

310. PARTICULARITIES OF DEEP CARIES TREATMENT. FILLING MATERIALS AND TECHNIQUES

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Introduction. Deep dental caries is a localized pathological process characterized by demineralisation of the inorganic part of enamel, destruction of its organic matrix and softening of hard dental tissues with the subsequent formation of cavity defect, the lesion area extends beyond the tooth enamel and can extend to the root, affecting the dentine which is adjacent to the pulp chamber. The development of the pathological process leads to the thinning of the parapulpal dentine, slightly permeable in pathogens. The protective layer is diluted and destroyed, which causes the infection to penetrate through the root canals in the periodontal tissue and even in the maxillary bone tissue. The nature of tissue changes determines the choice of treatment method that is effective due to biomechanical preparation of the carious cavity, medicated processing, application of curative and insulating fillings, as well as the choice of filling material for permanent dental crown filling.

Aim of the study. To study the particularities of the development of deep dental caries and to select treatment materials and techniques.

Materials and methods. A group of 10 patients (5 women and 5 males) aged 20-45 years (10 teeth - 2 canines, 2 premolars, 6 molars) underwent complex examination and treatment. Following clinical and paraclinical examination, the patients were diagnosed with deep caries. To ensure the treatment efficiency and safety, we opted for the treatment using the indirect capping technique in two visits. To avoid dental pulp excitability, we applied the curative calcium hydroxide-based filling Ultra Blend on the bottom of the carious cavity. It stimulates reparative dentine formation, having antiseptic, bactericidal and antitoxic action.

Results. Of all the cases studied, only 1 patient (1 molar) had complications resulting in acute pulpitis, so we can state that calcium hydroxide-based preparation Ultra Blend corresponds 90% to its properties, being effective in the treatment of deep caries.

Conclusions: The two-visit treatment using the indirect capping technique and the application of curative paste Ultra Blend based on calcium hydroxide - determined high efficiency of the treatment of deep caries due to the stimulation property in reparative dentine formation.

Key words: deep caries, cavity, indirect capping.