

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ  
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**



## **МАТЕРІАЛИ**

**104-ї підсумкової науково-практичної конференції  
з міжнародною участю  
професорсько-викладацького персоналу  
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ  
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Конференція внесена до Реєстру заходів безперервного професійного розвитку,  
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**Чернівці – 2023**

of the joint space, whereas an ultrasound examination of the joints may show an increase in the amount of synovial fluid. In case any doubts arise, the puncture of the joint and the culture of synovial fluid, as well as the magnetic resonance imaging of the affected joints are advisable.

**Conclusions.** Thus, a differential approach to diagnosing and treating the children with coxitis has made it possible to distinguish clinical groups with specified diagnoses, which had an impact on further treatment tactics.

**Rotar O.V.**

## **COVID-19 INFECTION WORSENES PROGNOSIS IN PATIENTS WITH ACUTE NECROTIZING PANCREATITIS**

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**Introduction.** COVID-19 has led to an unprecedented global health crisis. It primarily affects the respiratory tract, but previous reports of acute pancreatitis occurrence in patients with COVID 19 suggest possibility of direct injury of pancreatic gland by this virus.

**The aim of the study:** was to establish influence of COVID 19 infection on acute pancreatitis futures.

**Material and methods.** We present observation of three patients with acute necrotizing pancreatitis (ANP) and concomitant COVID-19. They were medium age persons with biliary and alimentary etiology of disease and BMI 33-41 kg/m<sup>2</sup>. Severity of patients' condition were estimated by whole body CT, changes of oxygen balance and biochemical parameters of peripheral blood.

**Results.** All patients were diagnosed with COVID-19 within 4-9 days before initiation of ANP with bilateral pneumonia of 15-40% of lungs on CT. They were presented with persistent multi-organ failures and injuries over 50% of pancreas. Respiratory failure was established in all patients, renal and cardio-vascular dysfunction as well as intra-abdominal hypertension was diagnosed in two of them. Biochemical changes included prolonged prothrombin and partial thromboplastin time, elevated fibrinogen and D-dimer concentration (640-2580 µg/l) with normal amount of platelets as well as moderate hypertriglyceridemia (6.2-9.5 mmol/l). They received intensive care treatment with respiratory support, interventional treatment was applied to all of them with step-up approach. Diffuse hemorrhage from pancreas occurred in one patient on 6<sup>th</sup> day from onset as result of coagulopathy and several laparotomic interventions were necessary for control of it. Despite intensive therapy this patient died due to progressed ARDS (overall mortality - 33.3%). Rest patients survived, duration of intensive care treatment was 14-20 days.

**Conclusions.** COVID-19 infection worsens clinical feature of ANP. Severity of coagulopathy and ARDS could be determinants of negative outcome.

**Solovei M.M.**

## **METHODS AND MEANS OF VECTOR-PARAMETRIC POLARIZATION MICROSCOPY OF POLICRYSTALLINE FILMS OF RAT BLOOD IN DIFFERENTIAL DIAGNOSIS SEPSIS SEVERITY**

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**Introduction.** Development and experimental testing of a new digital technique for objective differential diagnosis of septic process severity by statistical analysis of vector-parametric polarization images of laboratory rat blood films. To achieve this goal, we used a set of methods of Stokes polarimetric microscopic examination, parametric, statistical and information analysis of septic changes in the polycrystalline structure of blood films of laboratory rats. An experimental measurement of the coordinate distributions of the fourth parameter of the Stokes vector (crystallization parameter - CP) of digital microscopic images of blood films of laboratory rats was carried out at the location of a laser micropolarimeter, the optical scheme of which is given in scientific papers is presented in our work in fig. 1.