

- Oral Presentation 62

TITLE: In vitro study of flexure strength of flowable composite resins

AUTHORS: Rico Carrillo V, Martínez Huesca M, Baguena Gómez JC, Chiva García F.

SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S30.

* doi:10.4317/jced.17643846

<http://dx.doi.org/10.4317/jced.17643846>

Objectives

To compare the flexure strength of six flowable composite resins

Materials and Methods

30 Rectangular bar-shaped specimens (20mm x 7mm x 1mm thickness) of six flowable composite resins (X-tra base, Voco; SDR, Dentsply; X-flow, Dentsply; Opticor Flow, Spofa Dental; Filtek Supreme XTE, 3MEspe y Grandio Flow, Voco) were made with a metal mold (n=5 each). Composite resins were photopolymerized with Demetron LC curing light (Kerr) according to manufacturer's instructions and stored in distilled water 24 hours at 37°C. Specimens were tested in three-point flexure in an universal testing machine (Autograph AGS- 1KND, Shimadzu, Japan) at a crosshead of 1mm/min. One-way analysis of variance and Tukey's post-hoc test were made (significance level: $p < 0,05$) using SPSS v.15

Results

Three-point flexure strength (MPa) was 157,2935,02 (Grandio flow), 138,2438,47 (FiltekXTE,3Mespe), 112,9916,39 (Opticorflow,Spofa), 11066,4 (X-tra base,Voco), 101,0148,7(SDR,Dentsply) y 42,379,46 (X-flow,Dentsply), showing significant statistical differences between Xflow (lower strength) versus Grandio flow ($p=0,002$) and Filtek Supreme XTE ($p=0,011$).

Conclusions

Flowable composite resins Grandio Flow and Filtek Supreme XTE showed the highest flexure strength and X-flow was the lowest.

- Oral Presentation 63

TITLE: Treatment of type II dens invaginatus by guided endodontics

AUTHORS: Rico-Romano C, Zubizarreta-Macho A, Soto-Pereira E, Sierra-Armas L, Alonso-Ezpeleta LO, Mena-Álvarez J.

SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S30.

* doi:10.4317/jced.17643847

<http://dx.doi.org/10.4317/jced.17643847>

Introduction

Dens invaginatus is a rare dental malformation probably resulting from an infolding of the dental papilla during tooth development, whose treatment is a challenge for the clinician. Numerous therapeutic alternatives have been proposed for the treatment of this anatomical alteration: nonsurgical root canal treatment, endodontic surgery, intentional replantation, extraction, and combinations of the previous one. This range of possibilities is the result of ignorance of the internal anatomy of dens invaginatus. Structural variations make very difficult the conventional root treatment, condemning these teeth to submit new therapeutic procedures.

Case report

This case report shows the root canal treatment of a type II dens invaginatus diagnosed by cone beam computed tomography. The pulp access was planned using a planning software osseointegrated implants and was guided by splints made by stereolithography.

Conclusions

Cone beam computed tomography is the most effective diagnostic method of teeth with anatomical malformations. The planning software osseointegrated implants are an effective method for planning the root canal treatment, and the confection of stereolithographic splints allows a guided and conservative pulp access.

- Oral Presentation 64

TITLE: Cervical root resorption: Report on two clinical cases

AUTHORS: Robles Gijón V, Lucena Martín C, Pulgar Encinas RM, Navajas JM.

SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S30.

* doi:10.4317/jced.17643848

<http://dx.doi.org/10.4317/jced.17643848>