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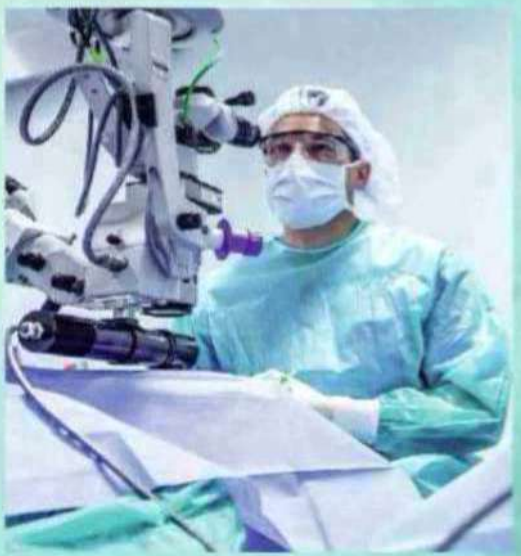

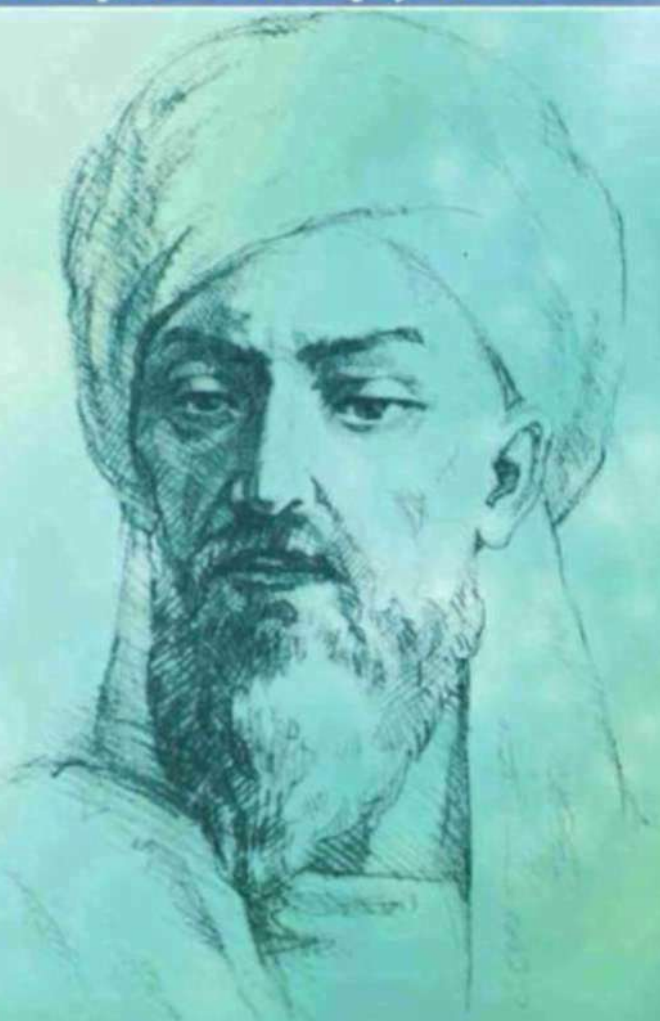

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DENTAL ORAL HEALTH IN CHILDREN WITH CHRONIC PYELONEPHRITIS

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✓ ***Resume***

The connection between the condition of the oral cavity and general somatic diseases is constantly emphasized by dentists. This arouses the constant interest of researchers to study the features of the course of dental pathology against the background of some forms of somatic diseases. In the literature, there is information about the condition of the hard tissues of the teeth, periodontal tissues and the mucous membrane of the oral cavity in children with chronic pyelonephritis. Morphological association of pathological processes in children with chronic pyelonephritis is manifested by kidney and periodontal tissues, lymphocytic infiltration, fibrosis, damage to microvascular vessels. With the development of chronic pyelonephritis, structural and functional changes in periodontal tissues become dystrophic, accompanied by vasoconstriction of microvessels and tissue sclerosis.

Keywords: Chronic pyelonephritis, oral mucosa, caries, chronic renal failure, dental condition.

СТОМАТОЛОГИЧЕСКОЕ СОСТОЯНИЕ ПОЛОСТИ РТА У ДЕТЕЙ С ХРОНИЧЕСКИМ ПИЕЛОНЕФРИТОМ

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✓ ***Резюме***

На связь состояния полости рта и общесоматических заболеваний постоянно обращают внимание стоматологи. Это вызывает постоянный интерес исследователей к изучению особенностей течения стоматологической патологии на фоне некоторых форм соматических заболеваний. В литературе имеются сведения о состоянии твердых тканей зубов, тканей пародонта и слизистой оболочки полости рта у детей с хроническим пиелонефритом. Морфологическая ассоциация патологических процессов у детей с хроническим пиелонефритом проявляется в тканях почек и пародонта, лимфоцитарной инфильтрации, фиброзе, поражении сосудов микроциркуляторного русла. При развитии хронического пиелонефрита структурно-функциональные изменения в тканях пародонта приобретают дистрофический характер, сопровождающийся вазоконстрикцией микрососудов и склерозом тканей.

Ключевые слова: Хронический пиелонефрит, слизистая оболочка рта, кариес, хроническая почечная недостаточность, стоматологическое состояние.

КАРИЕСИ МАВЖУД СУРУНКАЛИ ПИЕЛОНЕФРИТ БИЛАН КАСАЛЛАНГАН БОЛАЛАРДА ОҒИЗ БЎШЛИҒИНИНГ СТОМАТОЛОГИК ҲОЛАТИ

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✓ ***Резюме***

Оғиз бўшлиғи ҳолати ва умумий соматик касалликлар ўртасидаги боғлиқлик стоматологлар томонидан доимий равишда таъкидланади. Бу тадқиқотчиларнинг соматик касалликларнинг айрим шакллари фонида тиш патологияси курсининг хусусиятларини ўрганишга доимий қизиқиш уйғотади. Адабиётларда сурункали пиелонефрит билан оғриган бемор болаларда тишларнинг қаттиқ тўқималари, периодонтал тўқималар ва оғиз бўшлиғи шиллиқ қаватининг ҳолати тўғрисидаги маълумотлар мавжуд. Патологик жараёнларнинг морфологик ассоциацияси сурункали пиелонефрит билан оғриган бемор болаларда буйрак ва периодонтал тўқималар, улар лимфоцитар инфилтрация, фиброз, микроваскуляр томирларнинг шикастланиши билан намоён бўлади. Сурункали пиелонефритнинг ривожланиши билан периодонтал тўқималарда структуравий ва функционал ўзгаришлар дистрофик бўлиб, микротомирларнинг вазоконстриксияси ва тўқималарнинг склерози билан бирга келади.

Калит сўзлар. Сурункали пиелонефрит, оғиз бўшлиғи, кариес, сурункали буйрак етишмовчилиги,стоматологик ҳолат.

The purpose of the study: It consists of studying and evaluating the dental condition of children with chronic pyelonephritis and improving their caries prevention..

Object of research: Children from 1 to 7 years old.

Research methods:

Dental, biochemical, cytological, statistical methods are used

Scientific novelty of the research:

In children with chronic pyelonephritis, clinical-functional, biochemical and cytological indicators in the body and clinical symptoms of the main dental diseases in the oral cavity are based on correlation;

In children with chronic pyelonephritis, biophysical changes in oral fluid parameters, level of hygiene in the oral cavity, and inflammatory reaction in the periodontal soft tissues were found to be the main risk factors for the development of dental caries;

In children with chronic pyelonephritis, the high preventive effectiveness of remineralizing therapy with deep fluoridation was found;

Children with chronic pyelonephritis have been proven to have a positive effect of controlled tooth brushing, oral hygiene, selection of hygiene products, and quarterly visits to the dentist, which are part of the complex of treatment and prevention of dental diseases.

Conclusions on the appropriateness of the study:

In children with chronic pyelonephritis, during the exacerbation of the disease, changes in the functional parameters of the oral cavity fluid are observed: a decrease in the rate of salivation, an increase in the viscosity of the oral fluid, a decrease in its surface tension, mineralization potential, which are more pronounced (Velik L.P., 2000).

Osokin M.V. (2007) stated in his thesis that the lesions of major and minor salivary glands were detected in children with end-stage chronic renal failure, which in some cases persist without clinical symptoms, 7% of them were diagnosed with sialadenosis accompanied by an increase in salivary glands. Xerostomia was observed in all children with chronic kidney failure, the amount of immunoglobulins of type A, M, G in mixed saliva, as well as the activity of aspartate aminotransferase, glutathione peroxidase, superoxide dismutase enzymes increases, which indicates a change in homeostasis. and the development of inflammatory-dystrophic processes manifested by clear changes in the mucous membranes of the oral cavity and hard tissues of the teeth. Yashuk E.V. (2009) states that the severity of periodontal inflammatory processes in children with end-stage chronic renal failure increases with a decrease in bone density and a decrease in the level of oral hygiene, a lot of microcracks appear in the tooth enamel of such patients.

Children with end-stage chronic renal failure treated with hemodialysis are characterized by poor oral hygiene, destructive changes in the hard tissues of the teeth (Cengiz ML., Sumer R., 2009), decreased reactivity of the dental pulp, numerous denticles and stones, which complicates the endodontic treatment outcome. (Orekhov D.E., 2009). Souza S.M. et al. (2008) reported that the majority (55%) of sick children complain of bad breath.

Similar data were obtained by many researchers in the study of the dental condition of children who were on hemodialysis due to chronic kidney failure: a decrease in the amount of saliva, poor oral hygiene, high intensity of dental caries and periodontal diseases. The authors also note the presence of pigmented dental deposits containing iron compounds (Nakhjavani Y.B., 2007; Martins S, 2008).

Takeuchi Y. (2007) and others found an increase in the number of microorganisms in the oral cavity when analyzing the data of oral microbiological studies using Dentocult System tests in children with chronic kidney disease.

Data on the prevalence of dental caries in children with chronic pyelonephritis are contradictory and, according to different authors, range from 69.8% (Kuchma S.N., 2008) to 97% (Belaya T.G., 2005).

A number of authors found that in children with chronic pyelonephritis, the amount of ionized calcium in blood and saliva is 1.5 times higher than in somatically healthy people. During the electrometry of hard dental tissues, a clear tendency to increase the electrical potential in children with chronic inflammatory diseases of the kidneys was found (Astakhova M.I., Gerasimova L.P., Pavlov V.N., 2009), which indicates an increase in microspaces in enamel and dentin (Loginova L.K. and others, 2006).

The National Guidelines for Pediatric Therapeutic Dentistry (2010) report the need for oral rehabilitation in more than half (62%) of children with chronic pyelonephritis. The authors suggested that the reactions of periodontal and renal tissues (hematuria, diffuse bleeding from gums) are similar due to high sensitivity to intoxication. In 1/3 of children with chronic pyelonephritis, in addition to changes in the gingival margin, dental deposits are noted in the form of dark brown, soft yellow or white plaque firmly attached to the neck of the teeth. Dark dense plaque can also be found in children without inflammatory changes in the periodontium. Thus, the authors identify a triad of symptoms characteristic of chronic pyelonephritis in the oral cavity: pallor of the mucous membrane, dark pigmentation and carious dentin in the neck of the teeth, trophic disturbance of the epithelial lining of the back of the tongue.

The study of literature data showed the prevalence of oral pathology in children with chronic kidney disease, but most of the studies are devoted to the terminal stage - chronic kidney failure, and the problem of dental pathology in children and adolescents with chronic pyelonephritis is not addressed.

According to modern concepts, dental caries and periodontal diseases are the main diseases that determine the structure of dental pathology in adults and children (Gadzhiev S.A., 2000; Sayfullina H.M., 2001; Samoylik M.M., 2005; Pogorzelska-Stronczak V, Bubilek-Bogacz A, Szporek W., 2001; Brogardh-Roth S., 2010; Widmer R.P., 2010). In this regard, the causes of these diseases, the risk factors, the nature of the disease, the clinical features of the disease, as well as various approaches to the treatment and prevention of diseases that are very important for humans are being developed.

Dental caries in childhood is a multifactorial disease with many biological (Seow W.K., 1998) risk factors (Reisine S., Douglass J.M., 1998; Vouse W.T., Den Besten P.K., 2010). Also, there are risk factors such as artificial feeding of the child during infancy (Dini EL., Holt R.D., Bedi R., 2002), disruption of the microflora of the oral cavity (Berkowitz R.J., Jones P., 1985), frequent use of easily digestible foods. Carbohydrates (Gordon Y., Reddy J., 1985), poor oral hygiene (Seow W.K., Amaratunge A., 1996), intraurethral and postnatal developmental disorders (Lai P.Y., Seow W.K., 1997; Thitasomakul S., Piwat S., 2009), malnutrition (Psoter W.J., Reid B.C., 2005), low level of parental knowledge of diseases (Marino R.V., Bomze K., 1989) are among them.

In 1998, the International Life Sciences Institute (ILSI) published the monograph "Caries Preventive Strategies" on the etiology, pathogenesis and prevention of dental caries. In this article, the authors identify two groups of factors that should be taken into account when assessing caries risk. The first group includes factors that damage dental tissues - plaque, easily digestible carbohydrates, the composition and functions of saliva. The second group includes characteristics that are related to the development of caries, but not directly involved: socio-economic factors, dental diseases and general somatic diseases.

The current theory of caries etiology and pathogenesis recognizes the primacy of the chemical-parasitic concept. Many researchers have shown the polyetiological nature of periodontal diseases, and the inflammatory reactions caused by the microflora of the oral cavity play a major role in their development (Grigoryan A.S., 2007).

Colonization of tooth surfaces by bacteria is an important etiological factor in the most common diseases of the oral cavity - dental caries and periodontal diseases (Rupesh S., Winnier J.J., 2010). In foreign literature, there are many studies showing the leading role of Streptococcus mutans in the occurrence and development of caries in temporary, removable and permanent teeth (Axelsson P., Kristofferson K., 1987; White G.E., Armaleh M.T., 2004; Peters M.S. , Tallman JA, Brown TM, Jacobson J J, 2010). Adhesive polysaccharides help bacteria to find their place in plaque and ensure that they adhere to enamel. the connection of enamel apatite surface with bacterial polysaccharides is provided by hydrogen bonds, Sa2+ ions and adhesin proteins. Adhesin proteins include a glycoprotein with a molecular weight of 200 kDa secreted by streptococci (Vavilova T.P., 2011).

Conclusion

For example, patients suffering from gum and dental diseases with impaired gum function may experience xerostomia, dental hyperesthesia, increased concentrations of trace elements, and a mixed acid-base reaction.It is designed to improve oral hygiene. However, these studies have not been confirmed in the scientific literature and have not been confirmed in clinical studies, indicating that the cause of pyelonephritis is increased acid-base activity of uric acid and its effect on the body's buffer system, as well as its disorders.Currently, the pathogenesis of dental caries and periodontal diseases is being studied. All of the above studies show the dentist's role in the prevention of dental pyelonephritis and periodontal lesions in children, as well as in the comprehensive rehabilitation of children with this pathology.

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