

38. METHODOLOGY OF USING THE OCCLUSAL KEY IN CLINICAL PRACTICE



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Introduction. The special significance of personalization is manifested in the meaning of the anatomical, topographical, and constitutional characteristics of patients. Therefore, the search for new materials and technologies for “invisible” dental restoration in therapeutic activities is justified. The methodology of using the occlusal key involves reproducing the original anatomy of the tooth structure by simulating the original unprepared tooth structure. The technique is used where, before the restorative procedure, the occlusal surface is practically undamaged.

Case statement. One of the ways to reproduce the structure of the cusps and fissures is to make an occlusal key using a liquid rubber dam from the chewing surface. In the clinic, it can be used in cases where, in the presence of carious lesions, the main area of the chewing surface is preserved. I present a clinical case of making a template for caries. Intact chewing surface. It is assumed that the occlusal key will be removed using a liquid rubber dam, followed by the preparation of the cavities and filling them with a photocurable composite.

Discussion. An analysis of the effectiveness of restoring the chewing surface of teeth using the “occlusal key” technique showed that the material filled the mouths of the fissures and covered the slopes and cusps of the chewing surface. When evaluating the finished restoration made using the “occlusal key” technique, the chewing surface of the finished work completely reproduced the chewing surface of the tooth before preparation. When checking the occlusal contacts, the restoration was in full interaction with the antagonist's teeth.

Conclusion. Thus, the use of individual occlusal keys in the clinical practice of a dentist in specific situations is an excellent alternative option for modeling the occlusal surface of individual teeth. The “occlusal key” technique simplifies the dentist’s work, saves time on modeling the restoration, and avoids its lengthy occlusal adaptation and grinding compared to the free modeling technique.