

## FEATURES OF DENTAL APPOINTMENT FOR CHILDREN DURING A PANDEMIC

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### Summary

During a pandemic, dentists are forced to admit patients only with acute toothache, which has led to an increase in the number of children with various forms of pulpitis and periodontitis and their complications. Often, failure to comply with medical prescriptions and failure to attend subsequent courses of treatment made the dynamics of the clinical picture more difficult. During a pandemic, a focus should be given to prevention of dental diseases.

The work of a dentist, especially a pediatric dentist, is very difficult and the peculiarity of this work confirmed by the period of a pandemic. Nevertheless, dentists are always ready to provide dental care in any conditions in order to improve the quality of life.

Here are two cases from clinical practice.

**Key words:** Dental departments, periodontitis, risk of infection, complications, children.

The pandemic has made its own adjustments not only in everyday life, but also in the healthcare system, including dentistry. This is especially true for the dental appointment of children, because the health of children is one of the priority areas in the health sector.

According to WHO recommendations, «during the COVID-19 pandemic, effective prevention of dental diseases and self - care continues to be a priority. Through telemedicine consultation systems or social media channels, it is necessary to inform patients about the maintenance of oral hygiene».

Through telemedicine consultation or social media channels we need to inform patients on the maintenance of oral hygiene [1]. During the quarantine, children's dental appointments had their own features, due to the fact that a number of diseases have an acute form and this requires the urgent and effective treatment.

**Objectives of the study:** To identify the features of dental appointment of children during a pandemic

#### Research objectives:

- 1) comply with biosecurity measures during admission;
- 2) to determine the features of a dental appointment during a pandemic;
- 3) analyze the number of treatment cases and morbidity;
- 4) improve the quality of preventive work during a pandemic.

Dentists, during a pandemic, continue to receive patients. During the visit, they are in close contact with the patients, when treating children - with their parents too. This creates unfavorable conditions for the dentist and a possible risk of infection, especially in the asymptomatic case of COVID-19.

As it known doctors of other areas was led to an online form of appointments, the dentist can carry out remotely only preventive work. In cases of acute toothache giving any form of treatment is possible only in the dental clinics. Because of this fact the dentist remains at high risk group for being infected with Covid-19 infection. Another feature was laid in the fact of contact with parents of the patients whom did not used all protective measures, which led the dentist at risk of infection too.

Dental departments were divided into 2 areas: sterile and non-sterile. Medical personnel needed to pass a PCR test. Without it admissions to work were not possible.

Before starting work, doctors and medical personnel needed to have an examination, measuring body temperature, which also affected the work schedule. Process had place one hour before start of the appointment. Using personal protective equipment (PPE) (suit, mask, cap, respirator, apron, boots, and gloves). Putting on and removing protective equipment takes additional time. In a protective suit, the dentist has no opportunity for personal needs until the end of the shift.

The working hours were shortened and therefore only emergency patients were admitted (with acute toothache or other emergency conditions). But the number of children did not decrease with such a schedule. Before quarantine, we took an average of 8-9 patients with acute toothache per shift, and during quarantine, the number of patients reached.

Difficulties appeared with sending a child for additional examination or consultation with other specialists.

During the quarantine period, 84 patients were admitted with acute pain, including those aged from 3-6 years - 53 cases; 7-10 years old - 18 cases; 11-14 years-8 cases; 15- 18 years old - 5 cases(fig.1) At the age from 3 to 6 years - 32 (60.4%) patients were diagnosed with: Chronic simple pulpitis; In 13 (24.5%) patients, chronic forms of periodontitis were diagnosed; 8 or 15.1% of the total number of adopted children were diagnosed with «Acute Periostitis» (figure 2).

Children aged 3-6 years' old who applied for chronic forms of pulpitis underwent pulpotomy. With chronic forms of periodontitis - treatment in several visits with a conservative surgical method. With inflammatory diseases of the K10.2 jaws, a periostotomy was performed (with antibiotics treatment). X-ray examination showed extensive bone resorption in 5 cases with a diagnosis of Chronic granulating periodontitis, and a decision to remove a tooth was made.

Here are two cases from our clinical practice:

Patient I., 4 years old was diagnosed with Chronic granulating periodontitis. According to the treatment protocol, a creso-

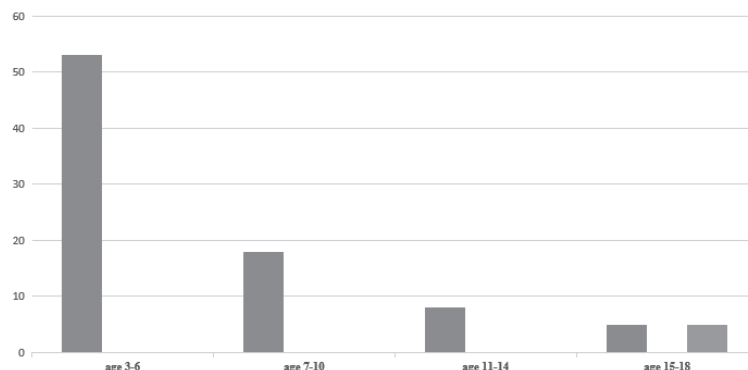
dent was placed under a temporary filling. But due to quarantine, the parents could not bring the child to the appointment, which led to a complication in the form of periostitis.

Patient A., 9 years old, presented urgently with acute toothache in 2.6 teeth. Objectively: the tooth is under the filling, the tooth mobility of first degree, the mucous membrane in the area of 2.5 and 2.6 teeth is hyperemic, the transitional fold is smoothed. R-image: expansion of the periodontal gap and

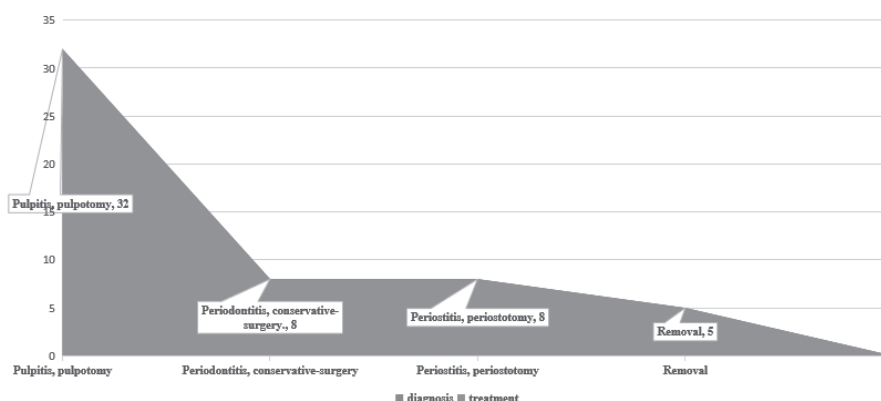
resorption of bone tissue in the apex of the tooth.

**Diagnosis.** Exacerbation of chronic granulating periodontitis with symptoms of periostitis.

**Stages of treatment:** In 1 visit - an outflow is created, the tooth is open. Since the patient came in urgently, we first provided emergency care, then sent him for an R-scan (to another clinic). Further treatment was continued according to the protocol.



**Picture 1.** Number of children who received dental treatment during the pandemic.



**Picture 2.** Prevalence of dental and treatment methods.

We tried to provide dental care to patients as much as possible on the first visit, and this was also dictated by the pandemic conditions.

A special feature of the dental appointment of children during a pandemic is the need to ensure the safety of patients and staff. A special feature of a safe visit to dentistry is a thorough anti-viral treatment and disinfection of the clinic, compliance with sterility standards by dental workers. A special feature of the safety of the patient and their parents from infection with coronavirus is the wearing a mask (both in the clinic and when going to the dentistry). If the doctor or medical staff had symptoms of the virus, the clinic's management should make a decision: to stay at home until cause is clarified. Doctors and medical personnel must take a PCR test. Without the results of the PCR test, personnel cannot be admitted to work. A special feature was the need to provide maximum dental care at the first visit.

During a pandemic, dentists are forced to admit patients only with acute toothache, which has led to an increase in the number of children with various forms of pulpitis and periodontitis and their complications. Often, failure to comply with medical prescriptions and failure to attend subsequent

courses of treatment made the dynamics of the clinical picture more difficult. During a pandemic, a focus should be given to prevention of dental diseases.

The work of a dentist, especially a pediatric dentist, is very difficult and the peculiarity of this work confirmed by the period of a pandemic. Nevertheless, dentists are always ready to provide dental care in any conditions in order to improve the quality of life.

# References:

1. Principles for delivering essential dental services in a pandemic COVID-19 // WHO Interim Guidelines - 3 August 2020.
2. Приложение 27 к постановлению Главного государственного санитарного врача Республики Казахстан от 22 мая 2020 года № 37-ПГВр Положение деятельности по мерам профилактики COVID-19 по усилению инфекционного контроля для стоматологических клиник. (2. Appendix 27 to the Resolution of the Chief State Sanitary Doctor of the Republic of Kazakhstan dated May 22, 2020 No. 37 - ПГВр Regulation on COVID-19 prevention measures to strengthen infection control for dental clinics.).

## ПАНДЕМИЯ КЕЗІНДЕГІ БАЛАЛАР ҮШІН СТОМАТОЛОГИЯЛЫҚ ТАҒАЙЫНДАУДЫҢ ЕРЕКШЕЛІКТЕРІ

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### Түйінді

Пандемия кезінде стоматологтар науқастарды тек өткір тіс ауруымен қабылдауға мәжбүр болады, бұл пульпит пен пародонтиттің әртүрлі формалары бар балалар санының көбеюіне және олардың асқынуына әкелді. Көбінесе медициналық талаптардың орындалмауы және емдеудің келесі курстарына қатыспау клиникалық көріністің динамикасын қиындатты. Пандемия кезінде стоматологиялық аурулардың алдын алуға ерекше назар аудару керек.

Тіс дәрігерінің, әсіресе балалар тіс дәрігерінің жұмысы өте күрделі және бұл жұмыстың ерекшелігі пандемия кезеңімен расталады. Дегенмен, стоматологтар өмір сүру сапасын жақсарту үшін кез-келген жағдайда стоматологиялық көмек көрсетуге әрқашан дайын.

Мақалада клиникалық практикадан екі жағдай келтірілген.

**Кілт сөздер:** стоматологиялық бөлімдер, пародонтит, инфекция қаупі, асқынулар, балалар.

## ОСОБЕННОСТИ СТОМАТОЛОГИЧЕСКОГО НАЗНАЧЕНИЯ ДЛЯ ДЕТЕЙ ВО ВРЕМЯ ПАНДЕМИИ

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### Аннотация

Во время пандемии стоматологи вынуждены принимать пациентов только с острой зубной болью, что привело к увеличению числа детей с различными формами пульпита и пародонтита и их осложнений. Часто невыполнение врачебных предписаний и непосещение последующих курсов лечения затрудняло динамику клинической картины. Во время пандемии особое внимание следует уделять профилактике стоматологических заболеваний.

Работа стоматолога, особенно детского стоматолога, очень сложна и особенность этой работы подтверждается периодом пандемии. Тем не менее, стоматологи всегда готовы оказать стоматологическую помощь в любых условиях для улучшения качества жизни.

В статье представлены два случая из клинической практики.

**Ключевые слова:** стоматологические отделения, пародонтит, риск инфицирования, осложнения, дети.

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## TO DETERMINE THE EFFECTIVENESS AND SAFETY OF PLANNED LOCAL ANESTHESIA IN PATIENTS WITH ARTERIAL HYPERTENSION

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### Summary

Arterial hypertension (AH) is one of the most common chronic diseases of the cardiovascular system, which has spread among various age groups of the population, characterized by an increase in systolic blood pressure (above 140 mm Hg) and diastolic (above 90 mm Hg). Research on the quality of life of patients receiving dental treatment is a promising modern direction in dentistry. Therefore, the problem of choosing effective and safe local anesthesia in the treatment of dental diseases in patients with arterial hypertension is relevant.

**Key words:** Hypertension (GB), ultracaine D-C with epinephrine 1:200 000, 4% articaine without epinephrine, Electrodontodiagnostics (EDI), Pulp Tester-P device.

**Relevance.** Hypertension is a very common disease. Currently, hypertension is not a contraindication for any type of anesthesia (excluding the use of ketamine). It is important to note the fact that it is necessary to achieve a sufficiently deep level of anesthesia before the stimulation that causes

the activation of the sympathetic nervous system. Today, the problem of outpatient dental treatment of patients suffering from arterial hypertension is relevant, since almost 99.9% of patients experience psychoemotional tension in the dentist's chair, accompanied by various kinds of vegetative disorders.