- Oral Presentation 43

TITLE: Endodontic retreatment and posterior restorative treatment using composite veneers

AUTHORS: Jiménez Martínez J, García Bravo M, Conde Pais J, Valenzuela Triviño V, Costas Soto A, Rosel Gallardo E, Castillo Salmerón R.
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Introduction

Although extraction-implant option has become increasingly popular to solve problems produced by endodontic treatment failure, maintaining natural dentition in healthy conditions remains the aim in dentistry. The success of root canals treatment is based on proper cleaning, shaping and three-dimensional filling. Recent studies concluded that while endodontic surgery offers more favorable initial success, the nonsurgical retreatment was provided superior long-term outcome. Through this case report we show the nonsurgical retreatment of 21, with subsequent internal bleaching and the reconstruction with composite veneers of both central incisors.

Case report

A 22 year-old female with no relevant medical history, who came to the Master (UGR) demanding an aesthetic treatment in the anterior zone. The patient presented composite restorations in poor condition on both central incisors, and a root canal treatment with improper apical filling and a metal pin in tooth 21. Due to the patient's aesthetic requirement, restorative treatment with composite veneers was performed in both central incisors and a previous nonsurgical retreatment of 21 to ensure the viability of long-term treatment.

Conclusions

In conclusion, we consider root canal retreatment is first choice to solve these cases and the restoration using composite veneers provide us the aesthetic we wanted to offer the patient a conservative treatment, reaching her expectations

- Oral Presentation 44

TITLE: Indirect inlay and onlay resin as minimally invasive treatment

AUTHORS: Liste Grela S, Gómez Meda R.
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Introduction

Dental materials that are available are constantly evolving due to the improvement of its mechanical and aesthetic properties, provide ample possibilities to make minimally invasive and resistant restorations. Reinforced resins and indirect technique for processing are more and more used. The dental technician also changes its process of developing dental reconstructions resin layering techniques and digital design techniques for CAD-CAM.

Case report

The material selected in various clinical cases described, it is the SR Nexco (Ivoclar-Vivadent, Schaan-Liechtenstein). It is a laboratory composite with opalescent microfillers for incrustations achievement by means of the indirect technique. Type inlay / onlay restorations, in which pulp vitality is preserved, where appropriate points of contact and suitable emergencies are created, cusp coverage with overlays, etc. are different cases, in which it is possible to use.

Conclusions

The use of a reinforced resin material provides appropriate intrinsic mechanical properties. There are many advantages of the indirect technique versus direct technique, such as the ideal characterization of the natural anatomy of the tooth, removing the risk of contraction of resin materials and conservative cavity preparation. Indirect use resins have improvements in both the matrix (polymerization and composition) and the material of filling (high proportion), which gives us greater wear resistance, increases resistance of tooth remaining, less microleakage so that currents of termoconduction that generate sensibility problems will not occur.

- Oral Presentation 45

TITLE: Determining the concentration of hydrogen peroxide in bleaching products

AUTHORS: López Paniagua R, Gambini Buchón J, Llena Puy C, Forner Navarro L.
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Objectives

Currently, hydrogen peroxide (HP) is used as active agent in tooth bleaching treatments. However, the HP

can be affected by some environmental conditions such as temperature, ultraviolet radiation or visible light, modifying the final concentration of this compound. The aim of our study is to assess a method for determine the concentration of HP in commercial bleaching preparations when this solutions are applied on the teeth.

Material and Methods

We selected three commercial preparations: Opalescence Endo® (35%PH), Pola Office +® (37.5 %PH) and DayWhite® (37 %) carbamide peroxide, All of them were preserved at 4°C in darkness. In order to quantify the amount of HP, the different compounds were dissolved in 6% bidestilated water (weight / volume) and 1 ml of this solution was placed in a special quartz cuvette and introduced into a fluorometer. Subsequently, the light emitted by the fluorometer ($\lambda=420$ nm) passed through the sample and the associated software provided the fluorescence emitted by the HP. Using this data and line pattern, the concentration of HP in the samples was obtained.

Results

The concentration of HP was similar in the Endo Opalescence® and Pola Office +® samples, 26.09 M and 26.68 M, respectively. On the other hand, the concentration of HP in DayWhite® sample was 5.28 M.

Conclusions

The method used in this study allows to calculate the concentration of HP (active agent) in the bleaching products analyzed. However, future studies should be developed in order to compare the final concentration with the desired product concentration.

- Oral Presentation 46

TITLE: The complexity of rehabilitation canine guides

AUTHORS: Luengo Capilla MA, Ceballos L, Gomes G, Fuentes MV, Araujo E.

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Introduction

The rehabilitation of canine guidance is a challenge for clinicians as it sometimes implies the conflict between different, opposing, materials which can result in asymmetrical wear. The constant introduction of new materials lacking sufficient, or sometimes any, clinical studies regarding their long-term behaviour is a reality.

Therefore the clinic faces a difficult task when choosing the most appropriate material.

Case report

We present two clinical cases in which canine guidance was rehabilitated as a complementary treatment for aesthetic reasons at the patients' demand. For these treatments the restorative materials used were a lithium disilicate ceramic (IPS and maxPress, Ivoclar Vivadent) and a nano-ceramic resin composite (Lava Ultimate, 3M ESPE), respectively.

In the first case, four ceramic veneers were made for the maxillary incisors and two more for the mandibular incisors to protect the restoration of the upper teeth and provide stability to the guidance. Thus, the guidance was made of ceramic and enamel. At the 18 month revision a distinct wear of was observed in the natural enamel requiring additional restoration of the lost dental tissue by means of a ceramic veneer made of the same material.

In the second case, the patient had direct resin composite veneers applied in the maxillary canines and in the maxillary right lateral incisor, without occlusal contact, that were made at the end of the orthodontic treatment. Palatine veneers of composite resin were applied in the maxillary canines using the nano-ceramic composite resin (Lava Ultimate, 3M ESPE). At the 6 months check revision no wear was observed in the antagonist teeth.

Conclusions

Despite the fact literature point out to a similar wear for lithium disilicate ceramic and enamel, further clinical studies are required to corroborate the evidence.

- Oral Presentation 47

TITLE: Stimulatory effect of leptin in the dentin sialophosphoprotein (DSPP) production in human dental pulp

AUTHORS: Martín González J, Sánchez Domínguez B, Crespo Gallardo I, Martín Jiménez M, Segura Egea JJ.

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Objectives

Leptin, a mediator of the inflammatory response, and its receptor (LEPR) are expressed in the human dental pulp. Sialophosphoprotein dentin (DSPP) is a protein involved in odontogenesis and the dentin-pulp reparative response. This research aims to describe the im-