

CLINICAL STUDY OF CLEANING AND POLISHING TOOTH PASTES Ro 7, Ro 8, Ro 10 and Ro 11

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ABSTRACT

A clinical study of toothpastes containing sodium fluoride 0,24% and abrasive of alluminium oxide was done. The aim of the research is to be studies the cleaning capacity of different toothpastes, upon, external stains, accepted after smoking or other reasons, as well as the changes in accumulation of a new plaque, after cleaning and polishing of the tooth surface.

Key words: external stain, toothpaste, sodium fluoride

INTRODUCTION

By growing up, the age, teeth often got stained, due to external or internal reasons. External stains are due to pigmental precipitations, closely linked with the tooth surface. They are rather attended with other precipitations like tooth plaque, tartar. The last, change the tooth crown colour too (Fig. 1, 2).

Their elimination from the tooth surface is of great importance, not only by aesthetical considerations but about the prophylaxis of the stomatological diseases. That necessitates the creating of cleaning and polishing pastes for clinical prophylaxis, containing active ingredients, directed to elimination of tooth stain and. their whitening.

AIM

The aim of the study is to be examined the cleaning

ability of four cleaning and polishing pastes, upon external stains due to smoking or other reasons, as well the changes in accumulation at a new plaque, after the cleaning and polishing of tooth surfaces. The pastes contained NaF - 0,24 % and abrasives of perlit or alluminium oxyde. "Clean polish" of Hawe Neos dental was a controlling paste in our study.

METHODS AND MATERIALS

The examination was lead by "Double blind experiment" method. We chose 10 patients with external. stains, on front teeth, which were registered by Lobene Stain index, by surface. Before the beginning of the study, the external stain was documented by color photo. After that supra- and subgingival tartar is, cleaned and registered PLI on Quigley & Hein. Cleaning and polishing of each tooth is made by the same cup shaped rubbers (N° 1250 E Prophylaxe) and the co responding paste, as soon as the cleaning time is reod in seconds and how many times the paste is changed. The teeth of five patients was cleaned in right side by Ro 8 paste and in left side with Ro 10. The teeth of the rest patients was cleaned in right side by Ro 7 past, and in left side with Ro 11 paste. After cleaning the teeth, to all the patients was given pastes and tooth brushes (all the same) to keep an oral hygiene. PLI is read on the 1-st, 2-nd, 3-td, 7-th days.

Fig. 1



Fig. 2



RESULTS

The analysis of the results from the examination showed that:

1. The most, surfaces are cleaned by Ro 11 paste.
2. According to changes in the average values of Lobene Stain index, Ro 10 and Ro 11 pastes give the best results.
3. According to the reduction of stained tooth surface, the best paste is Ro 11, followed by Ro 8 and Ro 10.
4. Comparing the pastes on index “Necessary clean-

ing of a tooth surface time” is set that the smallest necessary time is used with Ro 10 paste, and the most time with Ro 7 paste.

5. On the base “Necessary cleaning of one surface paste quantity” the results showed: The external stains are cleaned with minimum quantity of Ro 11. For each surface the paste is used once or twice.

Generalized rating of pastes according their cleaning qualities, can be showed in the next table.

Indexes		Rating				
		□ 1	□ 2	□ 3	□ 4	□ 5
1.	Cleaned teeth surfaces	Ro 11	Ro 8	Ro 10	Ro 7	Clean polish
2.	Decreased average values of Lobene Stain index	Clean polish	Ro 10	Ro 11	Ro 7	Ro 8
3.	Reduction of coloured tooth surface	Ro 11	Ro 8	Ro 10	Clean polish	Ro 7
4.	Necessary cleaning time	Ro 10	Clean polish	Ro 8	Ro 11	Ro 7
5.	Necessary cleaning quantity	Ro 11	Ro 7	Clean polish	Ro 10	Ro 8

Table 1. Generalized. rating of pastes according to their cleaning qualities.

Data analysis of the table gives reason to conclude that.:

1. The strongest cleaning paste is Ro 11.
2. The weakest cleaning paste is Ro 7.

In the study, we followed the speed of accumulation of tooth plaque after cleaning and polishing of tooth surfaces by the examined pastes.

We fixed, that on the first and the second day, the accumulated tooth plaque does not reach to the start level before cleaning. On the third day, smaller quantity of plaque is accumulated, according to base data. On the seventh day smaller quantity of plaque is accumulated to Ro 7 paste, followed by Ro 11. These data give reason to arrange the pastes in the next descending order № 1 -Ro 7, № 2 - Ro 11, № 3 - Ro 8 and № 4 - Ro 10.

DISCUSSION

The methods for mechanical cleaning eliminate only

external stains. It's more difficult, to eliminate the stain by these methods, when it is in medial phase, or, it's fully mineralised. In our examination some parts of the tooth surface can't be fully cleaned by paste and rubber.

The eliminating of external stains is expected from tooth pastes used in every day oral hygiene too.

It is important as the abrasiveness, as active ingredients in them. They must be used, after preliminary clinical oral prophylaxis with cleaning and polishing pastes, rubbers, brushes, and very fine plastic discs where needed.

CONCLUSION

According the clinical data, the pastes can be grouped by two. The cleaning starts with Ro 11 paste, and the surfaces are polished with Ro 7 paste.

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