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.

SOURCE: J Clin Exp Dent. 2014 1;6 (Supplement1):S22.

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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

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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-