TOOTH WHITENING - CLINICAL CASE REPORT

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Introduction

Nowadays, the concept of esthetics is related to white and well-aligned teeth. Therefore, the search for bright teeth has been increasingly frequent and among the techniques available in dentistry, whitening stands out as a more conservative treatment.

Substances have been used to whiten teeth since 1868. In 1910, the whitening techniques included the use of hydrogen peroxide with a heated tool. In 1948, whitening with calcium chloride was practiced. From 1960, sodium perborate was introduced with hydrogen peroxide, achieving better results. Also in 1960, homemade tooth whitening was introduced in the US, remaining unknown until 1989, when Haywood and Heymann described it in detail. From then on, the big industries invested in research and marketing, making tooth whitening a safe technique and with great results to its consumers (IRL, 1999).

The whitening of pulped teeth has presented very significant developments in the last decade, with the introduction of new whitening agents, with new formulas, concentrations, forms of use, techniques and equipment. The homemade technique in which the whitening gel agent of carbamide peroxide is applied in an individual tray by the patient in his/her home, has been losing space in this early century for the resurgence of the whitening technique at the dental office, which uses a new generation of whitening agents, with high concentration of peroxides, presenting quick action and great effectiveness (Burrow 2009).

According to Mondelli (2006) the exogenous teeth whitening technique used at the dental office is characterized by the need for the use of a gum protection, as the most efficient is the absolute isolation of the surgical field, due to the use of caustic substances to soft tissues.

In this context, Vasconcellos (2002) highlights several advantages of this whitening technique such as control of the final result by the professional, as it is executed in periodic visits of the patient to the dental surgeon. The whitening agent acs only on the tooth, as tissues are protected by absolute isolation or by mechanical barrier, thereby preventing the direct contact of the gel with these tissues. Another advantage is the absence of the need to use trays daily, the risk from ingestion of whitening gel and its contact with soft tissues. Thus, the purpose of this work was to demonstrate through clinical case the use of a new whitening gel recently introduced in the dental market.

Clinical Case Report

Planning

The patient was assessed in the Dentistry Masters Clinic at UNIOSTE. The patient was informed of the possible alternatives to solve the esthetic problems, including dental office and home whitening, direct and indirect facets. The choice made by the patient was the whitening at the dental office.

Color registration

First, prophylaxis of the teeth was performed with a rubber cup associated with pumice and water. Then, color registration of the teeth was performed through a range of colors ("Vita") and photography.

Protection of the surgical field

All soft tissues of the patient (gums, cheek, tongue and lips) were isolated from contact with the whitening product. The protection of soft tissues can be obtained by using solid Vaseline or glycerine-based gel. Then, isolation of gum tissues with Clàriant Dam (light-cured gum protector)(Angelus) was conducted. The professional wore gloves, long-sleeve aprons and protective goggles. A lip retractor was also used to facilitate the application of the barrier and the whitening.

Product Application

Gel preparation: mix the two phases with the syringes connected, pushing the piston alternately by up to 10 times, then put all content mixed to one of the syringes, and it's ready for use. A tip was adapted to the syringe remaining with the gel and a layer was applied on the entire vestibular surface of the teeth to be whitened (including the interproximal) and with extension for incisal and occlusal faces. The whitening gel Clàriant-Angelus Office 35% remained on the tooth surface for a period of 40 minutes. The application was held in one session of the gel with the help of a micro-applicator to perform vibratory movements (every 5 or 10 minutes). Thus, contact with the gel was renewed and the possible oxygen bubbles generated were also released.

Product removal

After 40 minutes, the gel was suctioned with a surgical endodontic cannula and the teeth washed with abundant water. The gum protector was removed by detaching it with an exploratory probe. Polishing of the teeth was done with polishing compound and felt pad.

Postoperative care

The patient received a paper list with post-operative care, how to prevent the tooth of getting in touch with agents such as coffee, tobacco, tea, lipstick, soft drinks, wines and others, because their teeth in this period are more permeable, and more susceptible to staining. Another factor is the post-operative sensitivity which is usually common in this whitening technique.

Photo Description

1 Initial photo

2 Felt Pad

3 Color selection

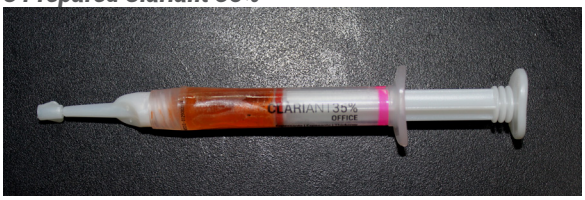
4 Relative Isolation

5 Clàriant Dam Application

6 Clàriant Dam Light curing

7 Clàriant 35% Preparation

8 Prepared Clàriant 35%



9 Clàriant 35%-2 Application

10 Clàriant 35% on the teeth

11 Clariant 35% Remova

12 Clàriant Dam Removal

13-A ClàriantDsense Application

13-B Color selection after whitening

14 ClàriantDsenseon the teeth