Results

The Kubelka-Munk transmittance overestimated translucency of all the resin composites tested. Furthermore, the estimated transmittance not adequately characterized differences between composites of different chroma (A1, A2, A3) or opacity degree (enamel, body and dentine).

Conclusions

Reliability and accuracy of Kubelka-Munk spectral transmittance is lower than absolute transmittance for translucency characterization of resin composites.

- Oral Presentation 22

TITLE: All-ceramic oral restoration. one smile, several materials

AUTHORS: Faci Martín B, Faus Matoses V, Faus Matoses I, Alegre Domingo T, Faus Llácer VJ.
SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S11.

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Introduction

According to the composition of ceramic systems, they have different properties and applications. the correct use of ceramic materials depends on several factors, including the clinician's ability to choose restorative materials, restoration manufacturing method, teeth preparation technique, cementing technique and individual patient needs.

in some clinical situations, the use of a single material would be enough, but sometimes it may be necessary to combine several types of materials to obtain the best restorative treatment outcome.

Case report

60-years-old woman presented to our dental practice to improve the aesthetic of her smile.

clinical and radiographic examinations revealed a root canal treatment on 2.1 with dark discoloration, a root canal treatment failure due to a root fissure on 2.2 and leaked dental fillings on 1.1, 1.2 and 1.3.

the treatment consisted of the extraction of 2.2, root canal retreatment and posts restoration on 2.1 and dental fillings on 1.1, 1.2 and 1.3.

the initial provisionalization was carried out through a temporary ovate pontic fixed partial denture on 2.1 to 2.3 and temporary veneers on 1.1, 1.2 and 1.3. made of polymethylmethacrylate using cad cam system. a second temporary ovate pontic fixed partial denture was positioned in order to contour the 2.2 surrounding soft tissues.

Six months later, temporary restorations were removed and an alumina based definitive fixed partial denture on 2.1 to 2.3 and feldspathics laminate veneers on 1.1, 1.2 and 1.3 were placed.

Conclusions

The anterior teeth restoration was achieved meeting the functional, aesthetic and biomechanical expectations of both, the patient and the professional, by means of different types of ceramic materials.

- Oral Presentation 23

TITLE: Efficiency and effectiveness of retreatment with Thermafil Plus, Guttacore and vertical condensation

AUTHORS: Fenellós-Aldea L, Alegre-Domingo T, Faus-Matoses V, Faus-Llácer VJ.
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Objectives

The purpose was to evaluate the efficiency and the effectiveness in retreatment depending on the obturation system: Guttacore, Thermafil, and warmed vertical gutta-percha condensation using Calamus, with ProTaper files retreatment.

Materials and Methods

It was executed in one hundred and five extracted teeth with one root canal. The cusp tip was reduced with a disc with working lengths set at 15 mm.

During preparation and between each file, 1 mL of 5.25% sodium hypochlorite was used as an irrigant. The canals were all prepared until F3 ProTaper file, lately, teeth were randomly allocated in three groups depending on the obturation material utilized: Thermafil, Guttacore and warmed vertical condensation. In all groups, the canal was coated with a thin layer of AH Plus root canal sealer.

Every canal was instrumented using ProTaper Retreatment files: D1, D2 and D3. To calculate the efficiency, the total time of all files to reach the working length was scored. The retreatment procedure was considered complete when no obturation material was observed on the last file. The efficacy was evaluated in terms of the remaining amount of the sealing material after the procedure.

Data were analyzed using SPSS (SPSS 15.0 Inc., Chicago, IL) with a p value < 0.05 and it was used ANOVA test and a Chi-square analysis.

Results

The mean time to reach working length was significantly shorter for Guttacore than Thermafil ($p < 0.05$). There was significantly more debris remaining in the apical third compared to the coronal and middle thirds in all groups ($p < 0.05$).

Conclusions

The Guttacore system requires less time than other sealing systems to reach the working length using Pro-taper files during the retreat. However, it was the group obturated with Calamus system which presented less obturation material remaining.

- Oral Presentation 24

TITLE: Orthodontic extrusion, an alternative to reconstitute the biologic width to the anterior sector

AUTHORS: Fernández B, González J, Escribano N, Gomes G, Da Silva D, Fuentes MV, Míguez M, Ceballos L.

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Introduction

The restoration of anterior teeth presenting an invasion of the biologic width implies a challenge to the clinician, since it is essential the reposition of the preparation margin prior to the prosthetic treatment.

One of the possibilities is to perform a forced orthodontic extrusion to allow margin displacement without alteration of the gingival contour of the teeth nor bone elimination.

Case report

We will describe a clinical case of a patient, a 43 year-old woman, that came to the Rey Juan Carlos University Clinic in search of a solution for a chronic gingival swelling in her tooth 11 after an crown had been placed.

Once the exploration was performed it was determined that both the old crown and the preformed metallic post had to be removed and the root canal treatment redone. Once the coronal portion had been restored with composite and a fiber glass post, a provisional crown made of acrylic resin was placed.

Due to the invasion of the biologic width, it was decided that a forced orthodontic extrusion of the incisor should be performed. Following the stabilization period we proceeded to restore the tooth with a zirconia

corecrown. In the subsequent revisions the absence of gingival swelling and the aesthetical integration of the artificial crown were observed.

Conclusions

The orthodontic extrusion is a restorative alternative to crown lengthening for those cases where a change in the gingival contour of the treated tooth is not desirable.

- Oral Presentation 25

TITLE: Pulp revascularization with triple antibiotic paste apropos of a case

AUTHORS: Fernández Pazos G, Fernández Millán D, Souto Míguez A, Rivas Mundiña B, Martín Biedma B, Varela Patiño P.

SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S25.

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Introduction

Pulp revascularization is a treatment that allows the development of roots in permanent teeth with immature apex whose pulp is not vital. It consists of disinfection system of root canals and insertion of a triple antibiotic paste. Subsequently a natural matrix composed of a blood clot is going to provide new cells with the ability to grow and produce the closure of the apical third, achieving the physiological formation of the root canal.

Case report

An 11-year-old boy, comes to consultation for caries in 3.6. The relevant diagnostic tests were performed that confirm the definitive diagnosis: pulp necrosis. The anesthesia of choice is without vasoconstrictor, Mepivacaine 3%. A manual pre-instrumentation was performed with K-files #20 and each canal was irrigated with 20ml of 5.25% NaOCl for 20 minutes. Canals were gently dried with paper points and a triple antibiotic paste was placed inside all of the canals with a K-file size #25: Metronidazole, Ciprofloxacin and Minocycline from 3mm before the apex. The tooth was restored temporarily with Cavit. At the 3-week follow-up, the temporary restoration was removed and the triple antibiotic paste was removed from the canals by 10ml irrigation of 5.25% NaOCl per canal. Apical tissues were irritated until bleeding by using K-file #40 in distal canal and K-file #20 in mesial canals. After 10 minutes, the entry of the canals was filled with MTA. For the final restoration, 2mm fluid composite were placed over the MTA and the direct restoration was performed with composite. The patient was checked at 3, 6, 12, 18 and 24 months. The molar is asymptomatic and functional.