

lesions. Both groups were treated using ICON system. Data were analysed by photostatic examination, before and after treatment.

Results. There was a significant improvement in clinical status, characterized by macula disparition and reduction in brown striations intensity in group one and complete treatment for the second group.

Conclusions. The conservative therapeutic method used in this study offered good results in enamel demineralisation treatment, manifested by caries in macula stage, but additional research are necessary in case of dental discoloration.

Key words: conservative treatment, fluorosis, incipient caries, ICON

302. THE USE OF “BULK FILL” TECHNIQUE FOR POSTERIOR TEETH RESTORATION

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Introduction. Modern dentistry, by continuous development of biomaterials and treatment techniques, opens up new possibilities of approach for dental affections, aiming to implement the most effective methods of treatment and to achieve revolutionary results in the treatment and prophylaxis of dental caries. The “Bulk fill” technique helps us to achieve a qualitative restoration of posterior teeth in a shorter time than using traditional techniques, due to the simplified process of restoration and last generation materials used.

Aim of study. The analysis of the advantages of „bulk fill” technique, used in posterior teeth restoration.

Materials and methods. A clinical study has been performed on a group of 36 patients, 12 of them female and 24 male, aged 21 to 48 years. Of the total amount of 52 treated teeth, 34 were molars and 18 premolars, 28 were diagnosed with chronic medium caries and 24 with chronic deep caries. Treatment protocol: clinical and radiological examination, loco-regional anesthesia, operating field isolation using rubber dam, preparation of dental caries and treatment of the dentinal wound, dental cavities filling, using „bulk fill” technique and materials, finishing and polishing of the restorations, radiological examination.

Results. The filling of the dental caries using the “bulk fill” technique allows the material stratification up to 5mm, incomparision with the classical technique of 2mm limit, avoiding multiple stratifications and reducing the working time by near 25%. The reduced contraction (3.6%) and the very low (1.5 Mpa) polymerization stress reduce the possibility of postoperative sensitivity.

Conclusions. The results of the study proved the superiority of the “bulk fill” technique in the posterior teeth restoration due to the simplified filling procedures, the good adaptation of the material to the formed cavity and the reduced time spent on the restoration process.

Key words: dental caries, bulk fill, stratification

303. MANAGEMENT OF TEMPOROMANDIBULAR DYSFUNCTIONS USING OCCLUSAL SPLINTS

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Introduction. Temporomandibular disorders represent a group of dysfunctions that involve the relationship of the mandible to the maxilla, characterized by articular, muscular and orofacial pain, bruxism, locking of the jaw, crepitus and crackles. With a various etiology, this condition is widely treated nowadays by using occlusal splints- removable artificial devices, that affect the mandible position and allow it to reseal in a physiological position, by creating a mechanical impediment for parafunctions.

Aim of the study. To determine efficiency of splint therapy in treatment of temporomandibular disorders.

Materials and methods. Five patients with temporomandibular dysfunctions were examined clinically and paraclinical, with the following complaints: headache, neck ache and ear ache, signs of orofacial pain, tinnitus and ear fullness, bruxism and teeth abrasion. The clinical examination revealed a set of signs and symptoms: pain in temporomandibular joint (TMJ) and facial muscles, observed during palpation, especially in the lateral pterygoid muscle, limitation in mouth opening up to 18 mm, deviation in mandibular path of motion, pathological sounds: crepitus and crackles. The paraclinical examination was performed for all patients and included: study models, electromyography and CT of TMJ. In order to fabricate occlusal splints, CR was determined using leaf gauge technique and impressions were taken for the upper and lower jaw. The patients were instructed to wear the appliance as long as possible during 1 month.

Results. We observed an improvement of pain symptoms, bruxism and muscle tension. CT revealed the reposition of condyles in CR.

Conclusions. Splint therapy ensures an efficient treatment of temporomandibular disorders, allow muscle relaxation and guide the condyles in a physiological position, improving the pain symptoms.

Key words: TMJ- temporomandibular joint, CT- computed tomography, CR- centric relation

304. RESTORING OF FRONTAL TEETH USING SILICONE TEMPLATE

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Introduction. For centuries, the literature and art have indicated that the smile represents a key role in facial aesthetics and thus in the integration into society of the individual. The technological progress has made modern dentistry to seek less invasive methods to restore masticatory apparatus functions. For modern dentist, the challenge is to conciliate the aesthetic and functional objectives, trying to get the best result. Thanks to a variety of options for dental restoration , we have many choices for repairing, worn, decayed, demaged or missing teeth restoring a healthy and beautiful smile.

Aim of the study. The silicone guide with wax up technique allows the placement of direct composite on the palatal surfaces of upper anterior teeth in an efficient and accurate manner. We planned to realize a smile analysis and method of frontal teeth restoring, exploring techniques of manufacturing silicone template and to achieve esthetic and long- term results.

Materials and methods. The study was performed on a group of 12 patients (5 female and 7 male), aged between 24-27, showing aesthetic impairment. Of the 12 cases, 8 were diagnosed with non-caries lesion on anterior teeth and 4 cases with caries lesion. 8 were treated by simple preparation for better retention and 4 were treated by preparation and removing of necrotic dentin in the tooth cavity. The silicone key was made according to the wax up.

Results. The results of the aesthetic analysis were collected from the level of face, lips, dental arches and occlusal level.