasma pneumoniae* to further improve and support the current literature in this field of infectious diseases and to study the impact of the COVID-19 pandemic on the prevalence of *M. pneumoniae*.

Materials and methods. This retrospective case series included 105 patients hospitalized in Grodno Regional Infectious Disease Hospital with a positive *M. pneumoniae* DNA (PCR) and a positive IgM (ELISA) from September 17, 2024 to December 31, 2024. Statistical processing of the material was carried out using the StatTech v. 4.7.2 software package, Russia, using nonparametric methods and Exel.

Results and discussion. For this case series 87 (82,9%) out of 105 patients were children and 18 (17,1%) were adults; this showed a shift to pediatric

population. Furthermore, 92 (87,6%) patients out of 105 were presented with pneumonia; which subdivided into 86 (81,9%) as unilateral and 6 (5,7%) as bilateral localization, 7 (6,7%) were presented with bronchitis as the primary complain and 5 (4,7%) were presented with upper tract respiratory infection. The demographic division of patient population into city 91(86,7%) and village 14 (13,3%). Co-infections were prominent with 23 (21,9%) out of 105 patients.

It was revealed that during assessment with the application of Mann-Whitney U test for the following parameters such as CRP depending on pneumonia and fever ($p = 0,045$). Pneumonia without fever was predicted at a CRP value below 21,8 (Youden index) by ROC curve (AUC = 0.663; 95% CI: 0.526-0.799, $p = 0,045$). The sensitivity and specificity of the resulting prognostic model were 93,3% and 37,1%, respectively.

The correlation was established between PLR (platelets/lymphocyte ratio) and CRP/eosinophils ($p=0,009$), PLR (platelets/lymphocyte ratio) and NLR (neutrophils/lymphocyte ratio) ($p<0,001$), the analysis of the NMR (absolute neutrophils/absolute monocytes ratio) depending on pneumonia & fever ($p = 0,046$), the MER (absolute monocytes/absolute eosinophils ratio) depending on pneumonia & fever ($p = 0,034$), CRP/platelets depending on fever type ($p=0,004$), CRP/ absolute monocytes depending on fever type ($p = 0,006$). Furthermore, with the application of Student's t-test for assessment of $WBC \times 10^9$ depending on pneumonia & cough, it was revealed to be highly statistically significant ($p = 0,001$).

Conclusion. An epidemiological shift to pediatric population was observed. It shows a higher correlation between biomarkers such as absolute lymphocytes, WBCs, absolute eosinophils, absolute platelets and absolute monocytes was observed. Presence of co-infection is considered as the variation of immune system caused by *M. pneumonia* after the COVID-19 pandemic.

MULTIDISCIPLINARY APPROACH TO END-STAGE POLYCYSTIC KIDNEY DISEASE: A CASE OF BILATERAL NEPHRECTOMY AND TRANSPLANTATION

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Introduction. Polycystic Kidney Disease (PKD) is a genetic disorder characterized by the formation of fluid-filled cysts in the kidneys, leading to progressive renal impairment and complications such as hypertension, hematuria, and end-stage renal disease (ESRD). Autosomal Dominant Polycystic Kidney Disease (ADPKD) is the more prevalent form, accounting for approximately 85% of cases and is caused by mutations in the PKD1 and PKD2 genes. Despite advances in supportive care, many patients eventually require renal replacement therapy, including dialysis and kidney transplantation. This