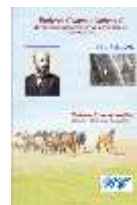




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Dependence of the crystallogenic properties and the state of the micelles of the salivary fluid on the hygienic status of the patient

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Keywords: crystallography, micelle formation of salivary fluid, acid-base balance in the oral cavity, enamel demineralization, oral hygiene.

Abstract

It is known, that chronic catarrhal gingivitis is widespread everywhere. This is due to both non-compliance with individual oral hygiene, and factors of general and local immunity, lifestyle, unhealthy habit and the lack of timely prevention. Crystalloscopy as a science appeared relatively recently and is used in a large area of express research of scientific medical laboratories. However, most methods do not describe the physical and chemical processes occurring in facies, which are necessary for a complete understanding of the processes occurring in micro-preparations and a correct interpretation of the crystallographic data obtained by these methods. Research data of the relationship between crystallogenic properties of oral fluid and the micelles state of salivary fluid in students treated of chronic catarrhal gingivitis of moderate severity are described in the article.

A students group, which the dependencies between the activity of the carious process and the characteristic changes in the crystalloscopy of the oral fluid were determined, was observed for 30 days. A statistically significant dependence of hygiene product cleaning ability on crystalloscopic properties of saliva, changes in the structure of micelles and the clinical picture of chronic catarrhal gingivitis in patients were found. A shift in the acid-base balance of the oral fluid to the alkaline side was registered in the treatment protocol for chronic catarrhal gingivitis because of inclusion of an anti-inflammatory toothpaste containing sodium bicarbonate and fluoride in its composition. There is an improvement in the indices of oral hygiene, a decrease in inflammatory processes in the periodontal tissues, which indicates a positive dynamics of the complex treatment of chronic gingivitis in patients.

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