

FRACTURE RESISTANCE OF TEETH TREATED ENDODONTICALLY AND RESTORED WITH LIGHT-CURED COMPOSITE WITH AND WITHOUT CUSP COVERAGE

Munteanu Dumitru, Cirimpei Vasile, Cirimpei Tatiana, Ciobanu Ana

Academic adviser: Sergiu Ciobanu, M.D., Ph.D., State Medical and Pharmaceutical University “Nicolae Testemitanu”, Chisinau, Republic of Moldova

Introduction: The golden standard in restoring teeth after endodontic treatment is the dental crown. Once in dental practice were introduced adhesive techniques of filling, these are more often used as post – endodontic treatment. Dental fractures are very often found in this particular group of teeth, which is why we decided to analyze if cusp coverage restores strength lost during endodontic treatment. .

Material and methods: Using PubMed, Google Scholar and HINARI databases, we selected 42 articles which have as keywords “cusp coverage” and “fracture resistance”. The selected materials were analyzed by the working group, which according to their discussions, knowledge and clinical experience has taken an attitude towards this subject. To demonstrate the technique of making cusp coverage we presented a few clinical cases we still monitor.

Results: The endodontic treatment increases the risk of tooth fracture. Factors predisposing to fracture are the endodontic access cavity, presence of marginal ridge, cusps thickness, cusp deflection and lack of pulp chamber roof. Hood explained using a mathematical formula the mechanism of cusp deflection that proves the importance of cusp coverage. This was confirmed by clinical and experimental studies.

Conclusion: Endodontically treated teeth and restored with cusp coverage may be more resistant to fractures than those filled whit composites conventionally.

Keywords: prevention, tooth fracture, cusp coverage.

AESTHETIC VS. DENTAL HARMONY IN AMPLITUDE DISCOLORED RESTORATION

Cigu Andor Toni

“Apollonia” University, Iasi, Romania

Introduction: Most common reasons for failure in discolored dental restorations are on how to improve aesthetics and restorations functionality diagnostic. Efficient communication of dental harmony and dental aesthetics, dental-facial relationships, the characteristics of color, the functional-occlusal harmony are part of therapeutic planning taking into account the specific properties of materials and the different ways they can be used, the practitioner chooses the appropriate system with technician and patient for the situation. Fine adjustments allow a specific character which involves the verification of functional aspects, aesthetic appearance of the desired restoration.

Aims and objectives: This paper proposes an approach on harmony and aesthetic dental in amplitude discolored restorations with an optimal system that allows adjustment and progressive verification of restoration for being able to count on the success of the final result.

The objectives consist in differentiating between the directions for the protocol of occlusal rebalancing, functional and the harmonizing a whole physiognomic appearance offering the dental aesthetic desired by dental team with the patient.

Material and method: A 32 year old patient presents to clinic with the desire in prosthesis the maxillary and mandibular discoloration. After clinical and paraclinical examination, we decided a complete restoration taking into consideration occlusal rebalancing and the determination of an optimal intermaxillary centric relationship. The focus is on complex restoration ceramic system with porcelain veneers, and metal-ceramic.

Result: The design of the esthetic crowns and porcelain veneers allows us to use a prosthetic restoration with all the benefits of dental aesthetics and harmony thanks to the adjustment and created access to each odonto-periodontal unit and for prophylaxis procedures. Final appearance is acceptable esthetical and the dispensary of patient a week later can prevent unpleasant events.

Conclusions: Therefore, with minimal modifications of a conventional metal-ceramic prosthetic restoration can get more long term benefits. Further studies are recommended with a longer time dispensary. In conclusion, we believe that in some cases, the disadvantages caused by the existence of an impediment in polish the occlusal surface which is a high risk for fracture of ceramics are outweighed by advantages given by the existence of a glaze liquid for ceramic by enabling to achieve an optimal, smooth, glossy surface for esthetic purposes. This method can be indications of use in following situations: uniform prosthetic restorations on implant, large bridges expanses with implant aggregation, unidentare or pluridentare prosthetic restorations.

Key words: aesthetics, harmony, amplitude discolored restoration.

METHODS OF TREATMENT OF HYPOPLASIA OF PERMANET TEETH IN CHILDREN

Ursu Tatiana

Academic adviser: Stepco Elena, M.D., Ph.D., Associate Professor, State Medical and Pharmaceutical University "Nicolae Testemițanu", Chisinau, Republic of Moldova

Most common anomalies in primary and permanent dentition are abnormal formation of enamel or hypoplasia that is a deficiency in enamel thickness which may be caused by: systemic metabolic stress, hereditary anomalies, and localized trauma, caused by defects in matrix secretion. The percentage damage of permanent teeth of enamel hypoplasia among children is from 3 to 50% in different countries.

Clinical dental hypoplasia in the permanent teeth comes in the form of white spots (opacities) and/or as morphological changes (ditches or large lesions). These spots formed during development are called lesions or hypoplasia hypocalcificated, the color of these spots can be white, milky, yellow or brown, which can appear on a single tooth (local hypoplasia) or on a group of teeth (systemic hypoplasia). This type of defect may cause tooth sensitivity, may be unsightly or may be more susceptible to dental cavities.

Treatment of teeth with enamel hypoplasia must be determined on an individual basis in consultation with the child's pediatric or family dentist. Now, treatment of enamel hypoplasia tend to obtain aesthetic aims and psycho-emotional, and includes local and general treatment. General treatment of dental hypoplasia aims normalization of mineralization processes in general metabolism and needs child's pediatric consultation, while local treatment includes utilization of remineralization therapy, a technique of microabrazion, and realization of veneers.

The aim of our work is to study the evolution and manifestation of hypoplasia of permanent teeth at children, as well as review the effectiveness of modern methods of prophylaxis, local and general treatment at patients with hypoplasia.

Our study is based on data obtained as results of treatment of 12 patients (9 female and 3 male) at 12-20 age.