

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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