

techniques and introducing the new ones. Moreover, for the lateral group of teeth it is required to respect the proportionality between the mechanical properties of the restoration materials (fracture and abrasion resistance as well as the polymerization contraction) and the aesthetic properties. In order to avoid side effects such as fracture or the appearance of secondary caries, it is necessary to restore each lost tissues with materials that have the same structural and mechanical properties. Biomimetic restoration technique, using short fiber-reinforced composite as substructure, is a recommended alternative to direct restoration and can be reliably used for coronary restorations of large cavity teeth, in areas with low resistance conditions.

Aim of the study. The evaluation and optimization of the restoration technique on the lateral group of teeth, using modern materials and methods.

Materials and methods. In order to carry out the study, the research sample included patients between the ages of 18 and 50, these patients had various forms of dental pathology in the lateral group of teeth, of carious origin and their complications. Only the patients with limited or extended interest of the dentine layer lesions were selected.

Results. As a result of the systematization of the clinical-theoretical information and the practical application of modern solutions for the direct restoration of the lateral teeth, we came to the conclusion that by using short fiber-reinforced composite as a base with a superficial conventional composite restoration, structural and mechanical properties, as well as the failure rate through the combination of materials has been improved, compared to those of restorations from conventional composite materials as a whole. The correct realization of the restoration technique of the lost tissues with materials that have similar properties, allows us to approach as much is possible to the biomimetic correspondence between the restoration materials and the anatomical aspect of the natural tooth.

Conclusions. As a result of the analysis of the proposed method, we have come to the conclusion that the correct realization of the restorations regarding the picking of the material and the appropriate working technique will lead to excellent results. The light-cured short fiber-reinforced composite has become a required material for its efficiency in restorative dentistry, which allows the restoring of large class I and II cavities in the posterior tooth group, where is a high level of masticatory pressure, due to its increased hardness. Their use not only presents aesthetic and lasting results over the years, but also reduces the working time and makes the practitioner's work easier.

Key words: Direct dental restorations, biomimetic materials, fibre-reinforced composite.

389. TEETH WHITENING - THE ALTERNATIVE IN DENTAL AESTHETICS

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Introduction. Since centuries, the physical appearance of people has been a major importance in society. Nowadays, the patients are willing to invest a lot of money to have a brilliant smile, and to have more self-confidence.

Aim of the study. This paper aims to examine the alternative whitening and the motivational values of the patients. The study is based on data obtained by treatment of the 25 patients aged

between 20 and 35 years old, including 18 women (72%) and 7 men (28%). All patients were divided into 2 groups: first group were the patients who choose home teeth whitening; and the second group were the patients who choose office teeth whitening, First patients group included 18 persons. Second group included 7 persons. The algorithm for investigation of patients included: clinical examination, photostatic examination, vitality and sensitivity tests of the teeth. Following the study, each patient received adequate treatment, choosing one of the proposed whitening methods.

Materials and methods.. Home whitening was accomplished through individual trays and gel "Opalescence PF" (Ultradent, USA) - 15%. Office whitening was performed using the "Opalescence Boost" - 40%. The most powerful aesthetic effect is obtained by the method of whitening in the office, using the "Opalescence Boost", being important the active substance concentration, also duration of whitening sessions and overall duration of the whitening treatment.

Results. Whichever method is chosen, whatever home or office whitening, treatment caused color modifications at all 25 patients included in the study. It is very important to use proper whitening materials, patients training and their supervision by the doctor.

Conclusions. Teeth whitening are required so as women and men, first being students, single persons and people with higher education. Currently there are many whitening methods and choice of any of them will give positive results, assuming the task for the dentist to choose the best method for each patient individually.

Key words: whitening, Opalescence PF, Boost

390. USE OF FLUID COMPOSITE MATERIALS IN DENTAL RESTORATIONS, FRONTAL TEETH

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Introduction. Flowable resin composites were developed and introduced to the world as a revolutionary restorative biomaterial in 1996. These first-generation flowable formulations were designed to simplify the placement technique and to expand the range of clinical applications for resin composites. These biomaterials were marketed by manufacturers for a wide range of applications, which included all classifications of anterior and posterior composite restorations, block-out materials, composite repair, core buildup, crown margin repair, cavity liners, pit and fissure sealants, anterior incisal edge repair, preventive resin restorations, provisional repair, tunnel preparation restorations, adhesive cementation, restoring enamel defects, air abrasion cavity preparations, and void repairs in conventional resin composite restorations.

Aim of the study. Comparative study of adhesion to hard dental tissues of fluid composite materials by dental recontouring microscopy in areas of dental tissue-composite interaction

Materials and methods.. A clinical study has been performed in three patients with different clinical diagnosis: abrasion, dental crown fracture, restoring enamel defects. These patients were treated using standard treatment and using fluid composite materials.