

# Oral hygiene aids case study

[Health & Medicine](#), [Healthcare](#)



My patient is a 9 years old Hispanic female. She has a Sonicare Kid toothbrush. She does not use any mouth rinse or interdental devices. She brushes her teeth once a day for 30 seconds. She presents a Class I permanent dentition excluding all maxillary and mandibular 1st and 2nd molars not erupted yet. She presents a healthy and firm v shape interdental gingiva filling the interproximal area, which classifies her with Type I gingival embrasure. No presence of prosthesis or oral appliances. My patient has the dexterity and skills to brush her teeth on her own. I asked her if somebody helps her with her oral hygiene and she stated her mom helps her brushing 2 or 3 times a month.

According to the American Association of Pediatric Dentistry (AAPD), children need help brushing until they are old enough to tie their own shoelaces, which is usually around 7 or 8 years old. Even though, parents supervision is always an extra help. I also asked her how many times a day she brushes her teeth, and she said: “ Once a day, only in the mornings after breakfast”. I explained to her to avoid plaque build-up it is important to brush her teeth and gums at least twice a day, in the morning and before going to bed at night with a fluoridated toothpaste. I also made clear she was missing the most important brushing of the day, which was the night time one.” Why is the night time brushing the most important one”?-asked my 9 years old patient-. I explained that both were important but she would never forget the night time one because according American Dental Association (ADA), at night the saliva secretion slows down which allows the acids to get accumulated corroding teeth all night. The saliva production decreases and the bacteria multiplies attacking gums and teeth. Patient confessed of

forgetting to brush her teeth at night because she is always tired at the end of the day. I told her I understood, and gave her a few suggestions and recommendations about schedule and manage her time wisely. I told her homework, sports, school, games are important but dedicating a few extra minutes of her time brushing and flossing at night is also a way of taking care of her overall health in general.

I quizzed my patient's oral health knowledge using a "Quiz: Brush Up on Your Dental Knowledge" questionnaire, which is a tool developed by Carefirst and Bluecross Blueshield family of health care plans. She responded 7 correct answers out of 10 questions. This scores her on the level of "Good Knowledge but brush more often". I wanted to help my patient to understand what plaque was, and then I realized plaque sometimes is difficult to see, especially for children when they may not know about gingivitis or periodontal diseases until gums begin to bleed and get swollen. This is when plaque disclosing solution can be very helpful for them. I performed a plaque index interpretation on my 9 years old patient to obtain an accurate plaque score. I use a purple disclosing solution, and told patient this solution is used to expose plaque, and it can help her visualize where the plaque is located. I painted this solution on to the teeth with a cotton tip applicator, then rinse away with enough water. I also explained to her and showed her all the areas with some pink and purple stains after rinsing are areas where plaque is presented.

After I obtained a final score of 12.5%, which is considered within the percentage of excellent hygiene according to O'Leary Plaque index, I gave

my patient a hand mirror to review our final results. I showed her the areas where the plaque was located, which were mainly found on gum lines of maxillary and mandibular anterior teeth. I also explained to her if plaque is not removed every day, it can start to thicken in turning into tartar, which is harder to remove, and this tartar is a precursor of cavities. I used pictures with different stages of plaque as a great visual teaching aid to educate my patient about how plaque can cause tooth decay. These pictures helped my patient to understand the importance of taking care of her teeth, and take oral hygiene very seriously. I came out with a plan to improve her brushing and flossing habits to eliminate plaque formation.

I recommended her to brush her teeth twice a day, and flossing once a day with a fine and thin dental floss. The purpose is to remove her mouth of as much plaque as possible. My patient only brushes her teeth for 30 seconds which is not enough time to remove all the plaque. I suggested taking her time while brushing, spending at least 2 minutes each time. I recommended her to use a timer or sing a song on her head to keep tracking of the time. I showed her that Sonicare toothbrush has a timer as one of its great functions. My patient felt really excited to discover another feature of her toothbrush. She even said: “ I cannot wait to try it tonight”. She also told me her toothpaste was boring, and did not like its taste anymore. Immediately, I turned on my Ipad, and showed her a huge variety of color and flavor toothpastes to choose from.

I also created “ I Can Do It! My Oral Health Habit Chart”, which is a motivation reward chart that encourages her to track her everyday brushing

and flossing while learning consistency. My patient seemed really motivated about oral health related topics, so I recommended her reading books about brushing teeth, watching videos or even download a mobile app having to do with oral hygiene. We also discussed the diet factor. She confessed of having sugary snacks every day. I listened to her statements and told her a sweet treat once in a while will not make any harm to her oral health, but the frequency of eating these sugary foods will put her at risk of tooth decay. I explained to her with an adequate age related terminology that some carbohydrates and sugars provide bacteria in plaque which demineralize (dissolve) the enamel making holes on teeth (cavities). Patient understood that reducing the frequency of sugar intake will allow her to have rest and saliva to neutralize plaque. Once I offered my patient this reasonable oral hygiene plan with realistic ways to incorporate it to her routine, and she recognized the problem wanting to modify her oral habits, I gave my patient 14 days to see any changes or modifications of previous findings.

I met with my patient two weeks later. I used the Motivational Interviewing Method one more time. I asked her the same open-ended questions regardless any changes on her oral hygiene routine. She answered them all as I would had expected. Patient has brushed twice a day for at least two minutes every day. Pt has flossed after night time brushing every day. Patient has reduced the frequency of sugary snacks to once a week, and drinking more water. We performed another plaque control record using disclosing solution again. This time she did not have that much plaque along gum lines scoring a 6. 25% which is within the healthy limits and reduced 50% less plaque than previous reading. My patient has had major

improvements in her oral health routine showing commitment and dedication.

Educating our patients with audio visual aids could be beneficial and effective preventing plaque-related oral diseases. Taking care of our children’s teeth is a key aspect of keeping their bodies healthy. “ Children need their teeth for a variety of reasons including tooth development, space maintenance, digestion, and speech development”, explain Dr. Smith. “ The expectation of getting preventing messages and habits to children early is that they develop a lifelong commitment to maintaining their oral health”.