Conclusions

Pulp revascularization by tri-antibiotic paste represents a therapeutic alternative to endodontic treatment under favorable conditions.

Such treatments allow to keep the tooth functional and asymptomatic.

- Oral Presentation 26

TITLE: Reattachment of a metal-ceramic crown using orthodontic extrusion. A case report

AUTHORS: Fernández Sánchez B, González Serrano J, González Serrano C, Ceballos García L.
SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S13.

* doi:10.4317/jced.17643810

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Introduction

Orthodontic root extrusion, or forced eruption, was first described by Heithersay in 1973. The target of this movement was to raise the fractured root surface from within the alveolar bone to a yuxta or supragingival position. This is achieved by providing a horizontal component, (usually a wire attached to the adjacent teeth), from which a vertical force is then exerted on the root. It is indicated in any cervical third root problem that involves or extends 0–4 mm below the crest of the alveolar bone, including horizontal fractures, caries, resorption defects and iatrogenic perforations of the coronal third of the root, unattached crowns...

Case report.

A 43 years old woman was seen in Rey Juan Carlos University (Madrid, Spain) with a gingival inflammation due to an unattached metal-ceramic crown around the tooth 11. We proceeded to orthodontic extrusion for 5 months, then a gingivectomy was performed and finally a zirconium fixed prosthesis was placed.

Conclusions

When a subgingival adaptation defect appears, it is difficult to maintain good oral hygiene, making the tooth susceptible to leakage, jeopardizing treatment outcome.

The role of orthodontic extrusion is essential in such situations to achieve a yuxtagingival margin. It is important to maintain a final crown-to-root ratio of at least 1:1, to ensure adequate periodontal support.

- Oral Presentation 27

TITLE: A new system of rotary instrumentation: F360 ®

AUTHORS: Centenera Centenera B, Mena Álvarez J, Rico Romano C, Zubizarreta Macho A.
SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S13.

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Introduction

The rotary instrumentation is directed not only to the endodontist, but to the general dentist who seeks to improve his results in day after day, and we meet the systematic appearance of new rotary systems.

Case report

Presentation of the sequence of instrumentation of the new rotary files f360®.

to visualize cross-sectional design and tip configuration, by images of sem (scanning electron microscope) to document his use in two clinical cases of lower molars carried out with the clinical sequence recommended by the manufacturer and the possible variations to introducing in the daily clinic.

Conclusions

System formed by two files of the only use with constant rotary movement and packed sterilized. Non-cutting tip with section in S italic, without preflaring's file in the system and with final file with taper 4 % and apical diameter 35.

The system F360 is formed by two file of the only use that make possible a decrease of the index of fracture for his flexibility and avoid the possibility of crossed pollution. The system might need incidental files to be able to carry out a previous glide path and increase taper of preparation to be able to combine with vertical condensation techniques

- Oral Presentation 28

TITLE: Analysis of hypochlorite extrusion based on different final irrigation systems

AUTHORS: Garrido García M, Montalvo Sánchez N, Pérez-Higueras Sánchez-Escalonilla JJ, Reboloso De Barri E, Martín González D, García Barbero E.
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Objectives

To quantify and determine the extrusion of sodium hypochlorite for different final irrigation systems used in semi-closed environment, simulating the periodontal ligament

Materials and Methods

48 human single-root teeth extracted for orthodontic or periodontal reasons were selected. They were cut at cement-enamel junction and the root portions were embedded in an agarose 0.3 % colloidal gel placed in individual transparent methacrylate boxes. Six experimental groups were established: needle -1 mm of the working length, needle -4 mm of the working length, EndoActivator, EndoVac, WaterPik power flosser and ultrasonic activation. The samples were randomized and were endodontically treated using PathFlie®, Pro-Taper® (Until F2) and Profile® (35.04), and were instrumented following the same protocol of irrigation. The final irrigation was different depending on the group. A mixture of sodium hypochlorite 5.25% and methylene blue was used as irrigant (96% of sodium hypochlorite and 4% of methylene blue).

During instrumentation phase, blue irrigant mixture was extruding through the apical foramen and was created a blue different size periradicular area. Two pictures of each sample were taken, the first one at the end of the instrumentation phase and the other one after the final irrigation. The size of these areas was quantified by ImageTool® 3.0 analyzer. The results were subjected to statistical analysis using Kruskal Wallis test for multiple comparisons and Wilcoxon test for paired samples, by the IBM SPSS 22 program.

Results

There were statistically significant differences in the extrusion recorded after the final irrigation in three groups: needle -1 mm of the working length, WaterPik and ultrasound. In needle -4 mm of the working length, EndoVac and EndoActivator groups there were no differences when compared with prior recorded extrusion.

Conclusions

Although there are differences in the degree of extrusion of different final irrigation systems employed, most of the extrusion of the irrigant it was produced during the instrumentation of the root canals.

- Oral Presentation 29

TITLE: Effect of adhesive expiration day on bond strength

AUTHORS: Garcia Belando A, Teruel Rodriguez A, Alegria Aniorte A, Cabello Colas M, Chiva Garcia F.
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Objectives

To evaluate the dentin shear bond strength of 3M ESPE adhesive systems: Adper Scotchbond Multi-Purpose (expired in 2015) and Scotchbond Multi-Purpose (expired in 1999).

Materials and Methods

Sixteen permanent posterior teeth were randomly assigned to two groups (n=8 each): (1) non-expired adhesive and (2) expired adhesive. Flat dentinal labial surfaces were carved and adhesives were applied on the dentinal surface according to manufacturer instructions.

Filtek Supreme A3 body (3M) composite cylinders (4 mm diameter; 2 mm high) were polymerized 20 seconds on the treated dentin surface.

After 24 hours of immersion in water at 37° C, shear bond strength was performed using a universal testing machine (Autograph AGS-1KND, Shimadzu, Japan) at a crosshead speed of 1mm/min.

Data were analyzed by t-test at an alpha level of 0,05 using SPSS v.12.

Results

The shear bond strength of unexpired adhesive (18,33 MPa; SD 1,59) was higher than expired adhesive (8,69 MPa; SD 3,55). Significant differences were observed between groups ($p > 0,001$).

Conclusions

As expected, expired adhesive system presented lower bond strength than unexpired adhesive system.

- Oral Presentation 30

TITLE: Six-month clinical evaluation of a universal adhesive

AUTHORS: Giráldez I, Fuentes MV, Baracco B, Ceballos L, Perdigão J.
SOURCE: J Clin Exp Dent. 2014 1;6(Supplement1):S14.

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