

blood serum was determined by the immunoenzymatic method of analysis (Vectior-Best, Russia). The study was conducted in accordance with ethical requirements, with the written consent of the children's parents or legal representatives. Analysis of statistical data, using parametric and nonparametric tests, was done using Microsoft® Excel® 2013 programs with the help of the function and of these programs.

Results. In children in group L1 there was a significant decrease in the level serum IgA, IgG, IgM and OF sIgA, IgA, IgG, being in reverse with the number of strains *Streptococcus mutans* in saliva, dental biofilm and indices of caries experience.

Conclusions. significant decrease in immunoglobulin levels in oral fluid and blood serum found in carioreceptive children is one of the important factors of carious risk and an unfavorable indicator of aggressive evolution of dental caries, which must be considered when planning individualized preventive measures.

Key words: immunoglobulins, dental caries, carious risk

340. MALOCLUSION PATTERNS IN PHYSICALLY, AUDITORY AND VISUALLY HANDICAPPED PATIENTS IN REPUBLIC OF MOLDOVA

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Introduction. The main problems of orthodontics from Republic of Moldova is to determine either the genetics or enviromental factors influence the development of malocclusions

Aim of the study. The purpose of the study is to determine the prevalence of malocclusion in children with special needs and relation with neurological disorders in the process of social behavoir of children.

Materials and methods. It was examined 2057 children with special needs (physically, visually, auditory, others) aged between 7-15 from diferent orphaned school from Republic of Moldova. Clinical examination of children included: disponsable dental mirror, chemical pencil, wooden spatula, calipser, portable light. Control group were selected 1345 children from normal school who did not have any neurological disorders and treatment of malocclusions.

Results. In sagital plan malocclusion was associated with 69 (9,75%) cases with auditory handicapped, 74(14,8%) children with visually handicapped, but in 33(18,33%) - with physically handicapped children. Mostly, malocclusion have been detected in physically handicapped children in vertical and transversal plan. Malocclusion varied in boys between 58,8% and 63,89% and in girls between 36,11% and 41,21%. The most affected age is 12-15 in visually handicapped children, 9-12 – auditory handicapped children and 7-9 age- in physically handicapped children.

Conclusions. Auditory, visually and physically disorders can be considered as key predictors and risk factors in appearance of malocclusion in children. Children with special needs may be treated according to the age and the nature of malocclusions.

Key words: malocclusion, children, special needs, orthodontic treatment

341. NEW METHODS OF RESTORING INTERDENTAL CONTACTS

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Introduction. Interdental contacts are an important factor to keep dento-alveolar system healthy. Its basic functions are protecting the underneath papilla and periodontal structures, prevention of carries and dispersal of masticatory forces. Studies show that distribution of dental caries is unequal, approximal surfaces being affected in up to 77%. Approximal caries may be difficult to diagnose and treat, even for an experienced dentist due to its hidden location. Diagnosing requires use of other methods than visual-tactile examination, such as: bitewing radiographs, fiberoptic-transillumination or fluorescent system like Saprolife. It is impossible to restore approximal surfaces with tight interdental contacts without using specially designed systems, like Palodent or Bioclear Biofit. This leads to an increased treatment time, especially when multiple teeth are affected.

Aim of study. To study the possibility of decreasing time necessary for restoring interdental contacts, using new materials and methods, preventing further complications.

Material and methods. In this study, 6 teeth (4 molars and 2 premolars) with approximal caries were divided into 2 groups. One group, consisting of 2 molars and 1 premolar, was treated with dental composite of low viscosity (Tetric N-ceram, Ivoclar) using “layered” technique. Another group was treated with bulk-fill composite of high viscosity (SDR, Dentsply) using “injection molding” technique. Total treatment time and approximal wall restoring was measured for every tooth of both groups. Post-op radiographs were taken.

Results. Due to increased polymerization depth of SDR composite (4 mm), fewer steps are required for core build up. As a result, total treatment time decreased on average by 4 minutes 50 seconds, along with wall restoring time decrease on average by 7 minutes 15 seconds, using “injection molding” technique. Post-op radiographs showed the presence of bubble in 1 tooth, restored by “layered” technique.

Conclusion. The “injection molding” technique requires fewer steps, less time, and reduces the possibility of further complication such as bubbles.

Key words: approximal caries, interdental contacts

342. PARTICULARITIES OF MEDIUM CARIES TREATMENT. MATERIALS AND TECHNIQUES OF TREATMENT

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Introduction. Dental caries (tooth decay) is an infectious and transmissible disease, which produces changes through demineralization in the mineral content of hard mineral tissues and which, under certain conditions, has the capacity to recur as well as to recover through demineralization processes. It is characterized by the demineralization of the inorganic part of the enamel, the destruction of its organic matrix and the softening of the hard dental tissues, with the subsequent cavity defect formation. The relevance of this topic is determined by the increasing incidence of dental caries, its severity, as well as local and general complications produced by dental caries. Also, the changes in tissues determine the type of material, the treatment methods used, and the attitude of the dentist in establishing the diagnosis and treatment plan.

Aim of the study. To study the particularities of medium dental caries manifestation and to select the appropriate filling materials and techniques.

Materials and methods. The study lot comprised 10 patients, of which 3 women and 7 men, aged 18-35 years, who were subjected to examination and treatment. After the examination, the diagnosis of chronic medium caries was established, the process being located on the occlusal