



67. THE USE OF COMPOSITE MATERIALS IN THE MORPHO-FUNCTIONAL AND AESTHETIC RESTORATION OF THE ANTERIOR TEETH

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Introduction. Dental traumas, caries, and injuries of the anterior teeth have an impact on the patient's physical and psychological well-being, requiring prompt functional and aesthetic restoration. Aesthetic tooth restoration differs from conventional dental filling primarily in that, instead of only restoring the functional appearance of the tooth, the aesthetic tooth restoration uses a material that exactly reproduces the dentin, enamel, transparency, and colour range of the tooth. Aesthetic modeling and dental restoration solve two problems simultaneously, namely restoring dental functionality and providing a clearly superior aesthetic appearance. Teeth affected by carious or non-carious lesions are usually restored using composite materials. Currently, resin-based composites are a popular option for direct restoration of anterior and posterior teeth. Physical appearance, such as colour match and polish, is very important for anterior teeth. Composite materials used for anterior teeth usually have small filler particles, which increases smoothness but also reduces the Young's modulus and fracture toughness of the material.

Aim of study. To assess modern techniques and methods of treatment of coronal odontal lesions using composite materials.

Methods and materials. To achieve the purpose of the work, a clinical study was performed. All patients were examined clinically and paraclinically. The diagnosis of coronal odontal lesions was made, and the treatment plan was established in mutual agreement with the patients. The anterior direct restoration technique was applied in the given study. The restorative materials used to restore the front teeth were as follows: GC GRADIA DIRECT AO2, GC GRADIA DIRECT A2.

Results. The patients who underwent the morpho-functional and aesthetic restoration of the anterior teeth with composite materials according to the latest techniques presented good aesthetic results, restoring the integrity of the tissues and the shade of the tooth colour.

Conclusion. The dentist must choose between direct and indirect techniques when determining the most qualitative and effective treatment for patients with aesthetic issues of the anterior teeth. Direct composite restoration should be strongly considered in circumstances where conservative treatment is possible. Advances in direct restorations, as well as the use of new bonding agents and new highly aesthetic direct resin systems, can all have a favourable impact on treatment. The direct method is considered a method of improving the aesthetics and reducing the working time.