Sheela Alburquerque DEN1100 E600 Principles of Dental Hygiene Care I Professor Susan Davide December 06, 2017

Greater New York Dental Meeting

The clinical research posters at the Greater New York Dental Meeting were interesting and educational. Being able to learn about all the different research topics related to teeth was fascinating and even more so because I was able to understand most of the material. I realized how much I have learned so far while in the dental hygiene program. There were a few posters that caught my eye but the poster that I was most interested in was from The Farmingdale State College, titled "The Effects of Green Tea Within the Periodontium." It was something that could be related to dental hygiene. My first thought was how it could help patients who may be suffering from periodontal disease or gingivitis with symptoms of inflammation, redness and bleeding. I could possibly suggest this natural approach of green tea when I begin to see these types of patients. Some might be more open or willing to trying a natural method over other types of medications. The extracted component of green tea is "camellia sinesis" which has anti-inflammatory and antimicrobial properties that become helpful to maintain the health of the oral cavity, especially in relation to periodontal disease.

When I first approached the presenters, they informed us of the benefits that some of the components within the green tea have like the catechins, such as EGCG, ECg and gallocatachin gallate, which are major green tea polyphenols that exert vascular protective effects to help a person with periodontal disease. The presenters also explained about a study completed to evaluate the topical action of green tea extract-based mouth rinse on gingival tissue that has undergone periodontal conditions, such as redness, inflammation, and bleeding. Patients that were clinically diagnosed as suffering from gingivitis were divided into 2 groups. One group was assigned to use a green tea mouth rinse, while the other group used a simple saline solution (the placebo). The 2 groups were assigned to rinse twice a day for 15 days. At the end of the study it resulted that the green tea group had a significantly lower plaque index compared to the placebo group.

When there is accumulation of plaque the response in the gingiva is usually inflammation, which then releases cytokines throughout the gingiva. Green tea extract helps in reducing symptoms in the gingiva by having the person drink green tea daily to benefit the health of their tissues and lessen redness, inflammation and decrease pocket depths. Each patient is different and as a part of the dental hygienist scope of professional responsibility they must properly assess any clinical findings before recommending the use of green tea products. Unfortunately, there needs to be more research on the effects of green tea within periodontium to be able to recommend this to a patient. But I feel it is an important break-through when helping to treat those who suffer from these symptoms. There are several ways green tea can be incorporated into the patient's daily routine like in mouth rinse, chewing gum, toothpaste and drinking it in tea.

Periodontitis is an inflammatory disease caused by groups of specific microorganisms and host defense mechanisms. Green tea catechins inhibit the growth of certain bacteria's that can further the result in active periodontitis. As a future hygienist, I believe that my role in a case with a patient having periodontal disease is crucial for me to be well educated so I can in turn educate the patient. Many patients out there may not know they have unhealthy gingiva or they

may be aware but are not educated enough to know how critical following a daily home health care with regular dental exams can benefit them. Having this knowledge of green tea can help in educating patients to incorporate it into to their daily routine. Many patients do not like to take medications so this can be a good alternative.

After speaking with the students and reading over some of the journals the students used for their poster I was able to better understand the benefits of Green Tea. There have been many studies conducted where green tea resulted in improved changes of probing depth, inflammation, bleeding, gingival indices, and plaque indices. This knowledge can change many outcomes of unhealthy gingiva for the better. I am really interested to hopefully one day find that this is confirmed to help patients with periodontal disease and hopefully incorporate it into the lives of many who need it. I now want to begin drinking green tea regularly to enhance my overall health.

Refrences

Bergamo Cardoso, K., de Carvalho M., Halawa Kudo, G.A., Akemi Matsumoto M., Santiago Junior, J.F., & Pinto Saraiva, P. (2016). Short-term Evaluation of a Green Tea Extract-Based Mouthrinse. *Revista Salusvita*, 35(1), 41-51. Retrieved December 1, 2017, from http://web.b.ebscohost.com.citytech.ezproxy.cuny.edu/ehost/detail/detail?vid=6&sid=e0dc805d-5e50-4337-

 $\frac{bec2bcaad21a9393\%40sessionmgr101\&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXR1-AN=115726557\&db=a9h}{}$

Grover, H., Dr., & Bhardwaj, P., Dr. (2016). Adjunctive Periodontal Treatment: Ascertaining The Role of Green Tea. Research and Reviews: *Journal of Dental Sciences*, 4(1), 98-99. Retrieved December 1, 2017, from http://www.rroij.com/open-access/adjunctive-periodontal-treatment-ascertaining-the-role-of-green-tea-.pdf

Rattanasuwan, K., Rassameemasmaung, S., Sangalungkarn, V., & Komoltri, C. (2016). Clinical Effect of Locally Delivered Gel Containing Green Tea Extract as an Adjunct to Non-Surgical Periodontal Treatment. Odontology, 104(1), 89-97. (2016). Retrieved December 1, 2017, from https://link-springer-com.citytech.ezproxy.cuny.edu/article/10.1007/s10266-014-0190-1

This is my second time attending the Greater New York Dental Meeting. The last time I attended was over 10 years ago. I really loved the experience of being at the dental meeting just like I did the first time. You can learn so much about any new products being launched or even products you didn't know existed which can benefit you and your patient. I was excited to find stuffed animals with typodont like teeth which were to be used as a teaching tool for children to learn to brush and floss. I thought it was such a genius idea because it makes it fun and they are able to practice while playing with the stuffed animal. I will definitely be buying one later on once I begin to have children as my patients.

There was a booth I came across that had activated charcoal toothpaste, which claimed to remove stains from the surface of the teeth without the use of abrasive agents or bleach. They were offering us a chance to try the toothpaste and so I did. It wasn't anything I would ever buy because of the price and I don't know that I liked the after taste of toothpaste but It was fun to try. Now I can say I have tried it when I'm asked about the product by my family. I can explain my experience to them and they can make their own decision on whether to try it or not. They also had us use the toothpaste with a new line of toothbrushes that had bristles which were super soft. I really loved the super soft feeling of the toothbrush I had never tried out before but am not used to the flat shape design of the brush. I usually buy a rippled or tapered shaped toothbrush but because of how soft it felt I would probably try it out on a regular basis.

Overall, I enjoyed the meeting his year and am very excited to visit the New York Dental Meeting again next year to see what new products or exhibits will be presented.