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The incidence and structure of dental pathology in children with chronic viral hepatitis C

Sevara MATKULIEVA[1], Khabiba ISAKHODJAEVA[2], Ilkhom KHAMIDOV[3]

Tashkent State Dental Institute

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ABSTRACT

The main purpose is to develop a complex of therapeutic measures for various lesions of the oral mucosa in children with chronic viral hepatitis C and solve the tasks and achieve the goals of the study, general clinical, biochemical, immunological, microbiological, virological, dental and statistical research methods were used in the work. The study was conducted in the period from 2018 to 2021. Data collection was carried out on the basis of the Republican Specialized Scientific and Practical Medical Center of Pediatrics of the Ministry of Health of the Republic of Uzbekistan (Department of Chronic Hepatitis. The head of the department is Academician of the Academy of Sciences of the Republic of Uzbekistan Inoyatova F.I.), as well as on the basis of the pediatric dental clinic of the Tashkent State Dental Institute. The main group of patients was formed, including 112 children with HCV and pathology of COPD. Results: The analysis showed that the proposed method of treatment had a significantly positive effect on the condition of the oral mucosa in children with hepatitis C.

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Bolalarda surunkali virusli gepatit Sda tilning shakli va rangi o'zgarishining xususiyatlari

Kalit so‘zlar:
bolalar,
og‘iz bo‘shlig‘i shilliq qavati,

ANNOTATSIYA

Surunkali virusli gepatit S bilan og‘rigan bolalarda og‘iz bo‘shlig‘i shilliq qavatining turli xil shikastlanishlarini dsavolash uchun terapevtik chora-tadbirlar kompleksini ishlab

[1] Assistant, Department of Prevention of Dental Diseases, Tashkent State Dental Institute.
[2] Senior Lecturer, Department of Prevention of Dental Diseases, Tashkent State Dental Institute.
[3] Assistant, Department of Prevention of Dental Diseases, Tashkent State Dental Institute.

surunkali virusli gepatit,
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chiqish. Tadqiqot maqsadi va vazifalaridan kelib chiqib umumiy klinik, biokimyoviy, immunologik, mikrobiologik, virusologik, stomatologik va statistik tadqiqot usullaridan foydalanilgan. Tadqiqot 2018-yildan 2021-yilgacha bo‘lgan davrda o‘tkazildi. Ma’lumotlar to‘plash O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligi Respublika ixtisoslashtirilgan pediatriya ilmiy-amaliy tibbiyot markazi (gepatologiya bo‘limi) negizida amalga oshirildi, shuningdek, Toshkent davlat stomatologiya instituti bolalar stomatologiya klinikasi negizida. Bemorlarning asosiy guruhi, shu jumladan HCV va KOAH patologiyasi bo‘lgan 112 bola tashkil etildi. Natijalar: Tahlil shuni ko‘rsatdiki, tavsiya etilgan davolash usuli gepatit C bilan og‘rigan bolalarda og‘iz bo‘shlig‘i shilliq qavatining holatiga sezilarli darajada ijobiy ta’sir ko‘rsatdi.

Особенности изменений формы и цвета языка при хроническом вирусным гепатите С у детей

Ключевые слова:
дети,
слизистая оболочка полости рта,
хронический вирусный гепатит,
вирусологическая,
патология.

АННОТАЦИЯ

Разработать комплекс лечебных мероприятий при различных поражениях слизистой оболочки полости рта у детей с хроническим вирусным гепатитом С. Для решения задач и достижения целей проводились исследования общеклинические, биохимические, иммунологические, микробиологические, вирусологические, стоматологические и статистические. В работе использовались методы исследования. Исследование проводилось в период с 2018 по 2021 годы. Сбор данных осуществлялся на базе Республиканского специализированного научно-практического медицинского центра педиатрии МЗ РУз (отделение хронических гепатитов. Зав. кафедрой является академик АН РУз Иноятова Ф.И.), а также на базе детской стоматологической поликлиники Ташкентского государственного стоматологического института. Сформирована основная группа больных, включающая 112 детей с ВГС и патологией ХОБЛ. Результаты: Анализ показал, что предложенный способ лечения оказал достоверное положительное влияние на состояние слизистой оболочки полости рта у детей с гепатитом С.

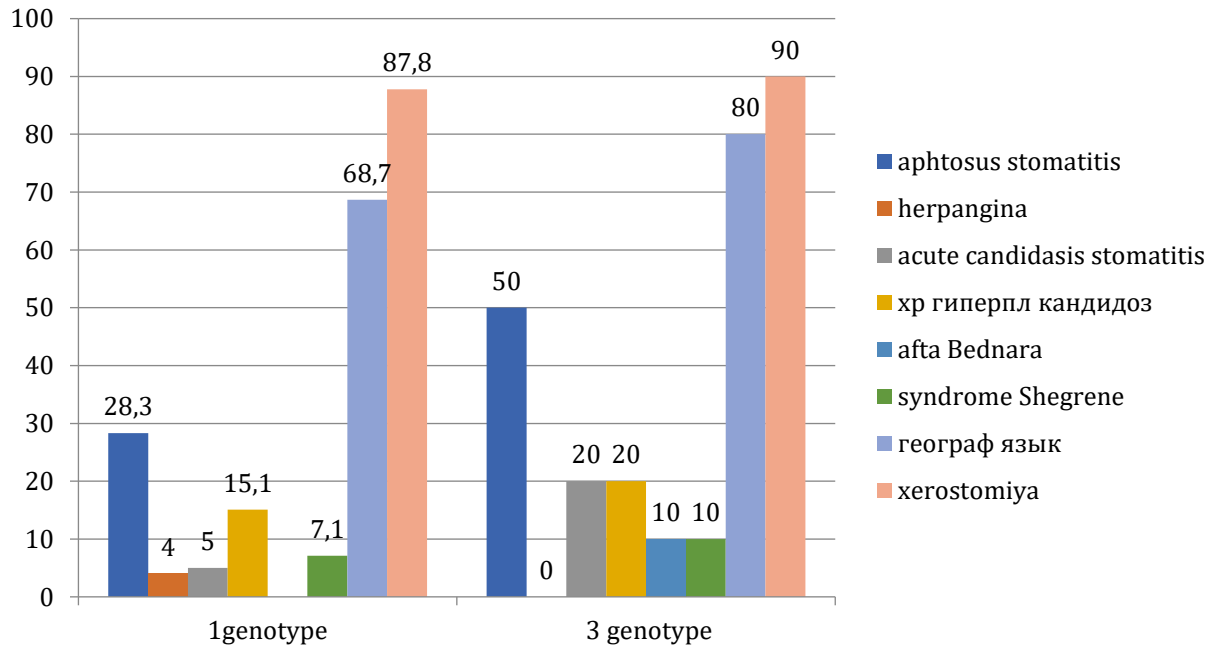
THE PURPOSE OF THE STUDY

To develop a set of therapeutic measures for various lesions of the oral mucosa in children with chronic viral hepatitis C. Material and methods.

The main group of patients was formed, including 112 children with HCV and OM pathology. The data of 50 children with OM pathology without HCV markers were used as a comparison group. The groups of patients were comparable by gender, no statistical differences were found (p>0.05). Boys predominated in both groups (66% in the main

group and 62% in the control group). In the main group, the proportion of girls was 34%, in the control group – 38%. The main group was dominated by children aged 7-14 years and 14-18 years (27.7% and 68.7%, respectively). In the control group, younger children were more often registered. There were significantly fewer adolescent children (14-18 years old) – 2% ($p<0.001$). All children included in this study underwent a comprehensive examination, including an assessment of the state of liver function, determination of immunological and virological markers of chronic hepatitis C, as well as a comprehensive dental examination, including, in addition to standard dental examination indicators, microbiological and immunological examinations of the oral fluid.

We analyzed the frequency of dental pathology recorded in children with chronic hepatitis C, depending on the CHC genotype. The data obtained are presented in Figure 1.1.

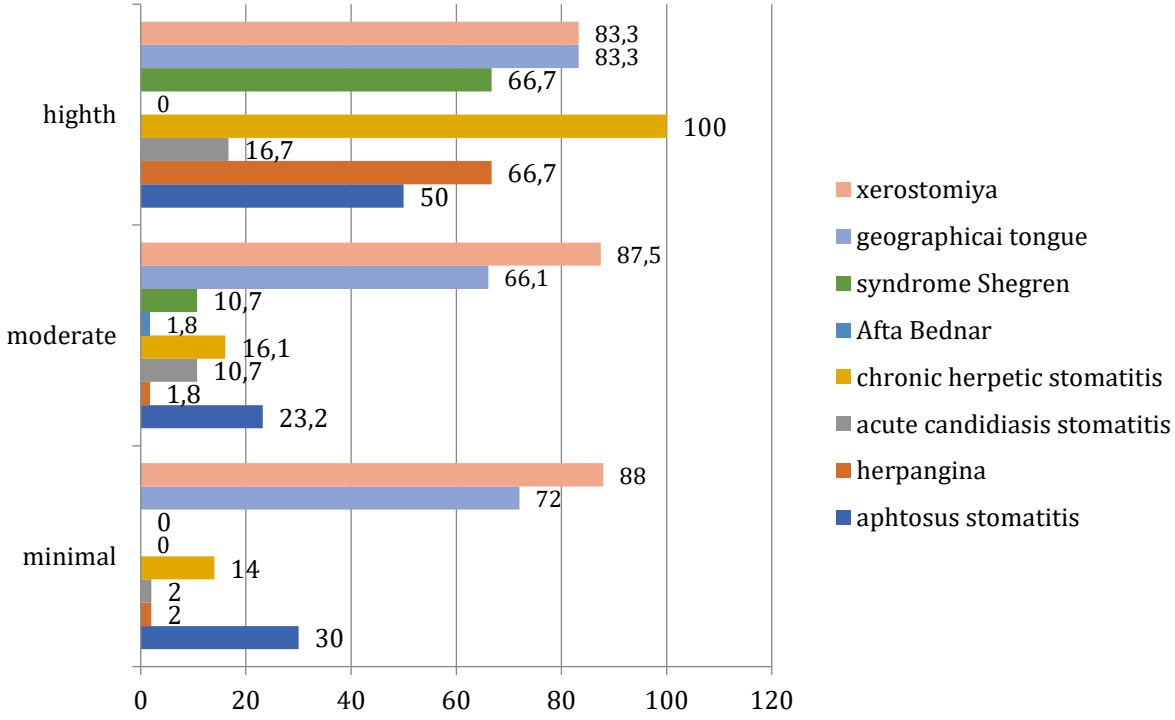


From the data in Figure 4.9. it can be seen that there were no significant differences in the frequency of registration of various dental nosologies. At the same time, it should be noted that in our study there were very significant differences between the number of patients with different virus genotypes.

Thus, there were only 2 patients with genotype 2, 10 children with genotype 3, while genotype 1b was detected in 100 children. In this regard, our results cannot fully reflect the dependence of the frequency of development of various types of dental disorders in children with chronic hepatitis C depending on the virus genotype.

We analyzed the frequency of development of dental pathology depending on the activity of the process in the liver. The results obtained are shown in Figure 1.1.

It can be seen from the diagram data that in patients with a high degree of activity of the pathological process in the liver, the frequency of registration of all nosological types of pathology of the oral mucosa was significantly higher compared to patients with moderate and minimal degree of activity of chronic hepatitis C.



RESEARCH RESULTS

With chronic hepatitis C, xerophthalmia and geographic stomatitis were detected significantly more often ($p<0.001$) (90.2% and 69.6%, respectively), and a number of diseases were recorded that were not observed in the control group, namely, herpangina (0.9%), Bednar's afta (0.9%), Sjögren's syndrome (5.4%).

The first study reporting an association between salivary gland disease and hepatitis C was published in 1992 and showed that 57% of patients with chronic liver disease associated with HCV had characteristic histological changes in the salivary glands (Haddad J., 1992). Subsequent studies have shown that, in contrast to Sjögren's syndrome, the lymphocytic infiltration in HCV patients was pericapillary rather than periductal, without destruction of the salivary gland ducts, and that the lymphocytic capillaritis resembled the early stage of the disease (Pawlotsky J.M., 1994.).

Further studies have shown conflicting results, but up to 80% of HCV-infected individuals may have salivary gland pathology (Henderson L., 2001; Ferreiro M.C., 2002), often presenting with histological evidence of mild sialadenitis.

According to our data, chronic viral and fungal lesions of the oral mucosa (recurrent herpetic stomatitis and chronic hyperplastic candidiasis) were also more typical for the group of children with chronic hepatitis C ($p<0.05$). This was also pointed out by a number of researchers (Coates E.A., 2000; Henderson L., 2001).

Calculation of the odds ratio (OR) showed that in children with CHC the probability of developing xerostomia is 82.6 times higher than in children without markers of CHC, geographic stomatitis – 26.4 times, chronic hyperplastic candidiasis – 3 times and recurrent herpetic stomatitis – 2.2 times.

We analyzed the dental status of 112 children with chronic viral hepatitis C. The data of 50 children without CVHC markers, randomly selected when applying for dental care, served as a control group. All children underwent a comprehensive dental examination.

When assessing the number of teeth in children at the time of observation, there were some differences in the observation groups. So, in the main group, the average number of teeth was 28 (24-30), while in the control group there were fewer – 24 (20-26) ($p<0.01$). This is due to the fact that in the control group the proportion of young children was somewhat higher.

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