

NYC College of Technology DEN1100L

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Toothbrushing & Flossing writing assignment

Part 1: Understanding Gingivitis and Periodontitis

The video “What is gingivitis?” by Crest and “What are Gingivitis and Gum Disease?” by Oral-B gives an explanation of what gingivitis is and what are the homecare treatments that we can implement. Both videos express that gingivitis is a gum disease resulting from the accumulation of plaque on the teeth. Plaque contains many types of bacteria that produce toxins that irritate the gums. The videos also communicate that the common symptoms of gingivitis are inflammation of the gums, bleeding and redness. Besides plaque accumulation there are other factors that can increase the risk of developing gingivitis, like the use of tobacco, stress, hormonal changes because of pregnancy, poor nutrition, medication and chronic diseases such as diabetes or HIV. To prevent gingivitis the best homecare treatments a patient can perform are a rigorous tooth brushing routine with a soft bristle toothbrush, the use of antigingivitis toothpaste and mouthwash and daily use of floss. From the video I have learned that a sustainable amount of the American population suffers or has suffered from gingivitis and is a disease that can be easily prevented and treated by dental professionals and patients. The most important thing to do as a dental hygienist would be to give our patients the right information and help them understand the importance of daily toothbrushing and flossing.

Part 2: Toothbrushing (TB) Methods and Types

TB Methods

As a dental hygienist we have the task of showing and explaining to patients the best method of toothbrushing depending on their necessities. In my case if I have a patient without dexterity problems or learning disabilities I would give the following recommendations to ensure that they brush all their teeth. The first tip would be to brush 2 teeth at a time. Then I would explain to the patient how to perform a modified Bass method to ensure an effective removal of plaque in every surface of the teeth and also on the sulcus, removing supragingival and subgingival plaque. I would explain to the patient that the toothbrush has to be placed horizontally for all the teeth and vertically only for the lingual surface of anterior teeth. Then I would show the patient how to place the toothbrush at a 45° angle with the bristles to the sulcus of the gingiva. After that I would teach the patient how to make small vibratory strokes at least 10 times and then the rolling motion through the occlusal or incisal plane. At last I would also tell the patient to perform an occlusal brushing, placing the toothbrush on the occlusal plane and doing 10 vibratory circular movements. With these 2 tips the patient would be able to clean all the teeth and also all the surfaces of them. For patients with dexterity problems, learning disabilities or children the toothbrushing method would be more simple to perform.

In addition, a soft bristle toothbrush and good care of it is important to maintain proper dental care. I would give 4 suggestions to the patient on how to care for their toothbrushes. The first one is to have at least 2 toothbrushes at home and use them

interchangeably so they can completely dry between uses. The second tip would be that after each use the toothbrush should be thoroughly clean with water until any toothpaste or debris is rinsed. The next suggestion is to keep the toothbrush in an upright position in an open space because bacteria can grow if it is stored in a container. The last advice would be to change the toothbrush every 2 or 3 month or when the filaments look worn.

TB Types

Powered toothbrushes are being more used but 80% of Americans are still using manual toothbrushes because they are more affordable and available than powered toothbrushes. “The American Dental Association (ADA) states that manual brushing is a safe and effective method of dental biofilm removal.” (Sinclair, 2020) For manual toothbrushes there are many options in the market to choose from depending on their individual characteristics, when compared with powered toothbrushes that there are less options available. From all of the different toothbrushes, 5 main characteristics should be considered to get the most suitable for each person. The first characteristic is the bristle configuration, this is how the bristles are positioned and trimmed; it can be multilevel, angled, flat, etc. The second characteristic is the hardness of the bristles, they can be soft, medium or hard but the ADA recommends only the use of soft bristles to minimize the gingival abrasion. The third aspect is the handle ergonomics; now handles have many features like texture or non-slip materials, but there are also more cushioning handles for patients with dexterity problems or learning disabilities. The fourth feature is the head design, there are standard-sized toothbrushes head but also small oval heads for kids or difficult to reach areas of the mouth. At last, the fifth feature is the infinite option colors and graphics.

When talking about powered toothbrushes and the replacement for the head they are more expensive than manual toothbrushes. Even though they are expensive it has been suggested that they are better for plaque removal if the patient using a manual toothbrush does not use the correct toothbrush or method. On the other hand, powered toothbrushes are more beneficial for patients with dexterity problems or learning disabilities if they can tolerate the vibration of these toothbrushes; for the patient that can not tolerate the action of powered toothbrushes, the manual ones are the best option. The design of the head is also favorable to reach the difficult zones of the mouth when compared to the standard-size of manual toothbrushes.

The advice a dental hygienist can give a patient regarding powered toothbrushes has to be in consideration with their individual needs. Powered toothbrushes have a simpler method of use; we have to explain the patient to place the bristles at a 45° to 90° angle and then move the brush to the different surfaces of the teeth. An important tip to give is to not apply a lot of pressure when brushing because it can cause abrasion on the gingiva. If the patient decides to use the powered toothbrushes it should have the same care as the manual toothbrushes. The head should be replaced every 2 to 3 months or when the bristles look worn, after each use the head needs to be thoroughly clean and then stored in an open and dry place.

Part 3: Flossing Methods

1. Who invented floss? When? What material was first used?

Dr. Levi Spear Parmly invented the floss in 1815. He recommended his patients to use a silk thread to clean between their teeth. ("The History of Dental Floss", 2021)

2. Significance of flossing?

Flossing is an important self-care method for the effective removal of plaque in the interdental space of the teeth that toothbrushing does not reach and this way also decreases the probability of gingival diseases like gingivitis or periodontitis.

3. Explain the rationale and steps to floss using:

a. Spool method: A piece of floss approximately 18-24 inches long. Only half an inch is grasped by the thumb and index finger to guide it to the interproximal space and the remaining floss can be tucked into the palm or wrapped around the middle fingers. The floss has to slowly be worked between the contact area without snapping it. Then a C-shaped is formed and the floss is moved up and down until the debris is removed.

b. Loop method: Is preferred for childrens or a patient with low dexterity. A piece of floss approximately 18-24 inches long is tied at the ends to form a loop or circle. The patient uses the thumb and index finger to guide the floss to the interdental space in a gentle motion without snapping the floss to not cause trauma to the tissue. Once through the contact area, the floss has to be gently slid up and down the mesial and distal marginal ridges in a C-shape around the tooth directing the floss subgingivally to remove the debris.

Part 4: Patient Care

1. How would you approach a 13-year-old teenager who has orthodontic appliances and tells you he brushes once a day and never flossed before getting braces?

First I would do a plaque index with a disclosing solution to use as a teaching tool to explain the 13-year-old teenager how and where biofilm accumulates and what this accumulation can cause. Then I would explain to the patient how to use a soft toothbrush and how to perform a charter's method to clean on top of the orthodontic appliances and then also an occlusal brushing to remove plaque and biofilm from the occlusal surfaces. Also I would explain to the patient that because of the orthodontic appliances the use of flossing is important to remove interproximal biofilm that the toothbrush can not remove. I would show the patient how to use a threader floss to pass it through the interproximal space and then the spool method to properly remove the plaque.

2. How would you approach a 28-year-old patient who has localized gingival recession and the buccal surfaces of all posterior teeth, and indicates that they have been scrubbing their teeth using a medium TB bristle their entire life, and only flosses when food gets stuck in-between?

Using the information given in this case I would recommend the patient to change from a medium toothbrush to a soft bristle toothbrush. This way the brushing would damage the gingival tissue creating the recession. I would also recommend the daily use of floss before brushing to dislodge food or plaque and this way needing less time brushing and less force applied.

Part 5: Reflection writing prompts

1. What have you learned from this assignment?

From this assignment I have learned the importance of a daily toothbrushing and flossing for the prevention of gingivitis and other gingival diseases. I also learned how depending on the necessities of the patient, as a dental hygienist we can recommend the use of manual or powered toothbrushes and the characteristics we need to consider are suitable for that individual.

2. Did you find this assignment beneficial or not and why?

I found this assignment beneficial for the understanding of how a dental hygienist gives suggestions to the patients about tooth brushing and flossing and how each characteristic changes with the necessities and abilities of the patient. It is also beneficial to know the methods of flossing so we can properly teach our patients and this way they can remove plaque effectively and keep good dental hygiene.

3. Do you know of a family member or friend who may have used a TB or floss method incorrectly? Please explain.

I have seen my father brushing with the horizontal (scrub method) for less than 2 minutes and because of this inefficient method he has a big amount of plaque accumulation. I also know that he never has used floss but now he is using a water picker that has been helpful to clean the interproximal space of his teeth. He still complains of bleeding gums every time he brushes and that can be a sign of some level of gingivitis.

4. Do you feel more comfortable having a conversation with future patients about plaque, calculus and using toothbrush and flossing methods?

This and the other assignments we have done during the semester has given me a better understanding of how plaque and calculus affects the gingiva causing different gingival diseases and that the first steps to prevent them is toothbrushing and flossing. Now I feel able to give suggestions and advice to future patients about what self-care methods are appropriate for them and how to perform these methods.

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