UDC 616.611-002+616.988]-053.32- 07-037

REGIONAL OPTIONS OF FREQUENCY AND CLINICAL COURSE OF BRIGHT'S DISEASE IN CHILDREN

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✓ ***Resume***

The prevalence of GCN in line with the referral knowledge is low -13-50 cases per 10,000 population, however, because of the progressive course, patients with GCN compose the most contingent of medical specialty and haemodialysis departments, and at the stage of terminal nephropathy they become disabled, that could be a tragedy for the family and puts a significant burden on the state.

There is no accord on the role of individual risk factors touching the course of GN. The persistence of microorganism or infective agent infections is taken into account to be of nice importance within the progression of Bright's disease.

Keywords: children's, Bright's disease, frequency, clinical course, virus-associated, risk factors, disabled, chronic glomerulonephritis, end-stage kidney injury, dialysis

РЕГИОНАЛЬНЫЕ ОСОБЕННОСТИ ЧАСТОТЫ И КЛИНИКИ ГЛОМЕРУЛОНЕФРИТА У ДЕТЕЙ

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✓ ***Резюме***

Распространенность ХГН по данным обращаемости невелика -13-50 случаев на 10 000 населения, однако ввиду прогрессирующего течения больные ХГН составляют основной контингент отделений нефрологии и гемодиализа, а на стадии терминальной почечной недостаточности становятся инвалидами, что является трагедией для семьи и ложится тяжелым бременем на государство.

Единого мнения о роли отдельных факторов риска, влияющих на течение ГН, нет. Придают большое значение персистенции бактериальной или вирусной инфекций в прогрессировании гломерулонефрита.

Ключевые слова: гломерулонефрит у детей, вирусассоциированный, частота, клиническое течение, риск факторы, инвалидность, хронический гломерулонефрит, терминальный почечный недостаточность, диализ

БОЛАЛАРДА ГЛОМЕРУЛОНЕФРИТ ЧАСТОТАСИ ВА КЛИНИКАСИНИНГ МИНТАҚАВИЙ ХУСУСИЯТЛАРИ

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✓ ***Резюме***

Маълумотларга кўра СГН тарқалиши нисбатан кам- 10,000 аҳоли бошига 13-50 ҳолатлар кузатилади, аммо, прогрессив кечиши туфайли СГН билан беморлар нефрология ва гемодиализнинг асосий контингентини ташкил этади, ва терминал буйрак етишмовчилиги босқичида улар ногирон бўлиб, хар бир оила учун мусибат ва давлат учун оғир юк хосил килади.

ГН кечишига таъсир етувчи алоҳида хавф омилларининг роли ҳақида ягона консенсус йўқ. Бактериал ёки вирусли инфексияларнинг доимийлиги гломерулонефритнинг ривожланишида катта аҳамиятга эга ҳисобланади.

Калит сузлар: болалар, гломерулонефрит, вирус ассоциирланган, сурункали гломерулонефрит, ногирон, терминал буйрак етишмовчилиги., диализ

Relevance

Viral infections associate temporally with the onset of many glomerular diseases, particularly in children. In other cases of glomerulonephritis, when infection is clinically silent, viral syndromes can still be implicated as a trigger. However, strong evidence for viral causality in most glomerular disease is still lacking-[6].

Even though, not any culture of virus has been decisively established to cause any specific renal pathology, few glomerular diseases are linked to infection or host antiviral responses. Majority of these association studies are dated and involve small numbers of patients. A review of these affiliations is ensured now that novel molecular diagnostics are available, many glomerular disease classifications have been reconsidered and vaccines have changed the patterns of viral infection. Eventually, pediatric nephrologists may discover that outcomes of viral-associated glomerulopathies differ noticeably from those of the truly idiopathic forms-[7].

In accordance with the International Committee on Taxonomy of Viruses, there are seven orders, 103 families, 455 genera and more than 2,800 species of viruses. Although only a fraction of these species are known to infect humans, the number of human viral pathogens continues to increase . Viruses in general are polytropic, affecting several tissues or organ systems. Kidney cells often are infected during viral illnesses but appear to be unusually resistant to injury compared to other organs and tissues. Both viruria and viremia are often measurable during viral syndromes. Human kidney cells have commonly been used to culture several viruses in the laboratory, including adenovirus, cytomegalovirus (CMV), Coxsackievirus, measles and varicella viruses . The kidneys rarely bear the brunt of infection, either from cytotoxic effects or the host antiviral responses, which is in contrast to viral arthritis, hepatitis, meningitis, otitis, pharyngitis, pericarditis, pneumonitis and tonsillitis, to name a few. When kidney infection leads to kidney injury, it may be indistinguishable from that of non-infectious etiologies-[6].

Building up a viral related glomerulopathy requires demonstrative proof of viral contamination, alongside clinical or pathologic proof of kidney injury, either by histopathology, viral culture or proof of viral replication by polymerase chain response (PCR). This is certifiably not a straightforward undertaking and has not been performed satisfactorily in a significant number of the case reports or partner investigations of kidney contribution during viral disorders. Albuminuria and erythrocyturia happen vaguely in numerous febrile illnesses and don't the only one build up glomerular injury. Viruria or incorporation bearing cells in the pee can be either a reason or an impact of glomerular injury, or may basically reflect glomerular catching during viremia. Some infections are commensal in the kidney and might be shed innocuously. While polyoma infections (BK and JC infections) are known to contaminate rounded and, seldom, glomerular epithelial cells in the kidney, and to cause interstitial nephritis and, seldom, crescentic glomerulonephritis (GN) in relocated kidneys, there are no revealed instances of these infections tainting glomerular cells or causing glomerulopathy in local kidneys, even in immunosuppressed patients.

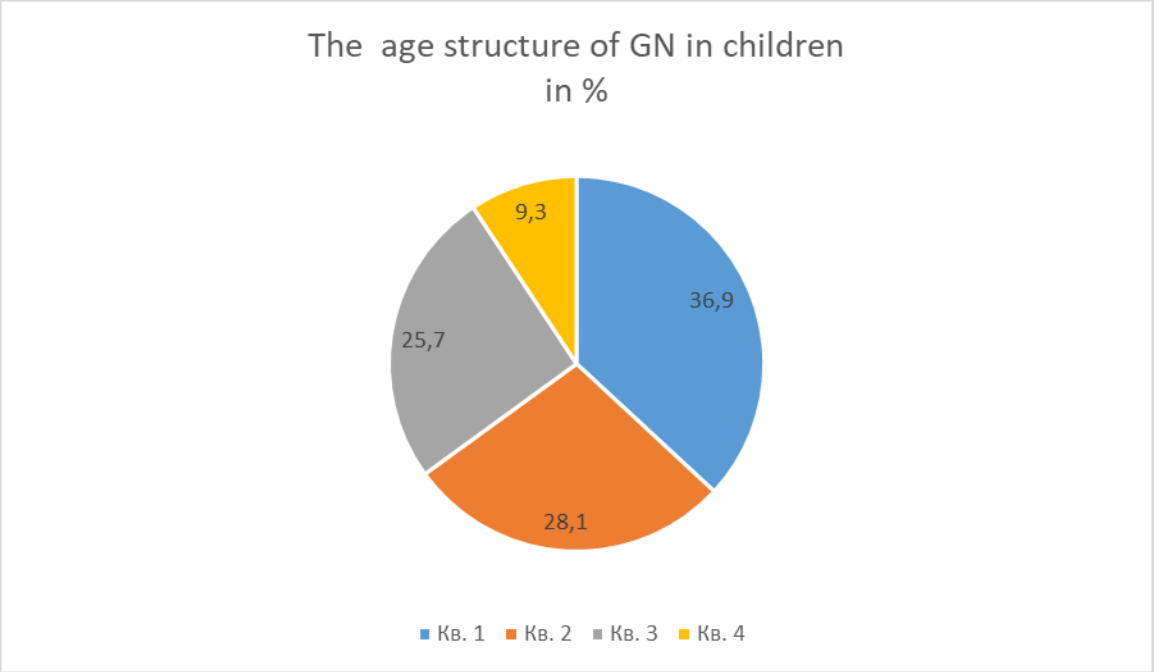
The study's purpose is to review the regional options of frequency and clinical course of GN in kids living within the Bukhara region of the Republic of Uzbekistan.

Materials and methods

249 sick children with GN who received inpatient examination and treatment at the Bukhara regional children's multidisciplinary medical center were monitored. All patients were examined for General blood tests, urine tests, urine tests according to Nechiporenko and zimnitsky, biochemical tests and functional research methods.

Among the surveyed boys there were slightly more - 161 (64.6%) than girls - 88 (35.4%). The examined sick children were aged 1 year-18 years, including children under 5 years - 70 (28.1 %), 6-10 years - 92 (36.9%), 11-15 years - 64 (25.7%), 16-18 years - 23 (9.3%).

Diag. 1



For a comparative study of the influence of risk factors patients were divided

into 2 groups:

1-group: 138 (55.5%) sick children with virus-associated GN;

2-group: 111 (44.5%)sick children with GN without viral Association.

The data of the official medical statistics of the regional Health Department of the Bukhara region for 2017-2019 were studied retrospectively.

The assessment of risk factors for the development of GN was calculated by the "case-control" type. The value of the odds ratio (or) was evaluated as follows: if the OR exceeds 1, it means that the chances of detecting a risk factor are greater in the group with the presence of an outcome and the factor has a direct relationship with the probability of an outcome. An OR with a value less than 1 indicates that the chances of detecting a risk factor are greater in the second group and the factor has an inverse relationship with the probability of an outcome [8]..

Discussion: The results of a retrospective study of knowledge for three years showed that 43293 (76%) kids out of the full variety of youngsters were admitted to the hospital with diseases of the genitourinary apparatus (UTD) throughout the studied amount. the incidence of GN for the studied amount is seventeen.3%. it had been found that the frequency of hospitalization of youngsters with tract diseases is on the average seven.61% of the full children's hospitalization.

Analysis of morbidity and hospitalization at the place of residence showed that kids living in rural areas were a lot of usually hospitalized - 204 (81.9%).

At a similar time, the frequency of hospitalization of youngsters with UTD within the amount 2017-2019 raised nearly one.6 times.

The nosological structure showed a predominance of chronic GN in kids. Thus, our studies revealed that: CGN - 137 (55.0%), AGN-75 (30.2%), and first syndrome (NS)-37 (14.8%)

Tab. 1

Nosological structure of GN		
Chronic GN	Acute GN	1st NS
137	75	37
55.0%	30.2%	14.8%

The examination discovered comorbid pathology in kids of this class. CGN frequently occurred by following conditions iron deficiency anemia I-IIdegree-88 (64,3%), reccurent respiratory infectious - 122 (89,0%), and delayed physical development, 69 (50,4%), oral cavity disorders - 68 (49,6%), skin redness – 18 (13.2%), and edema - 78 (56,9%), herpes infection - 55 (40,2%), diarrhea-28 (20,4%), convulsive syndrome-1 (0,73%), haemorragic vasculitis- 1 (0,73%).

Tab.2

Comorbid patholgy structure of CGN									
IDA	RRI	delayed physical development	oral cavity disorders	skin redness	edema	herpes infection	diarrhea	convulsive syndrome	vasculitis
64,3 %	89,0%	50,4%	49,6%	13.2%	56,9%	40,2%	20,4%	0,73%	0,73 %

In AGN, the frequency of comorbid pathology was as follows:: reccurent respiratory viral infections (RRVI))- forty six (61,4%), iron deficiency anemia I-IIdegree-- twenty one (28,0%), allergic reaction - two (2,7%), class Insecta allergic - one (1,4%), haemorragic vasculitis-1 (1,4%), pox -1 (1,4%), diarrhea-1 (1,4%), measles-1 (1,4%).

Tab. 3

Acute GN comorbid pathology structure						
RRVI	IDA	allergic reaction	haemorragic vasculitis	pox	diarrhea	measles
61,4%	28,0%	2,7%	1,4%	1,4%	1,4%	1,4%

Primary NS happens in comorbidity with RRVI-23 (62.2%), iron deficiency anemia of I-IIdegree-5 (13.5%), undetermined-6 (16.2%), herpes infection-1 (2.7%), food allergy-1 (2.7%), dental caries-1 (2.7%)

Tab.4

Primary NS comorbidity structure					
RRVI	IDA	undetermined	herpes infection	food allergy	dental caries
62.2%	13.5%	16.2%	2.7%	2.7%	2.7%

Conclusion

As a result of research, it had been attainable to work out some regional options of GN in children: the frequency of GN is considerably higher among rural children; comorbid types of GN predominate within the clinical picture; GCN prevails within the structure of urinary organ diseases. Comorbid pathologye acts as a predictor of GN formation in kids and therefore the transition of the method to the chronic course . Some regional characteristics of Bright's desease in children: the frequency of GN is significantly higher in boys than in girls; the clinical picture is dominated by comorbid pathologies of GN; in the structure of renal diseases prevalent CGN; risk factors for the development of virus associated GN in children are pathological course of pregnancy and childbirth, viral and allergic diseases of the child and the nonspecific factor of hypothermia (P<0.01); risk factors for the development of non-associated GN virus in children are allergic diseases in the family, past reactions to vaccination, diarrhea and convulsive syndrome in the child (P<0.01).

Consequently, the establishment of important risk factors for the progress of GN in children, particularly in early childhood, is of theoretical relevancy. By improving preventive measures at the stages of prenatal management of pregnancy and childbirth, it is possible to achieve a reduction in renal pathology, in particular when GN is associated with the virus in children.

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Entered 09.05.2021