Case Report #3

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Demographics

OS was a 40 year old African American male. His case value was heavy type II.

Assessment

At his initial visit, OS was feeling well. He reported being hospitalized for one day in 2015 for an abdominal hernia operation. He had no symptoms since then. Also in 2015, OS was diagnosed with depression and arthritis in his right shoulder. He reported taking daily medication for depression and every other night took sleep medication. At his initial visit, OS could not remember the names or doses of his medications, but did bring this information to his second visit. He took 100 mg of sertraline daily and 50 mg of trazodone daily. OS did not report any other systemic condition or allergies. When OS filled out the medical history form, he did not provide a name for a doctor, and when we asked him, he did not remember. Because OS did not provide the name of a doctor, he was assigned to the local hospital near his home.

At his initial visit, OS had slightly elevated blood pressure and pulse, so at all subsequent visits, his vitals were retaken. Blood pressure at visit one was 138/77 and pulse 89. This was discussed with OS, but at the same time, he had just rushed to the clinic from the first floor. At his second visit, blood pressure was 163/92 and pulse 102. Again, OS had rushed to the clinic. When blood pressure was retaken five minutes later, it was 127/78 with pulse 95. At the next visit, blood pressure was 145/83 with pulse 92. When it was retaken, it was 135/78 with pulse 97. At the next visit, his pulse was 115/80 with pulse 102. The final visit blood pressure was 136/77 with pulse of 82. Patient OS was classified as ASA II due to depression and arthritis.

Regarding dental history, OS couldn't remember when he last had dental treatment. He reported it was a long time ago.

OS did not require premedication.

OS reported smoking marijuana and cigarettes in the past, as well as drinking alcohol socially. OS had not smoked marijuana for the past 14 years (since 2004) and had not smoked cigarettes for the last nine years (since 2009). He had not had any alcoholic beverages in the last year (since 2017).

OS reported brushing very thoroughly once a day with a manual toothbrush. He also reported rinsing with Listerine and did not floss. OS also reported that he sometimes rinsed his mouth with peroxide. OS asked about braces at his initial visit. It was explained to him that first, it was important to regain his oral health. However, because of his interest, OS was given a list of local dental providers.

Oral Pathology

OS had a 1cm, slightly indented, linear scar at his right eyebrow. When asked about it, he reported that an air conditioning vent fell on him when he was 6 years old.

At his initial visit, OS presented with a small bean-shaped occipital lymph node on the right side of the back of his head. In the following week, he developed a cold. Intraorally, at his initial visit, OS was observed to have a fissured tongue with a coating of plaque. At a subsequent visit, a flat, red, 2cm irregularly shaped lesion was observed on the right side of his soft palate. Dr. Brown looked at it and diagnosed geographic tongue with ectopic geographic tongue that had spread to his soft palate. OS also had three small, round mandibular tori. Tori were present bilaterally, two on left side and one on the right side.

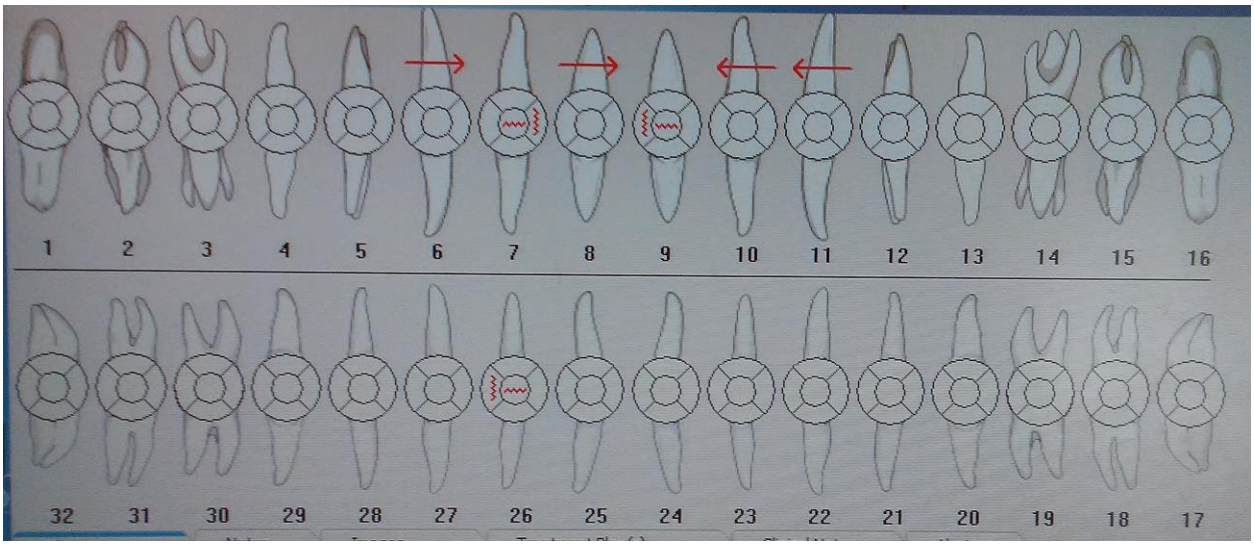
At OS's fifth visit, he complained of pain in the gingiva between teeth #20-22. He only experienced this pain when he pressed on the area. There was no apparent lesion and when a professor checked OS, nothing remarkable was found. OS did say that he had tried to floss this area.

Dentition

OS had all 32 teeth, but #16, 17, and 32 were partially erupted. He had a class I occlusion with 3 mm overjet and 30% overbite.

OS had small MI fractures on #7, 9, and 26. He had diastemas between #6-7, 8-9, 9-10, and 10-11. Erosion was present on teeth #7-10. The teeth were smooth and very translucent, especially around the incisal edge. Patient reported sucking limes and lime juice often, but he also reported that he did not leave the limes or lime juice in his mouth for very long. He did not report any gastrointestinal issues or reflux.

Patient did not have any history of caries, no restorations, and did not have any active carious lesions. OS had no staining present.



Periodontal

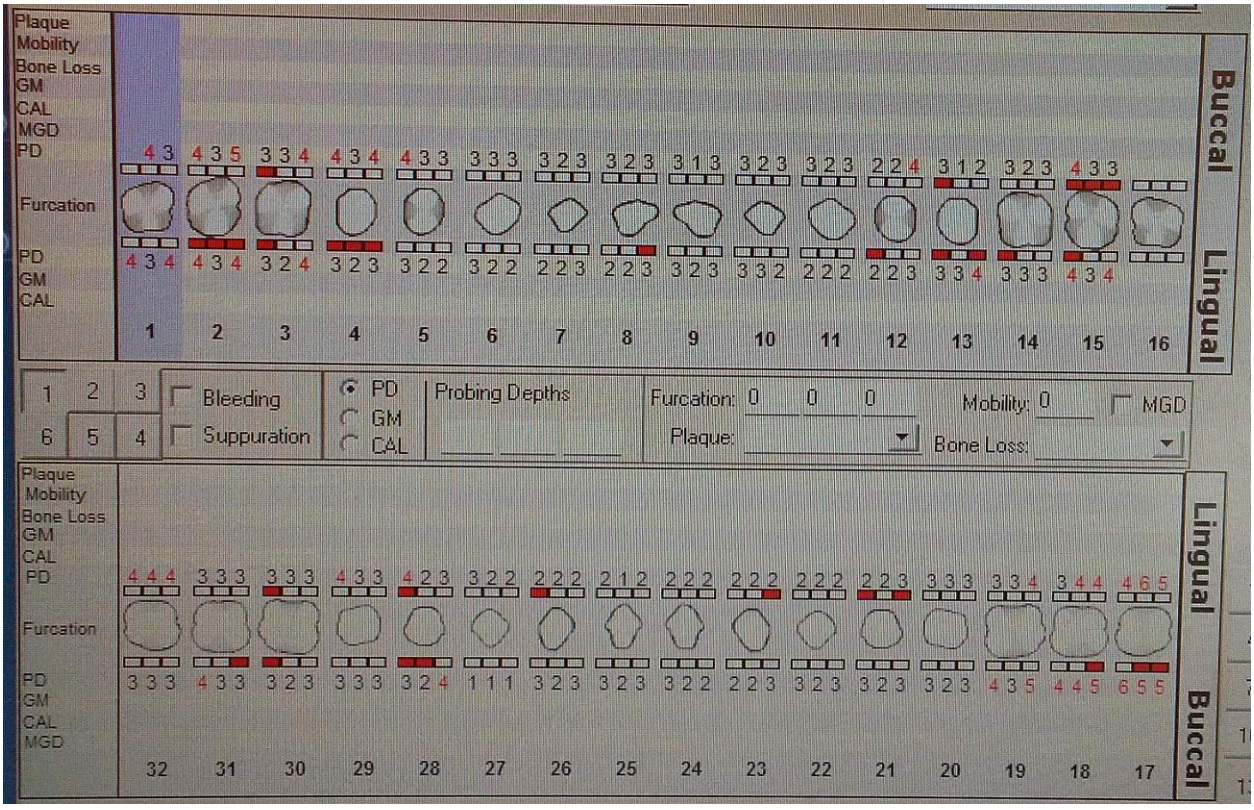
OS was classified as a type I case. His gingiva was coral pink with generalized marginal redness. The papilla between #8 and 9 was deep red. Tissue was scalloped in anterior areas and flatter around posterior teeth. It filled interdental spaces. Tissue was firmer around anterior teeth and

spongier in posterior teeth. Stippling was present in anterior areas. Patient had a rolled lingual margin between #19-27 and bulbous papilla between #22-27. There was overgrowth of the papilla around tooth #26. OS also had 1mm recession on #12, 28 and 29. OS also had a low labial frenum on the maxilla. OS had moderate inflammation. Perio probing revealed healthy sulci on the anterior teeth with some pocketing measuring mostly 4mm around posterior teeth #1-5, 12, 13, 15, 17-19, 28, 29, 31, and 32. Tooth #17 registered a 6mm pocket depth on the lingual and mesiobuccal surfaces. There was moderate bleeding during probing.

Two plaques scores of 1 were calculated for OS. However, there was some reduction in the amount of plaque present between visits. Plaque was concentrated interproximally and around the gingival margin. He also had more plaque on the lingual surfaces of teeth.

Patient was identified as a heavy calculus case value. Calculus was found on anterior and posterior teeth. OS had supra- and subgingival anterior calculus and mostly subgingival calculus posteriorly.

Based on findings, I had planned to scale all four quadrants, teach tooth brushing using the modified Bass technique, and flossing with waxed floss. I also planned to complete polishing and a fluoride treatment.



Radiographs

OS did not remember the last time he took dental radiographs. OS was approved for a full mouth series, which was taken on April 19, 2018. When the radiographs were reviewed with OS, they showed slight vertical bone loss between teeth #11-15. No carries were present.

Treatment Management
OS had a total of six visits, including one for radiographs.

At his first visit, treatment began late. My scheduled patient did not show up and I was found OS in the cafeteria around 45 minutes late. Assessments including one quadrant of perio probing were completed.

At visit two, I looked up OS's medications. OS did not report any side effects to his medication. One of the potential side effects was xerostomia, but this was not noted the intraoral exam and treatment. I also completed perio probing, completed a calculus detection exam on the LR quadrant, and completed calculus detection.

OS's third visit was to take the full mouth series.

At visit four, OS was over an hour late. He thought he had an appointment in the afternoon. The modified Bass tooth brushing technique was taught and a plaque score was calculated. I scaled the LR quadrant.

Visit five began about 40 minutes late with reviewing home care. I adjusted the tooth brushing technique so that OS turned the brush vertically on the anterior teeth. I introduced a proxabrush for use in the diastemas. I completed the clinical skills exam on the LL quadrant. Next, I rescaled teeth #27, 28, 29 and 30 and scaled the upper right quadrant. At OS's final visit, which ended early, I reviewed home care, taught flossing with a flosser, scaled all four quadrants and finished with engine polishing. OS was placed on a six-month recall (November 2018). This was because his plaque score was fairly low, he seemed very invested in his home care, and I felt that the only reason he had heavy calculus build up was because he hadn't been to the dentist in a very long time.

The only major psychosocial factor that impacted treatment was that OS had difficulty remembering the dates and times of his appointments. He was late multiple times, and even showed up on a day when he was not scheduled. OS reported that he forgot he had an appointment scheduled and thought his appointment was scheduled for the afternoon. I made every effort to make sure OS was in clinic at the right time on the correct day. I referred to a calendar while making appointments, repeated the dates and the times multiple times for him, and I called him one or two days before every visit. In retrospect, I should have given him an appointment card after the first time he was late.

Multiple strategies for home care were taught. I decided to teach OS the modified Bass tooth brushing technique because biofilm was accumulating around the margin, subgingivally and interproximally. OS reported that he pressed very hard using long strokes. I emphasized the need to be very gentle, to use a soft bristle brush, and to only brush one or two teeth at a time. I also taught the use of a proxabrush because OS had multiple diastemas. At OS's last visit, I taught him flossing using small flossers because of the interproximal biofilm. I emphasized rinsing the flosser with water or Listerine before moving on to the next tooth. I also showed him how to wrap/hug the tooth.

OS did not require a referral to a dentist or a doctor. He was given a list of dental offices and he was assigned to a hospital near him.

Looking back on the treatment, the most important thing that I would change would be the tooth brushing technique that I taught OS. It was pointed out to me that the modified Bass tooth brushing technique was not the best for OS since he was a somewhat aggressive brusher. As such, I should have taught the Rolling technique which would have avoided any potential tissue damage. I also should have introduced the use of an electric toothbrush. This would have eliminated the need to move the brush at all.

Unfortunately, with OS I ran out of time and wasn't able to do a fluoride treatment. I would have liked to complete this for him. A fluoride treatment was planned because at the first appointment, OS reported that he only brushed once a day. Over the course of his appointments, OS told me he ate a lot of carbohydrates, including a lot of bread. He also had erosion on his anterior teeth.

Evaluation

OS was really positive and had a great attitude throughout his treatment. He was really flexible regarding appointment times. When I was doing the home care, OS was focused and seemed like he really wanted to master the techniques. He was able to do the modified Bass tooth brushing technique and he was able to use a proxabrush really well. He showed that he was able to be more gentle the second time we reviewed home care. At the same time, OS also showed ability to use the flossers.

From the very beginning of treatment, OS was interested in his oral health. His interest and involvement only increased throughout treatment. He began to ask more questions about what we were doing, why and the history of tooth brushes. He really wanted to understand what was going on in his mouth and how to keep himself healthy.

Unfortunately, I wasn't able to observe any changes in gingival tissue because there wasn't very much time from when I started scaling to when I finished. There was only three days in between those visits.

As treatment progressed, I added in different home care strategies. Originally, I was just going to teach OS tooth brushing and flossing, but as I examined his teeth, I realized he needed the proxabrush so I added that. Looking at his tongue and the coating on his tongue, I talked to OS about brushing his tongue and about possibly using a tongue scraper. I wasn't able to teach him the tongue scraper but I would like to do so at a future visit. I would like to introduce an electric toothbrush.

Reflection

I accomplished almost everything that I had planned. I was really happy that OS and I had extensive conversations about his oral health and I was glad that I was able to teach him more than one or two techniques. I would have liked to do the fluoride treatment for him but I was glad about what we were able to accomplish.

Based on feedback, clearly toothbrush technique selection is a weakness. I used what I thought would have been an appropriate technique based on where I saw the biofilm. However, one of the professors pulled up OS's perio chart and made me think about tooth brushing a little differently. I realized that I need to study these techniques and be very precise about why I'm using each one.

One positive experience was the amount of patient education and background information that I was able to give OS. He had so many good questions and wanted to learn so much! I was just glad that I had some answers for him. We talked about mouthwashes and active ingredients. I mentioned that as long as the active ingredients are present in the same concentrations, it doesn't really matter what brand is purchased. I explained it was important to look at the ingredient labels. We talked about bacteria, biofilm, why it's important to get rid of it, and we even talked about the history of the toothbrush. OS wanted to know a little bit about everything and it was really gratifying to see him caring about his oral health. I can't wait to see him for his recall!