

PREVENTING BEHAVIOR IN ORAL HEALTH

Dr. Ioana Elena Lile¹, Dr. Ligia Vaida², Dr. Paul Cornel Freiman¹, Dr. Tiberiu Hosszu¹, Dr. Tuturici Liviu¹, Dr. Elisabeta Vasca¹, Dr. Virgil Vasca¹, Dr. SzekeresCatalena¹, Dr. Onet Melinda¹

¹Western University "Vasile Goldis" of Arad , Faculty of Medicine, Pharmacy and Dental Medicine

²University of Oradea, Faculty of Medicine and Pharmacy, Dental Medicine II

ABSTRACT. Plaque as ecosystem of the oral cavity has negative repercussions on the orodental health. Receiving feed-back or giving systematic instruction for a proper education in order to obtain a good oral health requires both the establishment of advice regarding its mechanical removal and the diet, which should be considered and included the contact between each patient with professionals, from the eruption of the first tooth in the mouth. The study was conducted on a group of students with the age range between 18-24 years, where we assessed the degree of dental plaque and we evaluated it by the Silness-Loe plaque index and index Quigley-Hein changed by Turesky. It has been made an education for a good oro-dental health in terms of mechanical and chemical techniques for removal of plaque through direct demonstration and practical means. At the end of the study we did a reassessment of oral health of the entire lot of patients. It was recorded a improvement in oral health, showing that a preventive behaviour, with recommendation from the professionals can bring dental health in optimal parameters

KEYWORDS: dental plaque, tooth decay, periodontal disease, plaque indexes, revelators

INTRODUCTION

Revealing plaque substances have the ability to color the plaque only in places where it remains harden. The use of these revealing plaque substances after the oral hygiene, brushing teeth and flossing, is the ideal way we can check if we made a correct cleaning or not. We recommend patients to use periodically plaque revelators with the aim of educating and motivating them towards a good oral health.

Revelators of plaque may be based on erythrosine which is a red substance used in coloring dental plaque with the advantage to be easy to remove, has a good taste, minty and a quick effect. It contains iodine and it is a risk for those with hyperthyroidism and also it may cause allergies.

From the various types of plaque revelators we mention Eviplac tablets which are based on fuchsin, a substance that reveals plaque. The producer recommends to use it as follow: post a tablet in your mouth and rub your teeth with the tongue until complete dissolution and after rinse the mouth with water to remove excess.

Dental Plaque Disclosing Tables are tablets that dissolve themselves in the mouth under the action of saliva. The producer says that no action may be used prophylactically or therapeutically, and that they are

used to highlight the presence of dental plaque. It contains Erythrosine.

MATERIALS AND METHODS:

The study was conducted on 30 young subjects, university students, with the age range between 18-24 years, male and female, who had the habit to smoke and unhealthy eating habits.

The study was conducted in 3 stages and the dental plaque was revealed in different times of day in order to maintain good oral hygiene by removing efficient dental plaque. The objective of this study was to provide real demonstration to students that a good habit is a preventing behavior for a correct oral hygiene

For the revealing of plaque we used Eviplac tablets and Dental Plaque Disclosing Tables, chosen at random for each student and the amount of plaque was then noted by plaque index Silness-Loe and Quigley-Hein changed by Turesky index.

The first step was to determine the plaque by identifying Silness-Loe index and Quigley-Hein changed by Turesky index in all patients before making breakfast. At this stage patients had not eaten or drunk anything. They took the tablets and after 3 minutes of use it revealed dental plaque at each patient (fig.1). After breakfast all of them were instructed to perform oral hygiene.



Figure1. Silness-Loe's plaque index 2 = moderate accumulation of plaque buildup in the bag gum, visible on inspection; Index Quigley-Hein changed by Turesky: 1 = separate fringe or discontinuous strip of plaque at the gingival edge.

In the second step we determined the plaque index of Silness-Loe and Quigley-Hein changed by Turesky at all patients after lunch before the oral hygiene. We revealed the plaque at each patient (fig.2). And after all of them were instructed to brush correctly their teeth.



Figure2. Silness-Loe plaque index 2 = moderate accumulation of plaque buildup in the bag gum, visible on inspection (most evident in the upper gum); Index Quigley-Hein changed Turesky 3 = band over 1mm plate that covers less than 1/3 gingival dental surface.

The final step was to identify plaque index of Silness-Loe and Quigley-Hein changed by Turesky at all patients after diner before the oral hygiene(fig.3).



Figure3. Silness-Loe plaque index: 1 = band adherent to free gingival edge and neighboring tooth surfaces, as evidenced by the probe on the surface of the tooth (anterior); 2 = moderate accumulation of plaque buildup in the bag gum, visible on inspection (for posterior teeth); Index Quigley-Hein changed by Turesky 3 = band over 1mm plate that covers less than 1/3 gingival dental surface;

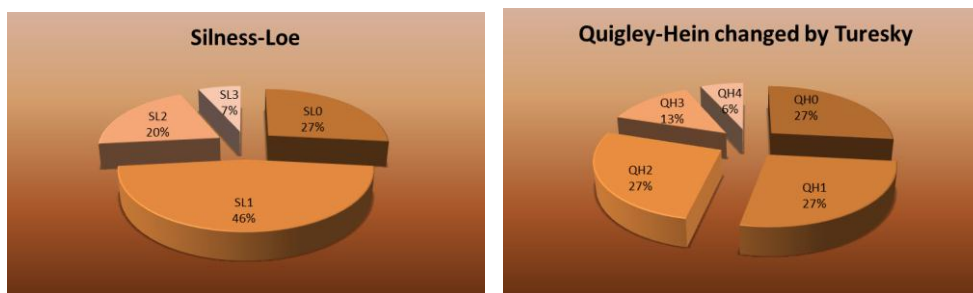


Figure4. Results the second day after we began our study

The results obtain after the first step of our study were collected in the next day, when we evaluated the Silness-Loe plaque index and index Quigley-Hein changed by Turesky at all the students and the collected data was processed in tables and graphics (fig.4), from which we saw that those indexes had high values showing as that there is need for an education for a good oral health.

In the second stage of our study we determined all indexes like above but after 1 week, in which the students were instructed for a good oral hygiene (fig.5, 6, 7).

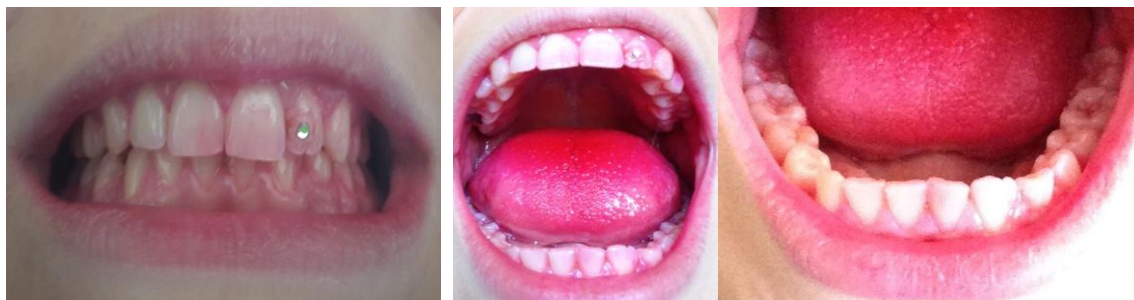


Figure5. Silness-Loe plaque index 1 = band adherent to free gingival edge and neighboring tooth surfaces, as evidenced by the probe on the tooth surface; Index Quigley - Hein changed Turesky: 0 = no plaque



Figure6. Silness-Loe plaque index 3 = abundant plaque and gingival bag teeth and gum edge;
 Index Quigley - Hein changed Turesky 4 = plaque covering more than 1/3 but less than 2/3 of the tooth surface (the upper arch and lower arch the back teeth); 5 = plaque covering 1/3 or more of the tooth surface (the front teeth of the lower arch);



Figure7. Silness-Loe plaque index: 1 = band adherent to free gingival edge and neighboring tooth surfaces, as evidenced by the probe on the tooth surface; Index Quigley - Hein changed Turesky 4 = plaque covering more than 1/3 but less than 2/3 of the tooth surface.

The results obtain (fig.7) were not very satisfying, and we continued with the education for good oral health including instructions for a good and healthy diet.

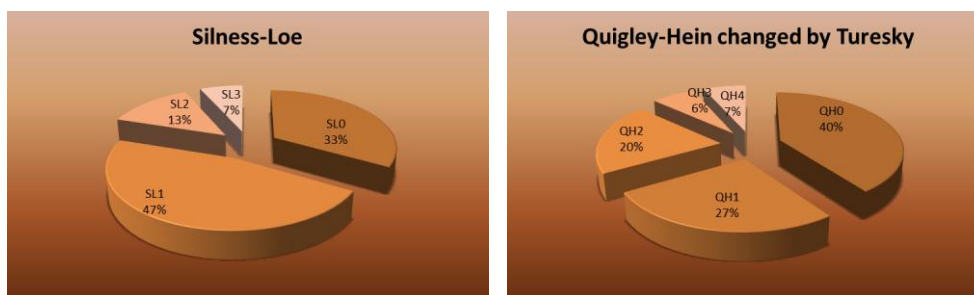


Figure7 Results obtain in the second stage of our study

In the third stage of our study, after 2 weeks, we proceed with the same steps and the results were showing an improvement in the state of oral health at our students (fig.8, 9, 10).



Figure8. Silness-Loe plaque index: 1 = gingival edge film adhesion to tooth surfaces free and neighboring teeth.
 Index Quigley-Hein changed by Turesky: 1 = separate fringe or discontinuous strip plate at gingival edge.



Figure9. Silness-Loe plaque index: 1 = band adherent to free gingival edge and neighboring tooth surfaces, as evidenced by the probe on the tooth surface; Index Quigley - Hein changed by Turesky: 1 = separate fringe or discontinuous strip plate at gingival edge



Figure10. Silness-Loe plaque index: 1 = band adherent to free gingival edge and neighboring tooth surfaces, highlighting the tooth surface, Index Quigley - Hein changed Turesky: 1 = separate fringe or discontinuous band on the outskirts gingival of plaque (plaque evident in posterior teeth).

The results at the end of our study had shown an improvement (fig. 11), and the reduced plaque which is usually associated with tooth decay and periodontal diseases show that we achieved a preventive behavior.

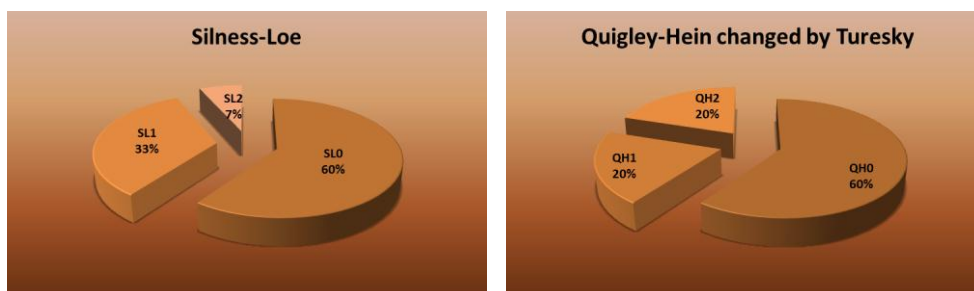


Figure11 Results obtain in the third stage of our study

Young people should be aware that a preventive attitude in accumulating plaque is reducing the risk for tooth decay and periodontal disease and is improving the oral health.

CONCLUSIONS

Considering this study un healthy diet and without the awareness of the importance of a good oral hygiene we bring unconsciously a risks to oral health, but a preventive behaviour, with recommendation from the professionals can bring dental health in optimal parameters. All of this is achieved in a strict relation to clinical oral health indexes and the more they decrease the oral health is better, reducing the risk for tooth decay and periodontal disease.

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