

19. INDICATIONS AND CLINICAL-TECHNOLOGICAL FEATURES OF PROSTHETIC TREATMENT OF CORONARY DENTAL LESIONS WITH MINIMALLY INVASIVE ZIRCONIUM OXIDE CROWNS

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Introduction. Coronary dental diseases are some of the most common pathologies of the stomatognathic system, and the methods of treatment by coating with crowns are the most effective methods of morpho-functional restoration (D. Bratu, R. Vissbaun, 2003). The application of artificial crowns in the vast majority of cases necessarily requires the preparation of hard coronary tissues, especially when applying contemporary technologies for the construction of metal-ceramic, all-ceramic, zirconium oxide constructions.

Aim of study. Determination of indications and clinical-technological features for making zirconium oxide crowns coated partially with ceramic by the stratification method.

Methods and materials. 8 patients between 23-55 years old were examined clinically and paraclinical with coronary dental lesions of the teeth situated in the frontal sector of the dental arches at both jaws previously treated. Were selected patients with orthognathic occlusion with minimal, medium, deep, and end-to-end coverage. Patients were examined clinically-instrumentally, radiologically and the models were studied visually and in the articulator. The assessment of the boundaries of the preparation areas was determined visually, and in the parallelograph, depending on the thickness of the hard tissues and the degree of incisal coverage. The position of the teeth on the arch, the static and dynamic occlusal reports were the main arguments that contributed to the miniinvasive preparation of the hard tissues of the teeth subjected to prosthetic treatment. The crown carcasses were made of zirconium oxide by milling, and the ceramics were deposited by the layering method.

Results. The study performed through the clinical and paraclinical examination of the selected patients offered us the possibility to prepare the crowns of the treated teeth, by covering them with mini-invasive zirconium crowns partially covered with ceramics vestibular or vestibulo-occlusal. The process of minimally invasive preparation of vital and devitalized teeth is argued by a minimum sacrifice of dental hard substance with biological, physico-chemical, mechanical protection and ensuring the aesthetic appearance.

Conclusion. The determination of indications for making zirconium oxide crowns partially coated with ceramic by stratification depends on the variety of occlusion, the thickness of the hard tissues, their size (volume and height) and their fragility, and not least the technological possibilities and wishes of the patient.