

TO STUDY CHANGES IN THE STATE OF THE CRYSTAL FORMING FUNCTION OF SALIVA IN VARIOUS PATHOLOGIES

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Annotation. The development of dental pathologies, as a rule, is a consequence of the progression of pathological processes occurring inside the human body. Against the background of weakened immunity, the influence of external negative factors increases, which leads to the formation of problem areas. The causes of diseases can be different: by the symptoms manifested on the tongue, lips and gums, as well as by the results of clinical diagnosis, including using professional equipment, it is possible to determine the source of anxiety.

Keywords: dentistry, immunity, diseases of the oral mucosa, periodontal disease.

The classification of diseases of the oral mucosa helps to make the correct diagnosis and start therapy in a timely manner, avoiding more serious negative consequences. Diseases of the mucous membrane of the oral cavity and periodontal are manifestations of various pathologies of internal organs, which require special examination methods to detect.

Purpose: to study the crystal-forming function of oral fluid in patients with diseases of internal organs.

The state of crystal formation of mixed saliva was studied in 30 students according to the method: after rinsing the oral cavity with one portion of distilled water, oral liquid was taken onto a slide, which was placed in a thermostat for 1 hour at a temperature of 37 ° C. The obtained crystals were examined under a microscope at a magnification of 7x10. The method of determining the pH of saliva was traditional - wetting a litmus test in the oral cavity for one minute. The time for the examination was determined two hours after within one minute. The time for the examination was determined two hours after the meal. Depending on the initial pH of the oral fluid, the examined patients were divided into three groups. The first group included 8 students (26.6%), whose pH value of the oral fluid ranged from 5.8 to 6.0. The examined patients had a history of endocrine pathology (1), kidney pathology (1), chronic tonsillitis (2), gastrointestinal pathology (4) An occlusion anomaly was determined during an examination of the oral cavity (4), non-carious lesions (1), swelling and atrophy of the papillae of the tongue (4), hard dental deposits and periodontal pathology (6). The second group included 19 people (63.4%), whose hydrogen ion index

fluctuated within the physiological norm (6.5-7.0). During the examination, they revealed endocrine pathology (2), gastrointestinal tract (7), kidneys (3), chronic tonsillitis (4), three of the examined were practically healthy. In the oral cavity, occlusion pathology was determined in 7 of the examined patients, dental deposits in 15, periodontal pathology in 13, swelling of the lips and tongue in 8 students.

When studying the crystal-forming function of saliva in students, the detected tree-like shape of crystals with a significant number (5-10) of crystallization centers was considered the norm, for the presence of Saz (P04)₂ micelles protected from aggregation by glycoprotein mucin in the oral fluid. This type of crystals was observed in practically healthy students (10.1%) who had not seen a doctor for 2-3 years. At the same time, their water-native ion index ranged from 6.5 to 7.0. In chronic tonsillitis, detected in 10.1% of students, with a pH ranging from 6.0 to 6.5, the following crystal variants were observed: The main trunk is slightly curved, small branches unevenly located relative to each other. In both variants, the crystals are moderately saturated. The pathology of the gastrointestinal tract was determined in 36.6% of the subjects, the hydrogen index of ions in the oral fluid of which was with a different value from 5.8 to 7.5. The main trunk is slightly curved, the branches are sparse, uneven in length and location, thickened in places. The crystal is slightly saturated.

Kidney pathology was observed in 20% of the students and the pH ranged from 6.0 to 7.5. The types of crystals in this group were as follows: The main trunk was thickened, the branches were frequent, symmetrical in location and unequal in length, moderately saturated. In endocrine pathology, the crystals are not saturated, with a rare arrangement of the main trunks, the branches are asymmetrical, of different lengths. This type of crystals was observed in 10.1% of the students and the pH was from 5.6 to 6.8. In some, the absence of crystallization was determined. Thus, the pH of oral fluid ions in various somatic pathologies did not have a definite pattern, and its significance in the crystal-forming function of mixed saliva requires a more detailed study of the issue. Determination of saliva crystallization can be used for early detection of pathology of internal organs.

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