GALAXY INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL (GIIRJ)
ISSN (E): 2347-6915
Vol. 12, Issue 4, April (2024)

RISK OF CHRONIC GLOMERULONEPHRITIS IN CHILDREN

Arzibekova Umida Abdukadirovna
Senior Lecturer of the Department of
Faculty Pediatrics and Neonatology, ASMI

ABSTRACT

A retrospective analysis of risk factors for chronic glomerulonephritis in 210 children was carried out. The role of a combination of several risk factors in the chronic course of the disease has been established. We identified 5 combinations of common risk factors that determine the chronic course of various clinical forms of glomerulonephritis in children. A table has been developed to predict the risk of chronic glomerulonephritis in children.

Keywords: children, method, treatment, glomerulonephritis, prognosis.

INTRODUCTION

To this day, glomerulonephritis remains the most important problem in pediatric nephrology. According to many researchers [1], chronic glomerulonephritis (CGN) is one of the main causes of the development of chronic renal failure among acquired diseases in children.

MATERIALS AND METHODS

The purpose of this study was to assess the role of risk factors for chronicity of glomerulonephritis and to develop methods for its prediction. A retrospective analysis of the possible role of some risk factors for chronic glomerulonephritis in 210 children aged 5-18 years was carried out. In 110 children (52.4%), glomerulonephritis manifested itself as nephrotic, in 80 (38.1%) - hematuric, in 20 (9.5%) - mixed form. A comprehensive examination of patients was carried out using clinical, laboratory and instrumental research methods. To survey children and their parents, we used a special questionnaire developed by us.

RESULTS AND DISCUSSION

When analyzing anamnestic data, aggravating risk factors were identified in the majority of children with CGN in the antenatal and perinatal periods: 10.9% of mothers had gestosis, 32.8% of mothers had influenza or ARVI during pregnancy, 17.6% - pyelonephritis, 16.2% - anemia, 6.2% of children were born with asphyxia, 6.7% - with intrauterine dystrophy, 2.4% - with large body weight, 7.1% - premature. From birth to 1 year, 33.3% of children were observed for perinatal encephalopathy.

Heredity aggravated by renal pathology was detected in 31.4% of children, arterial hypertension - in 16.7% of parents and in 49% of close relatives.

Long before the development of glomerulonephritis, 85.8% of children had inconsistent changes in urine tests: in the form of oxaluria - in 27.2%, uraturia - in 18.1%, microhematuria - in 25.7%, microproteinuria - in 14, 8%. Of 210 children, 17 (8.1%) were observed with a diagnosis of urinary tract infection. An X-ray urological examination revealed anomalies in the development of the kidneys and urinary tract (horseshoe kidney, duplex kidneys) in 9 (4.3%), pyeelectasia in 8 (3.8%), and pyelectasia in 5 (2.4%). - vesicorenal reflux.

131 (62.5%) children had chronic foci of infection. The most common chronic source of infection in children was multiple caries (50%), accompanied by lymphadenopathy (Table 1); chronic tonsillitis was diagnosed in 17 (8.1%). In these children, an increase in the ASL-O titer in the blood serum was detected to 1:625 - 1:1250. Frequent ARVI was observed in 95 (45.2%) children with chronic glomerulonephritis, and 11 (5.2%) had recurrent bronchitis. In 19 (9%) children, re-infection with scabies was observed, often with a complicated course. 17 out of 19 children with scabies were treated with benzyl benzoate up to 3-5 times.

Table 1. Frequency of detection of pathology in various organs in patients with CGN

Indicators	abs.	%
Multiple caries	105	50
Chronic tonsillitis	17	8,1
Chronic otitis media	7	3,3
Pyoderma	3	1,4
Scabies	19	9,0
Neurodermatitis	11	5,2
Gastrointestinal diseases	118	56,2
Enterobiasis	35	16,7
Giardiasis	55	26,2
Ascariasis	15	7,1
Diaphragmatic hernia	9	4,3
Inguinoscrotal hernia	7	3,3
Additional trabecula in the LV cavity	135	64,3
Congenital heart defect	5	2,4
Burns	9	4,3
Chronic hepatitis	7	3,3
Bronchial asthma	7	3,3
Recurrent bronchitis	11	5,2
Frequent ARVI	114	45,2
Food allergies	35	16,7
Drug allergy	175	83,3
Epilepsy	8	3,8
Febrile seizures	16	7,6

Gastrointestinal (GIT) diseases were found in 118 (56.2%) children with CGN. When performing fibroesophagogastroduodenoscopy (FEGDS), superficial gastroduodenitis was detected in 54 (25.7%) children, hypertrophic gastroduodenitis in 44 (20.9%), erosive gastritis in 13 (6.2%), erosive gastritis in 5 (2). .4%) - bulbitis, 2 (0.9%) - gastric ulcer. 9 (4.3%) children were diagnosed with diaphragmatic hernia of I-II degree, 17 (8.1%) - gastroesophageal reflux. 7 (3.3%) children had inguinal-scrotal hernia, 38 (18.1%) had biliary dyskinesia. Giardiasis was found in 26.2%, enterobiasis - in 16.7%, ascariasis - in 7.1%, carriage of the HBS antigen - in 19 (9%) children. 8 out of 19 children had a combination of 2-3 hepatitis markers (anti HBS-Ag, anti HBC-Ag, anti Hbe-Ag). In all 8 patients with positive 2-3 markers of hepatitis, glomerulonephritis manifested itself in a mixed form, resistant to glucocorticosteroid therapy.

The majority of children with CGN showed changes in the cardiovascular system. An echocardiogram showed additional chord or trabecula in the ventricular cavity in 135 (64.3%) patients, and degree I-II mitral valve prolapse in 38 (18.1%) patients. 5 (2.4%) had congenital heart disease.

Severe burns with preservation of keloid scars on the trunk and limbs were suffered by 9 (4.3%) children with CGN, 8 (3.8%) children suffered from epilepsy, and therefore took anticonvulsants for 2-5 years. 16 (7.6%) children had a history of febrile seizures, 56 (26.7%) had complaints of headaches with normal blood pressure. Most children with headaches had a history of perinatal encephalopathy. The electroencephalogram (EEG) of 25 of them showed mild cerebral changes in biopotentials with a predominance of pathology in the parietal or central regions in the form of high-amplitude theta waves. In 31 children, focal pathological activity and asymmetry of the sides were not detected, but there was a change in the reactivity of the cortex (with a predominance of excitation to affective stimuli). On the rheoencephalogram (REG) in 35 children there was a slight decrease in the tone of large vessels, in 21 there was a moderate increase in the tone of small vessels, venous dysfunction with sufficient pulse blood supply.

Thus, the most common risk factors found in patients with CGN are a burdened allergic history (food and drug allergies), the presence of minimal urinary syndrome long before the development of glomerulonephritis, chronic foci of infection, minor developmental anomalies of the heart and other organs, concomitant diseases of the gastrointestinal tract. The combination of various risk factors determines the chronic course of various clinical forms of glomerulonephritis in children. In patients with CGN, 5 combinations of risk factors can be identified that determine the chronicity of the renal process in various clinical forms of glomerulonephritis [5].

CONCLUSION

Chronicity of glomerulonephritis in children is promoted by a combination of several risk factors, the most significant of which are minimal urinary syndrome, which is present long before the development of the disease, antenatal and perinatal risk factors, chronic foci of infection, food and drug allergies.

The established 5 variants of often combined risk factors determine the chronicity of the disease in various clinical forms of glomerulonephritis in children.

REFERENCES

1. Ignatova M.S., Kurbanova E.G. Immunosuppressive therapy of nephrotic syndrome in children. - Moscow, 2010.
2. Korovina N.A., Gavryushova L.P., Shashinka M. Glomerulonephritis in children. - M.: Medicine, 2010.
3. Naumova V.I., Papayan A.V. Kidney failure in children. - Leningrad: Medicine, 2011.
4. Papayan A.V., Savenkova N.D. Clinical nephrology of childhood. — St. Petersburg: SOTIS, 2018. — 718 p.
5. Abrass C.K. Cellular lipid metabolism and the role of lipids in the progression of renal disease. Am. J. Nephrol. 2014. - V. 24. - P. 46-53.