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« IN THE POST PERIOD OF COVID -19 DISEASESPECIFIC CLINICAL-LABORATORY PROPERTIES AND DIAGNOSIS OF PYELONEPHRITIS IN CHILDREN »

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ABSTRACT

In connection with the new human pandemic of SARS-CoV-2 (COVID-19) infection, which has spread among humans in 2019-2021, a lot of research is being conducted on the diagnosis, treatment and prevention of Covid-19 virus. The incidence of Covid-19 infection among children has been significantly increased by 2021. Children with a premorbid background (lung disease, Kawasaki disease, various immunodeficiency conditions, kidney disease , etc.) can be included in the group of children prone to severe COVID-19 disease . The disease is often said to be asymptomatic, but severe and prolonged course of the disease has been observed in children with kidney disease .

Object and subject of research: *60 patients with pyelonephritis from 3 to 15 years of age in contact with COVID-19 .Groups of children to be examined: The study involved 20,000 children treated in inpatient and outpatient settings in Samarkand regional clinics in 2021 . All children included in the study formed 2 main groups. Group I - 40 sick children with pyelonephritis in contact with COVID-19 . Group II - 20 sick children with non-contact pyelonephritis with COVID-19 disease .The results of the study showed that in patients with pyelonephritis in contact with COVID-19 disease, the disease was dominated by general intoxication syndrome ,dysuric syndrome, pain syndrome . COVID-19pyelonephritis in children in contact with b is characterized by a predominance of symptoms of intoxication. Recurrent course of chronic pyelonephritis was observed.*

KEYWORDS: *Covid-19, Pandemic, Children, P Ielonephritis, P Roteinuria, L Eukosituria, Hematuria .*

INTRODUCTION

Developing in all countries of the world, including An increase in chronic progressive kidney disease leading to chronic renal failure is observed in many countries. Pyelonephritis remains a disease of particular medical, social, and economic importance. This is confirmed by international kidney registers that have been available for a number of years **[1].** In recent years, the proportion of asymptomatic and atypical variants of pyelonephritis has been increasing, leading to certain difficulties in early detection and timely treatment of the disease. Among the

reasons for the ineffectiveness of treatment of patients with pyelonephritis is the incomplete disclosure of its pathogenesis. **[2] .**

In the beginning of 2019-2020, humanity will have a new virusSARS-CoV-2 (COVID-19) infection, which spread rapidly in many countries and reached pandemic levels **[3,4].** In April 2020, specialists from Wuhan Central Hospital published a study examining the effects of corona virus on kidney function . Kidney damage was detected in 27.06% of hospitalized patients with coronavirus infection.COVID-19 is an enzyme receptor that alters angiotensin to enter the cell(ACE 2) type. ACE 2 is highly expressed in the kidneys. Therefore, kidney disease is a contributing factor to the onset of COVID-19 infection and aggravating the clinical course of the disease. Epidemiology of COVID-19 among children and pathogenetic mechanisms, morphology, clinical course, laboratory diagnosis, treatment and rehabilitation of various organ damage in pediatric practice - not fully resolved **[5,6] .**

The purpose of the work. Determination of clinical and laboratory features of pyelonephritis in children with pyelonephritis, COVID-19 in children living in Samarkand region , early diagnosis.

Object and subject of research: 60 patients with pyelonephritis aged 3 to 15 years with COVID-19 disease .

Groups of children to be examined: The study involved 60 children treated in inpatient and outpatient settings in Samarkand regional clinics in 2021 .

All children included in the study formed 2 main groups.

Group I - 40 children with pyelonephritis with COVID-19 .

Group II - 20 sick children with non-contact pyelonephritis with COVID-19 disease .

Control methods:

1. General clinical anamnesis, genealogical analysis, medical examination, blood and urine analysis, IFA analysis, biochemical analysis of ore and urine

2. Instrumental - measuring blood pressure, with renal UTT dopplerometry.

Kidneys using the Zimniskytest .

Clinical -laboratory examination.PSR and IFA analyzes were performed in the first group of sick children, according to the results of which 27 (67.5%) positive IFA analysis and 13 (32.5%) positive PSR analysis were observed. **[7]**

In the first group of patients with general intoxication syndrome - 35 (87.5%), dysuria - 29 (72.5%), pain syndrome -18 (45%), temperature reaction - 38 (95%). 'appeared in the ring.

Clinical manifestations of pyelonephritis of the second group included temperature reaction in 12 (60%), signs of intoxication in 10 (50%), pain syndrome in 4 (20%), and dysuria syndrome in 3 (15%).

Leukosituria was detected in 35 (87.5%) children in the first group . Proteinuria was detected in the majority of patients from 0.03 to 2.72 g / l - in 34 (85%) patients in the first group and to a

lesser extent - in 10 (50%) in the second group ($p < 0.05$)., was observed in 18 (45%) patients in the first group and 1 (5%) in the second group .

The activity of the inflammatory process was assessed by the number of leukocytes, neutrophil granulocytes, and the rate of erythrocyte sedimentation in peripheral blood. **[8]**

Thus, in 38 children (95%) of the first group, ECG was observed from 17 to 38 mm / h, and leukocytosis was observed from 13 * 109 to 35 * 109. In group 2 patients, ECG was relatively low - 8 (44.4%) ($p < 0.01$), neutrophil leukocytosis-6 (30%) ($p < 0.05$).

Symptoms of mild anemia were detected in the first group of children - 13 (32.5%), moderate - 9 (22.5%), severe - 2 (5%) girls. In the second group, mild anemia was present in 3 (15%) and moderate anemia in 2 (10%).

Ultrasound examination of the kidneys - ultrasound scanning of the kidneys in all children was performed with a convex-sensing ultrasound examination device " Sim-7000 " , which operates at a frequency of 5MGs - the standard method. No special inspection is required to conduct this inspection. It assessed the location of the kidneys, their contour, size (length and width), the characteristics of the parenchyma, the thickness of the cortex, the condition of the pelvic system. **[9]**

Functional renal reserve and renal concentration function were performed using the Zimnisky test. To more accurately assess this function, the analysis was performed using a dry food eating test .The specific weights in the study groups are given in the mean index (Table 1).

Maximum specific gravity of urine according to Zimnitsky test in children with pyelonephritis

	I-group	Group II	P
The average of the maximum specific gravity	1020 ± 4.2	1028 ± 3.8	> 0.05
Daily diuris (ml / day)	1408 ± 92.0	1324 ± 134.0	> 0.05

According to Table 1, the tendency to increase daily diuresis in children with pyelonephritis in contact with COVID-19 showed a decrease in specific gravity, but in both cases the statistics were not convincing. **[10]**

CONCLUSION

COVID-19Pyelonephritis in sick children in contact with b is characterized by a predominance of signs of intoxication . Recurrent course of chronic pyelonephritis was observed.COVID-19 In children who came in contact with , there was an increase in body temperature above 39 (55%), local pain syndrome, predominance of proteinuria in the urine, as well as a severe, debilitating course of the disease . **[11-13]**

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