- Oral Presentation 3

TITLE: Using Case Based Reasoning System to predict composite restorations failure

AUTHORS: Aliaga I, García-Barbero AE, Vera V, Campo L, Hernando B, Montalvo N, De Paz JF. SOURCE: J Clin Exp Dent. 2014 August 1;6 (Supplement1):S2.

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Objectives

The objective of this study was to validate if the Case Based Reasoning System is an appropriate tool for predicting composite restoration failures in the posterior teeth and establish the variables more statistically significant on the failure.

Materials and Methods

The study included patients from the Complutense University of Madrid, School of Dentistry, who needed dental treatment. Forty patients were recruited; Fourth year dental students treated patients during clinical practices in the Conservative Department. Once the teacher reviewed the treatment plan, the student did the treatment and clinical questionnaire was filled up. Clinical, radiographic data and two questionnaires were collected. The restoration was revised after twelve months. The University of Salamanca, Department of Informatics in the School of Science, coded the data to facilitate the statistical analysis and generate a prediction system.

Results

The study shows the statistically most influential variables, perforation of the rubber dam, incomplete caries removal, tooth-brushing habits, and age of the patient. Applying the algorithm SMO to all cases were studied and the system shows an 87.5 % of predictive power.

Conclusions

Case Based Reasoning System is a useful tool in predicting the failure of composite restorations and will determine which variables are statistically more influential on the failure.

- Oral Presentation 4

TITLE: Diastema closure with composite

AUTHORS: Álvarez-Maldonado de Castro N, Albertí Vich C, Araujo E, Luengo Capilla MA, Cura Peña M. SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S2.

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Introduction

Restoring dentofacial harmony in young patients after orthodontic treatment is common for clinicians in their daily practice. One of the toughest challenges is doing in young patients, where the most conservative techniques, are often more difficult and technical skill required. So far we have complex systems of composite resins that require some experience when stratifying masses with different opacity and optical characteristics. Recently there have been systems where, with a single mass, we achieve excellent results that satisfy both clinicians and patients.

Case report

A 16 year old male with none medical history of relevance, that comes to Expert in Cosmetic Dentistry, University Rey Juan Carlos, after orthodontic treatment demanding improved aesthetics, introducing diastemas of 13-23.

Previous waxed and mock up, we decided to make a first home bleaching with thermoplastic individualized splints and carbamide peroxide 10 %.

As restorations, we decided to use direct composite, selecting a resin system that would allow us to use a single mass of opacity due to the inability to stratify different masses by not having sufficient thickness. We decided to use Estelite Asteria (Tokuyama) in its opacity body, achieving great results thanks to its excellent properties.

Conclusions

Selecting either case, we can get satisfactory results with a single mass of composite, simplifying the technique to eliminate stratification and laborious selection of color to focus only on the final shape we want to give our restorations, thus bringing the general dentist to aesthetic dentistry.

- Oral Presentation 5

TITLE: Endocrown as an alternative to conventional restoration techniques of non-vital tooth

AUTHORS: Amorós Carazo C, Ortega Molina A, González Villafranca P, Valenzuela Triviño V, García Bravo M, Rosel Gallardo E, Conde País J, González López S.

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