

THE APPLICATIONS OF PROFESSIONAL WHITENING SYSTEMS IN DENTAL AESTHETICS

¹ALINA CRISTIAN, ²DIANA MÂRZA, ³A. CRISTIAN

^{1,2,3} „Lucian Blaga” University of Sibiu

Abstract: *The work presents a clinical study of immediate effects that occur as a result of the application of the teeth professional whitening system. After the whitening system, by applying the gel on the vestibular dental surfaces, lighter chromatic nuances can be obtained, which correspond to the patient's requirements - aesthetically and from the point of view of the treatment effects length in time.*

Keywords: *professional whitening systems*

Rezumat: *Lucrarea prezintă un studiu clinic al efectelor estetice imediate ce apar în urma tratamentului profesional de albire a dinților. În urma tratamentului de albire, prin aplicarea gelului direct pe suprafețele dentare vestibulare, se obțin nuanțe cromatice mult mai deschise decât cele dinaintea tratamentului, care corespund cerințelor actuale ale pacienților din cabinetul de medicină dentară, atât din punct de vedere estetic dar și din punct de vedere al duratei tratamentului și al durabilității efectelor tratamentului în timp.*

Cuvinte cheie: *sisteme de albire profesională*

INTRODUCTION

Teeth whitening has become an extreme demanded process in dentistry consulting rooms. More and more persons desire a special aesthetic aspect, a white and shiny smile to attract the attention and admirations of the persons that surround them. Nowadays patients become more and more preoccupied of their teeth colour and the color changes affect them social.

The whitening process with the best aesthetic results that has more advantages for the patients, is the professional one, used in the dentistry consulting rooms directly by the dentistry doctor.

The main advantage of teeth whitening it is definitely the removal of teeth spots and the procurement of a lighter white colour than the one before the treatment. The results are fast and appear after 60 minutes from the treatment start by the dentistry doctor who detains the control of the treatment, being able to decide when he can end the process according to the obtained white. The discomfort of the treatment is minimal, the process is not painful. The patients who can have this treatment have to have a good oral hygiene, no cavities, sensitive teeth and gums.

The side effects are generally insignificant, these might be a sensibility of the teeth for hot and cold, which can be prevented by applying some special flour gels. The final obtained white colour after the treatment it's hard to anticipate and most of the times the results are not final because the effects in time might decrease in the patients who smoke or consume drinks and food that colour the teeth.

MATERIAL AND METHOD

We examined a number of 38 patients with ages between 19 and 45 who presented different dental colours and etiology and who were indicated the treatment of teeth whitening. We performed the dental surfaces hygiene with professional brushing and calculus removal, using a special product for professional whitening used only in dentistry consulting rooms. The obtained colour after the treatment is established after a few days, after that we can apply special materials for coronary restitution (these materials cannot be whitened by applying the gel).

The teeth whitening gel we use, removes the colour stains without destroying the tooth structure. according to our producers instructions, we mixed the two different syringes that contain carbamid and hydrogen peroxide.

We applied the gums barrier which we photopolymerized, then we applied the whitening gel in 0.5-1 mm thickness on the vestibular surfaces of the teeth and after 15 minutes we cleaned the dental surfaces. We can apply the gel 3 times, each time 15 minutes. For greater efficiency we mixed the gel on the tooth every 5 minutes. Clinical case 1:

31 years old patient (doctor) comes in our dentistry consulting room for the eradication of the dental cavities and being totally not satisfied by the colour of the superior central incisives. Because 1.1 and 2.1 were DEVITALI (the cause of DISCROMIE) and presenting coronary longitudinal rifts on the dental glaze, we decided to make two ceramics microdentures, after the stabilization of the colour and professional whitening treatment.

We effected the calculus removal and professional teeth brushing, the colour of the dental glaze

CLINICAL ASPECTS

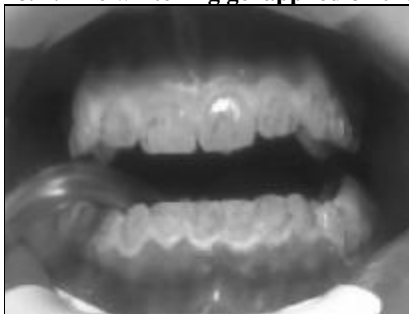
after the Vita colour table was: A2 for the frontal inferior and lateral superior teeth group, C3 for central superior and A3 for the lateral areas. (Picture no. 1)

Picture no. 1. Teeth colour before the whitening



After protecting the gums by applying the gums protection and drying the dental glaze, we applied the gum barrier that we photo – polymerized, after that we applied the whitening gel on the vestibular surfaces of the teeth, respecting the producers instructions. (Picture no. 2)

Picture no. 2. The whitening gel applied on the teeth



At the end of the treatment, the dental glaze colour is D2 according to the Vita colour table, 4 whites lighter than before (Pic.3). After the end of the whitening treatment, the performance of the microdentures and the coronary reconstruction with photo-polymerized composition, the patient declares herself as being very satisfied of the result and following to come to periodic consultation.

Picture no. 3. Teeth colour after the whitening treatment



Clinical case 2:

The 23 years old patient comes to our dentistry consulting room to have a professional whitening treatment, not being satisfied of the natural colour of the dental glaze (A3,5 after the Vita table)

After the professional brushing of the teeth, we

applied the gums protector, dried the vestibular dental surfaces, applied the gums barrier and then the gel respecting the producers instructions. (Picture no. 4)

Picture no. 4 Teeth colour before the treatment and the gum barrier



After the treatment, the dental glaze colour came to A1 for the frontal teeth group and A2 for the lateral teeth group according to the Vita colour table. (Picture no. 5)

Picture no. 5. Teeth colour after the whitening process



Clinical case 3:

The 37 year old patient presents in our specialized service for oral rehabilitation and for re-establishing the masticatory function. Following clinical examination we observed the lack of some masticatory units in the lateral areas, being necessary the restoration through the dental decks on the right maxillary hemiarcade and both mandibular hemiarcades. the patient is also displeased with the colour of his teeth so we decided to apply a professional tooth whitening which will then guide the colour of the teeth in the areas which are about to be restorated.

The dental glaze colour before the treatment was A4 (picture no. 6). We effected the teeth cleaning and applied the whitening gel on the vestibular surfaces of the teeth excepting the pylon teeth of the future denture decks (because these ones are going to be covered with dental decks which will have the natural colour obtained after the whitening).

At the end of the treatment the glaze colour was established at D3 (4 whites lighter) (picture no.7).

CLINICAL ASPECTS

Because the patient is a smoker and coffee drinker, the effects duration is short. Because the obtained results are obvious and the patient is satisfied, we decided to make the dental decks and white colour D3.

Picture no. 6. Teeth colour before the whitening process



Picture no. 7. Teeth colour after the whitening process



CONCLUSIONS

1. The results obtained after the professional whitening treatment are obvious and contribute to the upgrading aesthetic aspect of the patient.
2. The treatment may correct the discolorations of the incorruptible dental glaze.
3. The colour is established shortly after the ending of the treatment process, the patients declaring their selves very satisfied of the obtained results.
4. The white colour obtained after the professional whitening treatment it's a guide for the further coronary restitutions.
5. To preserve the colorations obtained results, it is necessary the formation and maintaining of some habits for a better dental hygiene.

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