Case Report #2

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Demographics

The patient was JM, age 28, classified as a heavy type I.

Assessment

JM's vitals at her initial appointment were BP 100/64 and pulse 94. She was in a car accident in February, and had been experiencing neck pain since then. She went to the ER where they took some medical x-rays of her neck. JM has been doing physical therapy twice a week for several weeks to help with the discomfort. JM was also prescribed muscle relaxers, but took them infrequently. She had not taken them before her appointments throughout treatment, and did not remember the name of the medication.

JM does not smoke or use drugs. JM drinks a few alcoholic beverages a few times a week.

JM does not require premedication for appointments.

JM was diagnosed with IBS in 2008 and had a colonoscopy in 2012. There were no remarkable findings. JM reported that she still experienced IBS symptoms every so often. JM was prescribed medication for the IBS, but does not take it because she says it makes the symptoms worse. She does not follow any special diet. At her initial appointment, JM was taking Orthotricycline, but stopped the medication before her second appointment.

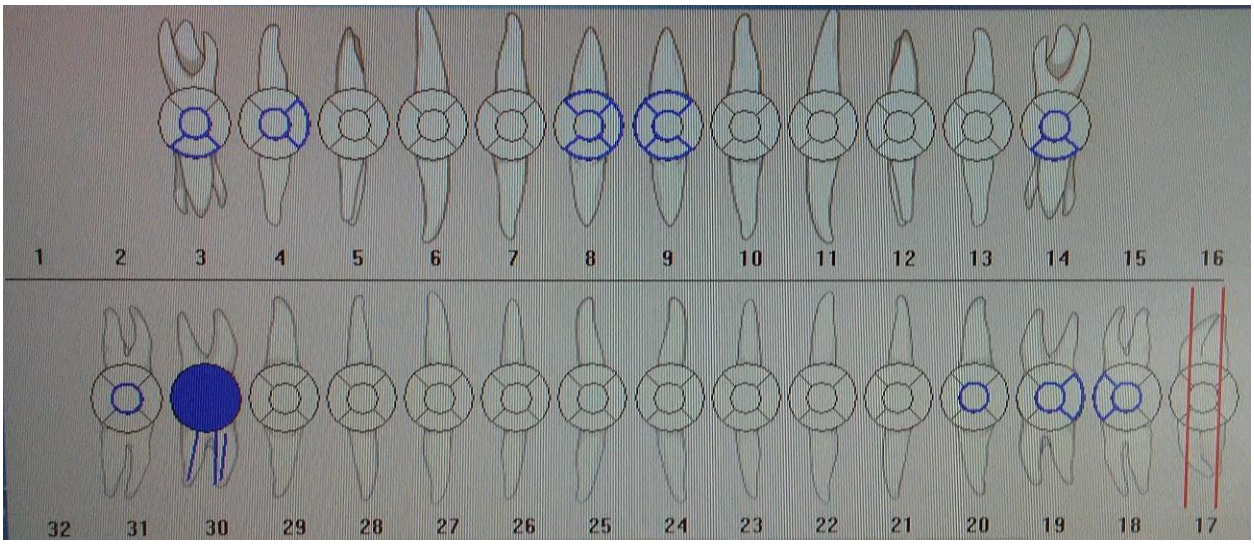
JM's last dental appointment and prophylaxis were completed in April 2017. In 2014, four bitewing radiographs were taken. At her initial visit, JM reported bleeding gums around her mandibular anterior teeth sometimes during brushing. She also reported tooth sensitivity to cold after using whitening trays. In October 2017, patient had her last whitening treatment using professional whitening gel. This was an at-home system. Patient uses a manual toothbrush once a day, usually in the morning. Sometimes JM brushes at night. JM flosses once a day, every few days. She brushes her tongue but does not use mouthwash.

Oral Pathology

There were no abnormal findings at JM's initial visit. During the extra-oral exam, no pathology was noted. However JM did have a left tragus piercing and a 2x2 centimeter blue-green tattoo of a Chinese character at the nape of her neck.

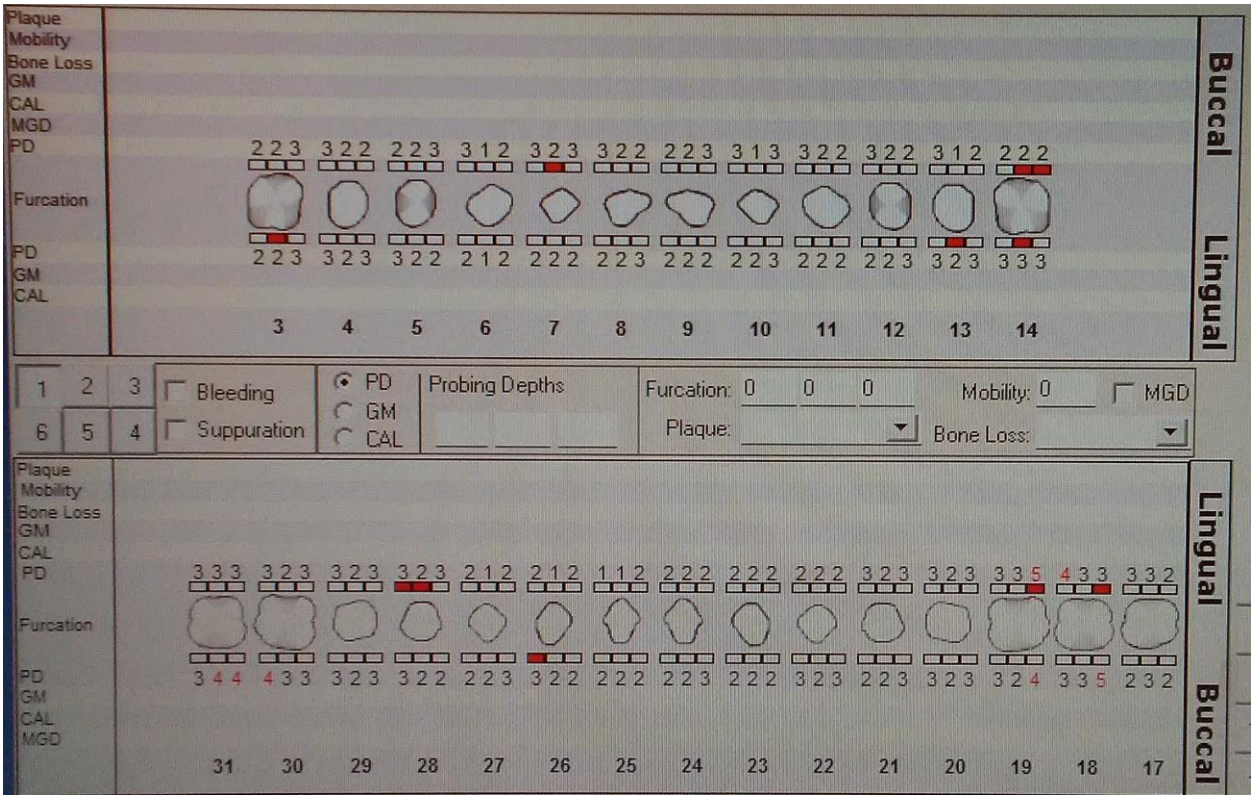
JM had a 2mm linear red lesion on her right buccal mucosa, as well as additional red linear lesions on her hard palate and interdental papillae between teeth #4-5, 5-6, and 14-15. The lesions did not appear to be open. They were not scabbed or bleeding, but appeared to be red lines on the tissue. JM had been unaware of the marks, but seemed to understand where they came from. She stated she was playing with something in her mouth.

Dentition
JM had a class III occlusion. She had cross-bite on all posterior teeth. There was an edge-to-edge relationship between anterior teeth. Open contacts with food impaction were present between #12 and 13 and 18 and 19. Mamelons were present on #23-26. Patient was missing teeth #1, 2, 15, 16, and 32. Number 17 was partially erupted. JM had the following composites: #3OL, 4MO, 8MFL, 9MFL, 14OL, 18MO, 19DO, 20O, AND 31O. There was a ceramic crown on tooth #30 and JM reported a history of root canal with a possible post and core. No suspicious carious lesions were present.
JM had had a diastema between #8 and #9, which her dentist fixed with bonding material.



Periodontal
JM had coral pink gingiva and generalized marginal redness. The tissue was scalloped and filled the interdental spaces. Tissue was spongy in posterior areas and more resilient in anterior areas. JM had edematous, rounded interdental papillae between mandibular anterior teeth. JM had mild inflammation.

JM was classified as an early type II periodontitis patient, due to presence of recession. Probing depths for JM were generally normal with localized 4mm pocketing on #18, 19, 30 and 31. The pocketing on #18 was possibly due to partially erupted tooth #17. There was minimal bleeding during probing. JM had 1mm recession on teeth #11, 22, 27 and 29.



Oral Hygiene

JM's initial plaque score was 1.5 and her revisit plaque score was 1.3. JM was classified as a heavy case. Calculus was present on anterior and posterior teeth. She had much more supragingival calculus on her anterior teeth, especially the mandibular anterior teeth, than on posterior teeth. JM's treatment plan included two visits following the completion of assessments. Homecare, including the modified Bass tooth brushing technique, was planned as well as scaling the LR quadrant. At the next visit, homecare was to be reviewed, tissue was to be evaluated, and the remaining quadrants were to be scaled. Engine polishing with fine paste, and a 2% neutral sodium fluoride gel treatment were to follow. I selected the neutral formulation due to the presence of multiple composites.

Radiographs

At JM's initial visit, the possibility of radiographs was discussed. This was because of the uncertainty of a post and core in tooth #30. The patient's last dental radiographs were in 2014. However, at the patient's third visit, when radiographs were going to be approved, it came to light that JM had an x-ray of her neck in the ER following a car accident in February, 2018. As such, she was ineligible for radiographs.

Treatment

JM's treatment took three visits. At her initial visit, assessments up to and including perio probing were completed. At JM's second visit, the modified Bass tooth brushing method was taught because JM had a lot of biofilm on the flat surfaces of her teeth, as well as around the margin and interproximally. I showed JM what her teeth looked like in the mirror and I instructed her to focus the anterior facial and lingual surfaces, as well as the buccal surfaces of

her posterior teeth. I also instructed JM to turn the brush in a vertical position when brushing her anterior teeth. She was able to demonstrate the method satisfactorily. After homecare was completed, I was able to scale the lingual surfaces of the mandibular anterior teeth.

At JM's third and final visit, homecare was reviewed. I finished the LR quadrant and had to rescale #25M, 27M and 29M. I finished scaling the UR, LL, and UL quadrants. I had to rescale tooth #21. Using a fine prophylaxis paste, I completed engine polishing because JM had a significant amount of biofilm on her teeth. Unfortunately, I was unable to complete the fluoride treatment because the appointment was running very late and JM was anxious to leave.

In general, JM was cooperative, followed directions, and was interested in her treatment. At her second visit, JM had to leave early. At her first and third visits, JM often fell asleep in the dental chair. I asked JM about her medication before her visits, and she had not taken the muscle relaxers before any of her appointments. She kept telling me how she was not used to waking up so early and kept falling asleep because she was tired.

JM was taught the modified Bass tooth brushing technique. She was shown the areas on which to focus in a mirror. JM seemed to be cooperative and willing to try the technique. However, she only reported using it a couple times. She didn't say why she wasn't using the tooth brushing technique but she didn't report any difficulty with it. However, once homecare was reviewed, JM's technique did have to be refined.

JM did not need a referral to a DDS or an MD at the time of treatment.

Looking back, the only thing I may have changed for this patient was the tooth brushing technique that I taught her. I might have started with Fones to get better plaque removal. At the same time, I would have tried to make time for a fluoride treatment. I wanted to give her a fluoride treatment because she had a moderate risk of caries. JM already had several composites. She only brushes her teeth once a day and her diet includes a lot of carbohydrates as well as acidic beverages (coffee). I was hoping to use the fluoride treatment to strengthen and protect her teeth. Time constraints didn't allow me to do this. At a future visit, I would like to introduce a water flosser or some type of flossing aid, especially since JM does not report flossing at this time.

Evaluation

Over the course of treatment, JM seem to be more interested in what was going on with her oral health. She asked questions, she wanted to have a conversation, and she seem genuinely enthusiastic. She made comments about wanting a healthier mouth and "nicer looking teeth."

During treatment, she was glad that the calculus was coming off her teeth, and she noticed a difference in how her teeth felt. Unfortunately, JM didn't really seem to change her routine. There weren't any major changes in the gingiva between JM's second and third visits. Her tissue was still slightly edematous and there was marginal redness. This could be because there was residual calculus, because she still wasn't flossing, or possibly because she still wasn't brushing well.

Reflection

I tried to accomplish everything that was planned for JM. I was able to teach her a few home care strategies and I did talk to her about electric toothbrushes. Unfortunately, I wasn't able to give her the fluoride treatment that I wanted because I just ran out of time and JM wasn't willing to come back for a fourth visit.

One positive aspect with JM was that I really tried to involve her in her treatment. I really wanted her to understand that treatment was necessary, which was why I showed her all of the visible calculus on her mandibular anterior teeth. She was shocked! When scaling, I showed her the pieces that came off, and I kept describing how her teeth looked. I also showed her the difference between the right and left sides after I was finished scaling the LR. It worked because she agreed to keep returning.

Unfortunately, taking the engine polishing competency with JM showed me several clear weaknesses. I didn't explain the procedure as well as I should have to the patient, which is an issue. I should be able to explain not only what I'm doing but why I'm doing it clearly so that the patient is able to understand. At the same time, I didn't use JM's electronic chart as well as I should have. Even though I knew in my head that she didn't have any contraindications to engine polishing, I should have opened the medical history and double-checked one more time. The paperwork is there for me to use so that my patient is ensured the best treatment. I will make sure to do this next time. Furthermore, my technique for polishing needed refinement: more pressure and more paste.