

# THE STUDY OF THE INFLUENCE OF AQUAFRESH TOOTHPASTE AND ORAL RINSES ON MICROBIAL COMPOSITION OF TOOTH DEPOSIT

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**Introduction.** The accumulation of tooth deposit consisting of microorganisms of normal oral microflora and food debris, can lead to gingivitis, tooth decay and other problems. Rational oral hygiene with the use of targeted treatments is one of massive and the most effective methods of dental diseases prevention. Among modern hygiene products there are toothpastes and oral rinses.

**The goal of research** is optimizing the choice of toothpastes and oral rinses and studying their impact on tooth deposit microflora.

**Objects and methods.** 9 people aged 16 to 25 were involved into the experiment which lasted 28 days, the test persons were divided into groups and 5 stages. All of them used Aquafresh toothpaste. Group 1 used the toothpaste only, while group 2 used toothpaste + Lesnoi Balsam oral rinse and group 3 used toothpaste + Colgate "Plax tea freshness" oral rinse. Before the beginning of the research study the test persons used various other toothpastes. The methods used were microscopic, bacteriological, mycological, statistical.

**Results and discussion.** The substitution of pathogenic to saprophytic microflora was taking place among test persons in group 1 from 1 to 4 state; the substitution of opportunistic pathogenic fungi to saprophytic bacteria was taking place among test persons in group 2; no representatives of opportunistic pathogenic and pathogenic microflora were found among test persons in group 3. However, from the beginning of stage 5 the increase in the number of microorganisms and the increase of quality representation in tooth deposit microflora was observed in all the groups.

**Conclusions.** It was confirmed that the toothpaste and oral rinses used in the study demonstrated preventive effect, but their use within a period exceeding 3 weeks was accompanied by the formation of microbial resistance to them.

Using complex toothpaste + softener oral cavity is more effective for people with gum disease than using only toothpaste.

**Practical recommendations.** When using toothpastes and oral rinses as preventive means, their obligatory change every 3-4 weeks is required. The use of oral rinses with treatment effect shall fully meet the purpose, mentioned in the package leaflet to the concrete product, or shall be agreed at the consultation with the dentist.