



However, pregnancy remains a contraindication. No matter how low the radiation dose during the procedure, it can unfavourably affect the development of the child. There are also difficulties with patients suffering from claustrophobia: CT must be performed, the patient has to sit still, it cannot be always performed in a panic state; a nursing mothers can apply it by removing all metal jewelry and it is better to abstent from breast-feeding a baby for 2 days.

Therefore, in order to avoid unnecessary exposure of the female patients during pregnancy and nursing mothers, CT should be performed in advance.

The purpose was to justify the therapeutic and prophylactic advantages of cone beam tomography based on the daily use in dental practice, given the absolute prohibition to be used by women during pregnancy, radiovisiograms, orthopantomograms and 3-D cone beam CT.

During 2016, on the primary dental appointment assist was provided to 45 women during pregnancy and lactating mothers in the dental office. This is the period where the use of electroodontodiagnosis and radiodiagnostics in clinical practice is indicated. In 15 cases, 3-D cone beam computed tomography (CT) scans were performed preliminary to patients aged 19-25 years, the information of which was stored on a computer or CD-ROM, which made it possible to use it in the dental practice.

The foregoing data shows that the method of cone beam tomography guarantees a therapeutic and prophylactic advantage as a method of X-ray diagnostics and makes it possible to use it in dental practice to provide complete specialized dental care to female patients during pregnancy and lactation.

X-ray examination during pregnancy should be determined by even more crucial criteria, since the dangerous effects of X-rays on the intrauterine development of the child are not excluded. If the doctor decides that this type of examination he cannot do with, then he must take all precautions to minimize the harm to the procedure.

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CONCENTRATION OF GENERAL IMMUNE COMPLEXES IN EXPERIMENTAL ANIMALS WITH AND WITHOUT THE LOCAL TREATMENT OF GINGIVITIS WITH THE COMPLEX ANTIOXIDANT THERAPY

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One of the highly sensitive and rapidly responsive link of the body is considered the immune system. It can clearly track the magnitude of changes in the main indicators of the course of the pathological process, the effectiveness of used treatment and predict the possible consequence of the disease. Its function is to destroy everything genetically alien, including damaged cells of one's organism, microbial cells, and genetically one that gets old, or represents cells or proteins of the initial stages of embryonic development.

The immune system is multicomponent, but works as a whole, one of the manifestations of which is the synthesis of antibodies. By binding to endogenous and exogenous antigens and activating the complement system, they form so-called circulating immune complexes (CIC), which are a manifestation of the body's physiological protection that promotes their rapid elimination by phagocytosis. Determination of CIC content is an indicator of the intensity of the inflammatory process and the state of the body's immunological reactivity system.

Experimental studies were carried out on 18 rabbits-males. An experimental model of ulcerative-necrotic gingivitis was obtained in animals by chemical burns. According to experimental conditions, all animals were divided into three groups: intact animals (6 rabbits); control group - animals of this group were not treated, the ulcerative-necrotic process healed on its own (6 rabbits); experimental group - in these animals, from the day of modeling of ulcerous-necrotic gingivitis, throughout the observation period, local treatment was performed with a complex of antioxidant preparations (ointment of Thiotriazoline, Zinc Ointment and Chlorhexidine Begluconate) (6 rabbits). Experimental drugs were applied at an approximate dose of 200 mg to the



damaged gum area 2 times a day in 2 hours after feeding the animals. Melted paraffin was used for the fixation of preparations on the surface of the wound.

In response to the damage and the appearance in the body of a large number of denatured protein structures from lesions that have antigenic features, the concentration of formation of general CICs had the same nature of changes in both experimental groups - a rapid increase in the initial time of observation and a gradual decrease to the level that is characteristic of intact one. However, in each individual group, the intensity and rate of changes were different.

On day 3, untreated animals in the control group showed an increase in total CIC content of 51.64% above the physiological index. At the level of reliable difference with intact animals. Also, the data obtained on the 5th day with an advantage of 36.36%.

However, by the 7th day, as a result of its further decrease, the studied index reached the value of statistically unreliable and prevailed the data of intact animals by 9.09%. Closer to the physiological norm, the CIC concentration was detected on the 10th day and amounted to 104.36%. At the same time, in the animals of the experimental group, the increase in the concentration of CIC at day 3 was significantly lower and was only 21.27% above the level in intact animals. By the 5th day, their value was within the statistical uncertainty and the physiological norm index was 11.27%. The tendency for normalization persisted in the future, and on the 7th and 10th days were obtained almost identical results: 102.90% and 102.36%, respectively, from the data of intact animals.

The protective properties of the developed complex of antioxidant preparations reduce the destructive processes in the area of damage, thereby reducing the antigenic load of the units of immunological reactivity of the body. As a result, their stress in the initial periods of the simulated ulcerative necrotic gingivitis is lower, as evidenced by significantly smaller quantitative values of the studied parameters and significantly faster normalization.

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**MICROBIOLOGICAL ASSESSMENT OF A COMPLEX OF THERAPEUTIC-
PREVENTIVE MEASURES CONCERNING CHRONIC CATARRHAL GINGIVITIS IN
CHILDREN AGAINST DIABETES MELLITUS**

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Dysbacteriosis of the oral cavity is known to complicate the course of chronic catarrhal gingivitis resulting from functional disorders of the macroorganism ecosystem, decreased the amount of probiotic and increased amount of opportunistic and pathogenic microflora. In this case the use of antiseptic, probiotics and stimulants in the complex of treatment is relevant.

The aim is to enhance the efficacy of treatment of chronic catarrhal gingivitis in children suffering from type 1 diabetes mellitus by means of improving the methods of pharmacological correction on the base of the study the microbiological properties of the disease.

We formed 2 groups of the study. Children received basic insulin therapy. The treatment of chronic catarrhal gingivitis in children from the main group was suggested the antiseptic solution "Decasan"; pill of a probiotic action "BioGaiaProDentis" and the immune modulator "Imupret". Children from the comparative group were treated according to the common scheme.

Biocoenosis of the oral cavity in children before the beginning of treatment was similar, and after the conducted first course of treatment microbiological status in both groups of the study improved immediately.

The results of a quantitative assessment of the oral microflora after the conducted treatment demonstrated 69,42 % ($p < 0,05$) decrease of the general microbial number in children of the main subgroup, and in the children from the comparative group – 46,92 % ($p < 0,05$). The number of gram-positive microorganisms in children from the main subgroup was found to be 73,69 % less as compared with the results of treatment ($p < 0,05$), gram-negative microorganisms – 46,43 % less ($p < 0,05$), and *Candida* fungi – 94,74 % ($p < 0,05$). These findings are twice as less in the group of comparison than those among the children from the main subgroup: gram-positive microorganisms