

their respective area. Ideally, there would be prophylaxis programmes and, in consequence, interceptive treatment.

Key words: anomalies, occlusion, orthodontic clinical diagnostic.

328. THE STUDY OF BIOPHYSICAL PROPERTIES OF ORAL FLUID IN CHILDREN WITH DENTAL CARIES

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Introduction. For early diagnosis of dental and systemic diseases, the crystallographic method of research of the oral fluid (OF) was proposed, as it is the most accessible body fluid.

Aim of the study: to study peculiarities of oral fluid micro crystallization in children with dental caries.

Material and methods: 100 children aged between 7 and 10 have been clinically examined. The study of crystallographic changes of the oral liquid was performed using the method developed by Shatohina S.N. and coauthors (2006). A volume of 0.2 to 0.3 ml of oral liquid was collected with a sterile pipette. Three drops of oral liquid collected from each child were applied on glass slides. The dehydration of the OF product drops was produced in a thermostat at $t\ 37^{\circ}\text{C}$, which insured dust protection. Micro preparations were examined under an optical microscope. The study was conducted in accordance with the requirements of the Code of Ethics for Scientific Research.

Results: from the total number of children examined, 71% are affected by dental caries. The oral fluid micro crystallization degree in children with dental caries is lower compared to caries-free children and is correlated with the degree of caries activity.

Conclusion: the study of structural peculiarities of dehydrated oral fluid droplet in children with dental caries has elucidated a number of markers of the changes produced in the mouth that can later be applied in screening research activities in dentistry, dental practice and development of cario-preventive measures and evaluation of their effectiveness.

Keywords: oral fluid, micro crystallization, dental caries

329. EVALUATION OF THE RISK OF DENTAL CARIES OCCURRENCE IN CHILDREN USING THE CARIOGRAM SOFTWARE

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Introduction: Dental caries is a multifactorial disease, characterized by a local destruction of hard tissues under the action of microorganisms. WHO places dental caries on the 3rd-4th place within health problems of the population, which offers it the characteristics of a social disease. It is important to pay attention to the high prevalence, as well as to the early occurrence of dental caries in growing children. The objective is to evaluate the risk of caries in children using the Cariogram software.

Materials and methods: The clinical data of this study is based on the examination of 98 children aged 7-14. The methods of examination included collecting patient data; clinical and complementary methods of examination. Oral hygiene index and DMFT were determined. The complex evaluation of caries risk was performed using the Cariogram software. The study was realized according to the ethic demands and with having signed the agreement forms by the children's parents or their legal representants.

Discussion results: The influence of a series of factors was found in the majority of children involved in the study. A very low risk in caries was determined in 24,48% of the children, low risk - in 25,51%, medium - 26,53%, high - 19,38% and very high - 4,08%. An extreme caries risk was caused by deficient oral hygiene, high concentration of Streptococcus Mutans in saliva, lack of fluoridation etc.

Conclusions: The high risk in caries occurrence in children indicates the need of initiation of pre-vention programs targeting individual factors of caries development.

Keywords: dental caries, cariogram, carious risk.

330. THE BACTERIAN PLAQUE – DETERMINING FACTOR IN PARADONTOPATHIES

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Introduction: The bacterial plaque is an ecological microbial system represented through a bacterial aggregation adherent to dental surfaces and not only, which can be removed through a water spray and simple cleansing. This system represents an important pathogenic potential not only for enamel but also for the marginal paradont. The bacterial plague is unanimously recognised today as being the determining factor of the paradontal disease. Its control is a way of prevention which determines the use of the most feasible methods of discovery, control and motivating the patients so as to annihilate the etiopathogenetic role of the bacterial plaque.

Material and method: The examination and evaluation of the patients have been carried out according to the clinical chart based on the extra and intraoral examinations. The observation charts have been filled in with paraclinical examinations. The study comprised a group of 200 patients aged between 15 and 76 who were examined at the same time interval, after the last dental brushing. The Silness-Loe plaque index was determined using as plaque revealing substance: methylene blue solution 2% (through mild tamponing so as not to remove the plaque deposits by rubbing), followed by energetic cleansing with