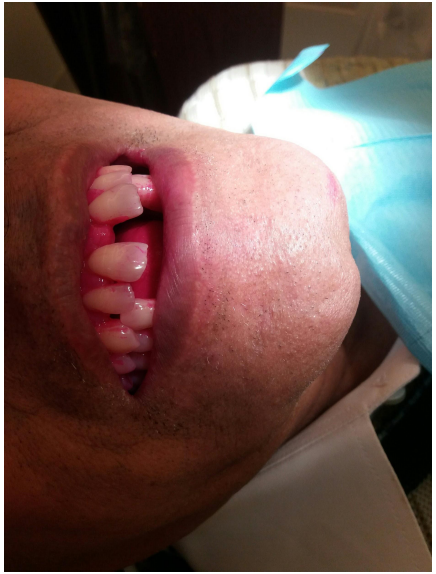
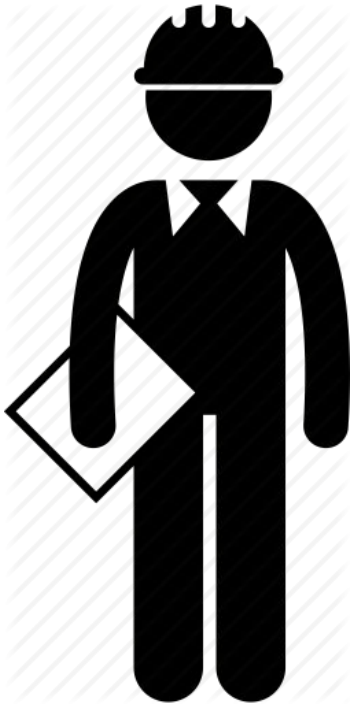
Case Presentation on My Heavy TypeIII/Diabetic/Hypertensive Patient



By Bushra Meraj
Fall 2018
Prof McLaughlin

DEMOGRAPHICS AND SOCIAL HISTORY

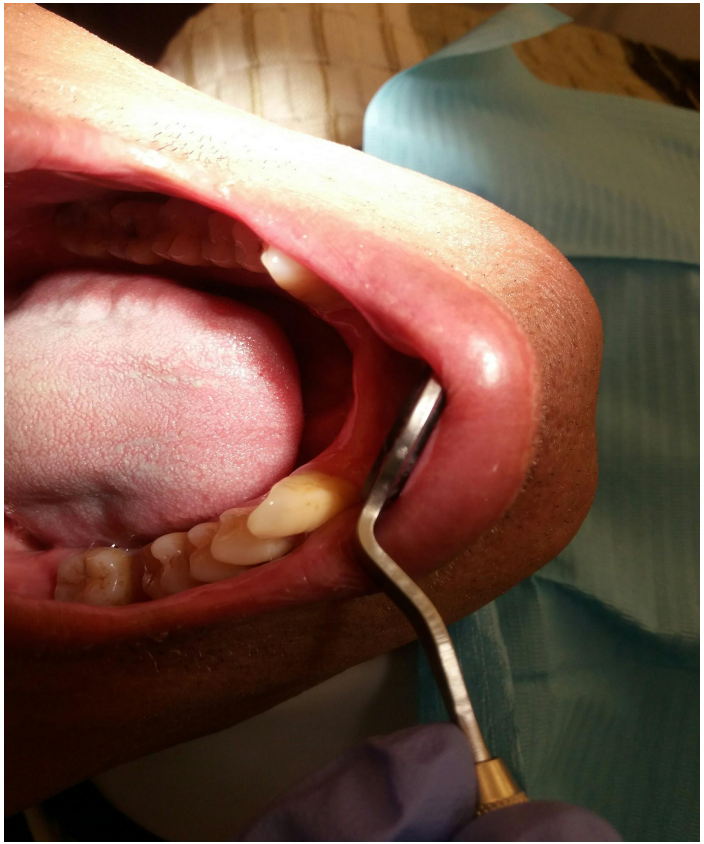
- My patient was M.S., a 68 yr old Indian male.
- Non smoker, non drinker, but devoted tea drinker
- Well educated and well spoken electrical engineer
- Earned a decent living and was married with 3 children.
- Active lifestyle with no personal time
- Very knowledgeable and upto date on current events and technology.



DENTAL HISTORY

- Limited knowledge about oral health or dental hygiene.
- Had not visited dentist in over 10 years.
    1. Active cavities and heavy extrinsic stains present
    2. Several teeth missing due to a fall in childhood
    3. In South Asian culture, people only visit the dentist “when in severe pain”
- Last dental cleaning was in May 2018 (recare pt)
- Prior to May appt, had never received cleaning in his life.
- Last FMS (on film) was taken at clinic in Apr 2018

SEVERAL MISSING TEETH



ORAL HEALTH ROUTINE

- His oral health care routine consisted of brushing once daily using hard bristle toothbrush and Sensodyne toothpaste (recession made his teeth sensitive).
- He did not rinse and complained of halitosis.
- He did have a proxabrush at home, but barely ever used it since he felt he “didn’t have enough time”

CHIEF COMPLAINT

- Did not return for the dental cleaning
- Chief concern was to “whiten his teeth” through polishing so his smile could be more presentable.
- He also wanted to get rid of bad breath.

HEALTH HISTORY

- ASA type 2 due to having diabetes type 2 and hypertension
- Initial BP: 109/78, pulse 77
- Visit 2 BP: 129/79 (slightly elevated), P 81
- Meds include: Amlodipine 5 mg, Metoprolol 25 mg, Aspirin 81 mg and Glipizide 2.5 mg

SYSTEMIC CONDITION 1-DIABETES MELLITUS TYPE 2

- Pt diagnosed with diabetes mellitus type II 5 years ago.
- Diabetes type II means your body doesn't process insulin well. Thus it is not absorbed properly into cells and blood glucose levels remain high (U.S. National Library of Medicine)
- Over time, this can lead to serious cardiac, neural, renal, ophthalmic and gingival problems (American Diabetes Association)
- Common symptoms of diabetes include: being very thirsty, urinating often, feeling very hungry or tired, losing weight without trying, having sores or infections, including periodontal infection, having blurry eyesight (Dansinger, M 2018))
- One is at higher risk for diabetes if it runs in the family, he’s overweight, has certain genetic conditions, such as PCOS or if he has heart disease or high blood pressure (Dansinger M, 2018)

MANAGEMENT OF TYPE 2 DIABETES

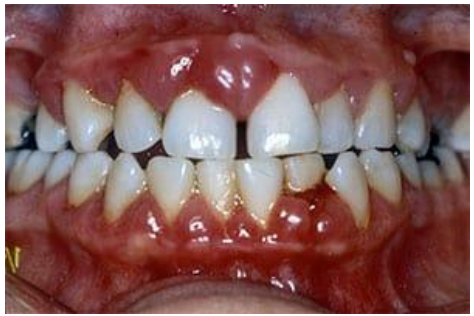
- To manage type 2 diabetes, pt is encouraged to eat “high-fibre, low-glycaemic-index sources of carbohydrate in the diet, such as fruit, vegetables, whole grain and pulses” and stay away from “foods containing saturated and trans fatty acids” (Colin, 2016)
- Some people with type 2 diabetes can manage their diabetes with healthy eating and exercise alone (American Diabetes Association, 2018)
- M.S. ate a high fibre diet, visited the gym every week and was trying to lose weight. He also checked his blood sugar weekly at home. It was in the range of 120-125.

MANAGEMENT OF TYPE 2 DIABETES

- He also took the anti-diabetic drug Glipizide 2.5mg daily
- “Glipizide is in a class of medications called sulfonylureas. Glipizide lowers blood sugar by causing the pancreas to produce insulin (a natural substance that is needed to break down sugar in the body) and helping the body use insulin efficiently. This medication will only help lower blood sugar in people whose bodies produce insulin naturally.”(U.S. National Library of Medicine, 2017)
- A1c level 1 month ago was 6.0
- A1c is a measure of glycated hemoglobin. Because red blood cells live 8-12 weeks “HbA1c can be used to reflect average blood glucose levels over that duration, providing a useful longer-term gauge of blood glucose control” (Global Diabetes Community)

DENTAL HYGIENE IMPLICATION OF TYPE 2 DIABETES

- “Gum disease is linked to diabetic control. People with poor blood sugar control get gum disease more often and more severely, and they lose more teeth than do persons with good control” (National Institute of Dental Research)
- “Patients with diabetes, esp those with poor glycemic control and oral infections, require more frequent recall visits and more fastidious attention to acute oral infections” (Ship 5)
- Since my pt was more likely to get periodontal disease and oral infection due to this systemic condition, it was important to manage his glycemic control and set a shorter recall time for him. His intra oral condition must also be checked thoroughly for signs of infection.



DENTAL MANAGEMENT OF MY DIABETIC PATIENT

- To manage the diabetic patient, the dental care team should also utilize :early and mid-morning dental appointments, reduce stress whenever and wherever possible, elevate home care to more strict standards and become “anti-microbial”, and use protective/preventive strategies such as home fluoride” (Ostler, 2011)
- All these intervention strategies were used. Pt was given mostly early morning appts, asked whether he had breakfast and his medication prior to the appt. Antimicrobial rinses and fluoride dentifrice was also recommended to the patient. His recall was also set to a shorter duration

SYSTEMIC CONDITION 2-HYPERTENSION

- M.S. was diagnosed with hypertension over 10 years ago.
- High blood pressure is a common condition in which the long-term force of the blood against your artery walls is high enough that it may eventually cause health problems, such as heart disease (Mayo Foundation, 2018)
- Risk factors for hypertension include genetics, an unhealthy diet, inactive lifestyle, too much stress, diabetes, obesity, overconsumption of alcohol and sleep apnea (American Heart Association, 2017)
- Most of the time high blood pressure is symptomless. However, it may cause headaches, anxiety, dizziness, vision changes, chest uneasiness, nose bleed, feelings of palpation in the head or neck (Shiel, 2017)

MANAGEMENT OF HYPERTENSION

- Hypertension can be managed by “eating a heart-healthy diet with less salt, getting regular physical activity, maintaining a healthy weight or losing weight if you're overweight or obese and limiting the amount of alcohol you drink” (Mayo Foundation, 2018)
- As stated previously, pt did not smoke or drink, ate a fiber rich diet and exercised once a week to control his two systemic conditions
- When diet and exercise are not enough to control hypertension, medications may also be needed.
- Pt took Amlodipine 2.5 mg, Aspirin 81mg and Metroprolol 25 mg daily for hypertension. Amlodipine is a calcium channel blocker, Metroprolol is a beta channel blocker and Aspirin is an anticoagulant (American Heart Association, 2017)

MANAGEMENT OF HYPERTENSION

- Tracking your blood pressure is key to managing it. It is recommended patients with hypertension measure and keep a daily log of their blood pressure, including activities that exacerbate it. (American College of Cardiology, 2017)
- Pt had a blood pressure monitor at home, but rarely used it.
- Blood pressure was taken at the clinic prior to each visit and this is what the readings were:
    - Visit 1 BP:109/78 P 77
    - Visit 2 BP 131/81 P 82
    - Visit 3 BP 130/69 P 79

DENTAL IMPLICATIONS OF HYPERTENSION

- Oral complications associated with taking antihypertensive medications can range from dry mouth, alterations in taste, gingival enlargement, and lichenoid reactions. When any of these signs or symptoms are observed, consultation with prescribing physician may be indicated if unable to be resolved using other modalities (Southerland, 2016)
- Xerostomia due to hypertensive meds put pt at increased risk for caries
- Severe dry mouth also made long appts difficult for patient. I constantly had to wet his mouth with the air water syringe to prevent my mirror from sticking to his buccal mucosa.

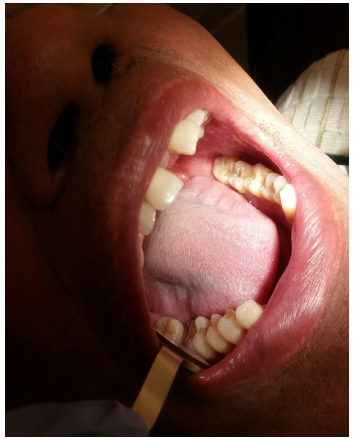
DENTAL MANAGEMENT OF HYPERTENSIVE PATIENT

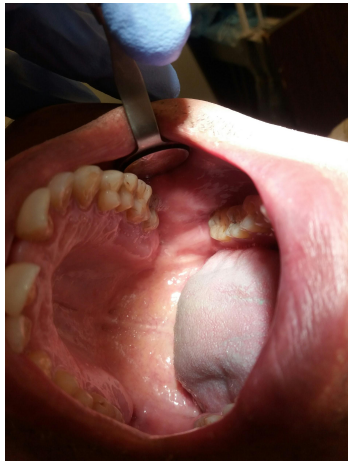
- Anticoagulant therapy such as with Aspirin may lead to prolonged bleeding during dental visits (McNeil et. al, 2018)
- Despite this well known fact, it is considered best not to interfere with drug treatment (i.e., suspending the medication several days before dental treatment or modifying the dosing scheme), but “control bleeding after the dental procedure by means of local hemostatic measures ” (Mingarro-de-Leon 2014)
- For this purpose, a gauze was kept handy and pressed into the gingiva when bleeding was otherwise uncontrolled anytime during prophylaxis.
- Medication based xerostomia was managed by asking pt to chew more xylitol gum to increase salivation prior to appts.
- Fluoride products were also recommended to reduce risk of caries due to xerostomia

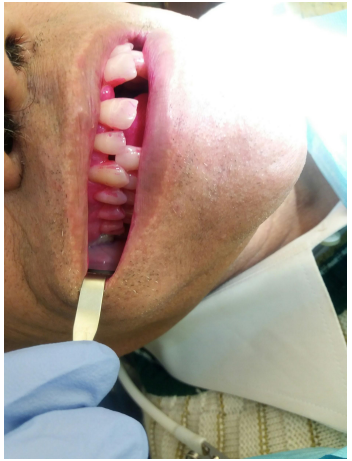
ASSESSMENTS

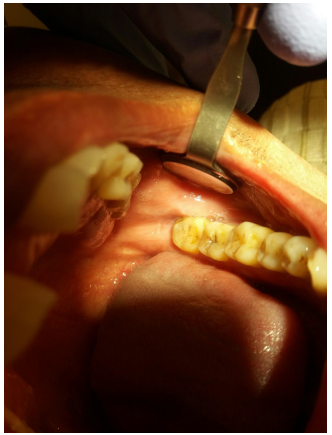
- All assessments were completed on Visit 1
- EO showed patient had bilateral TMJ crepitus, but no clicking or pain was present
- IO showed patient had white coating on tongue (possibly related to poor oral hygiene), bilateral linea alba and white striated pattern on posterior buccal mucosa
- FMS was already present on patient from April 2018, so no further radiographs needed to be taken

INTRAORAL PHOTOS







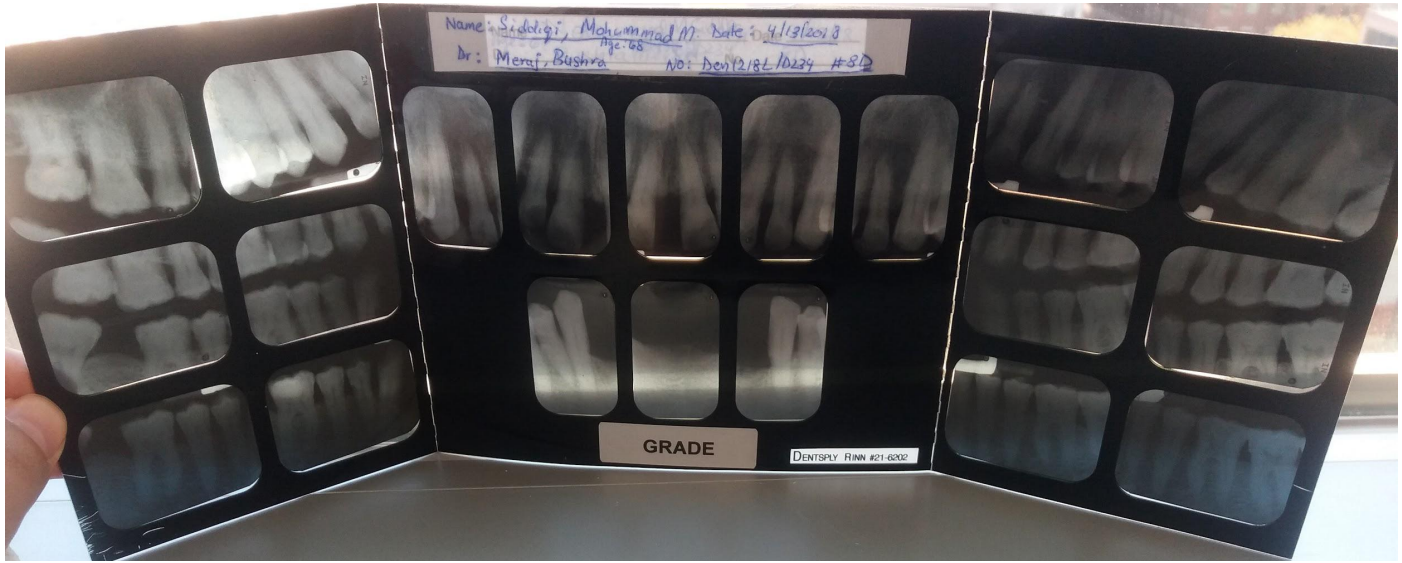


ASSESSMENT-DENTITION

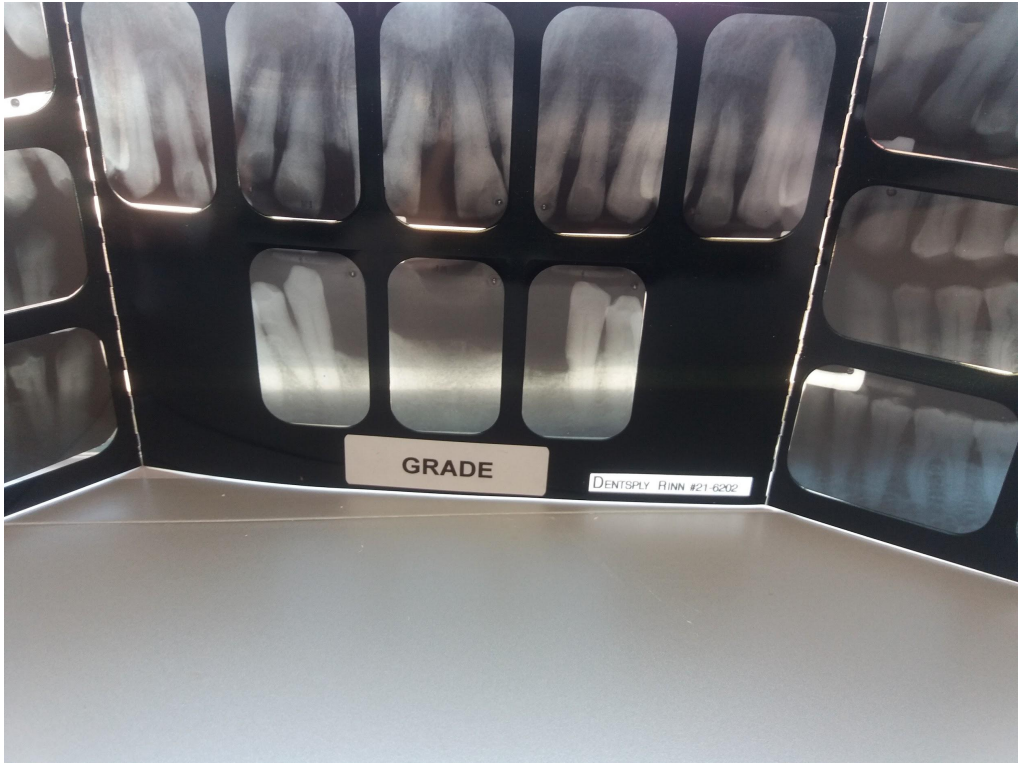
- Dentition showed bilateral class 3 occlusion, overjet of 4mm and overbite of 30%
- Several teeth were missing
    1. #23-26 were missing due to fall in childhood. They were never replaced
    2. #1 and 16 had never erupted
    3. # 31 had fallen out due to caries
- Several teeth had decay
    1. #12 distal and #13 mesial had class 2 lesions-parts of tooth had turned dark, possibly necrotic
- Pt was at high risk for caries due to no dental home, several lesions and xerostomia
- Several diastemas were present due to teeth shifting to fill the gap of missing teeth
    1. There was a prominent diastema btwn #8 and 9
    2. # 8 and 9 had also supererupted due to no opposing teeth in mandible
    3. Several smaller diastemata between # 6 and 7, 7 and 8, 9 and 10, 10 and 11

SUMMARY OF DENTITION

ASSESSMENTS-FMS TAKEN APR 2018



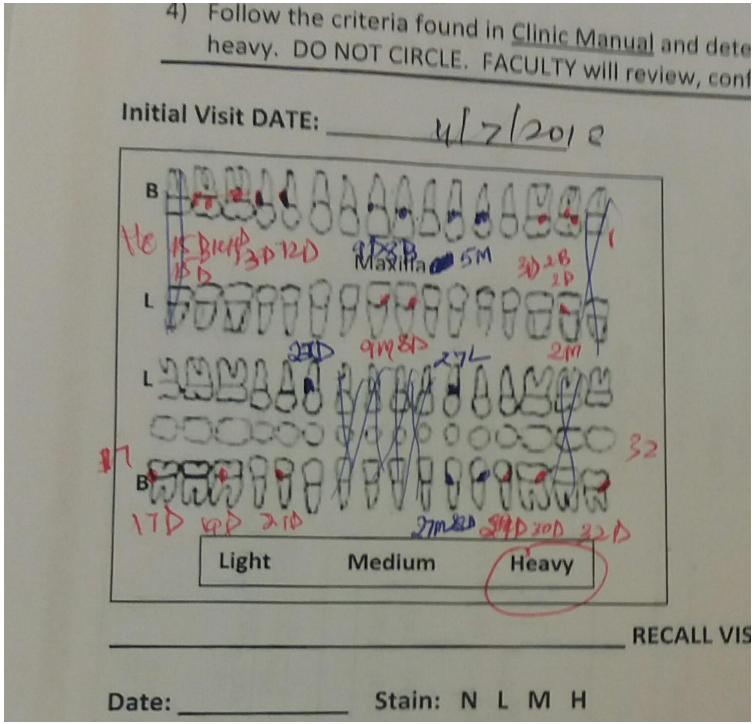
CLOSER LOOK AT ANTERIOR TEETH

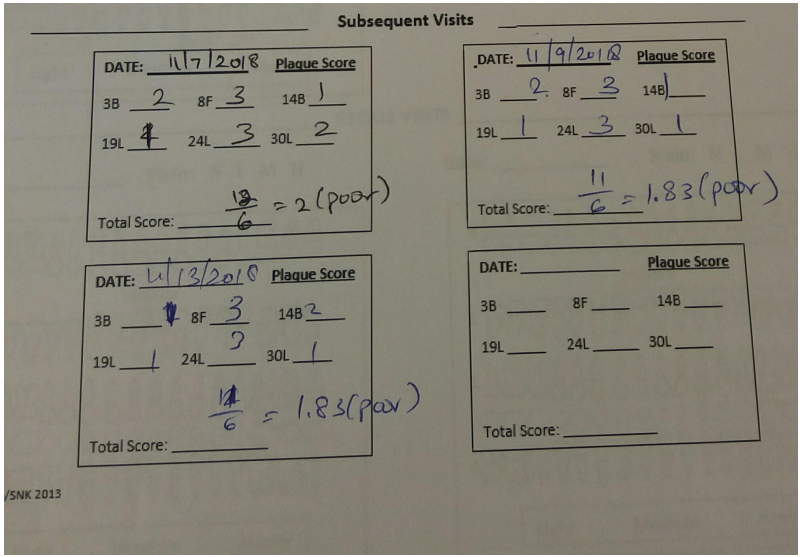


ASSESSMENT-ACCRETIONS

- Heavy extrinsic was also present due to regular tea drinking habit and poor oral hygiene
- Accretions were mostly interproximal, cervical and subgingival due to patient's inability to brush or floss properly
- Patient presented with a poor oral hygiene score of 2 during initial visit.
    1. PI score did not improve much with each subsequent visit
    2. Biofilm was mostly concentrated in the mandibular region and the linguals of all surfaces

CALCULUS DETECTION AND PLAQUE INDEX

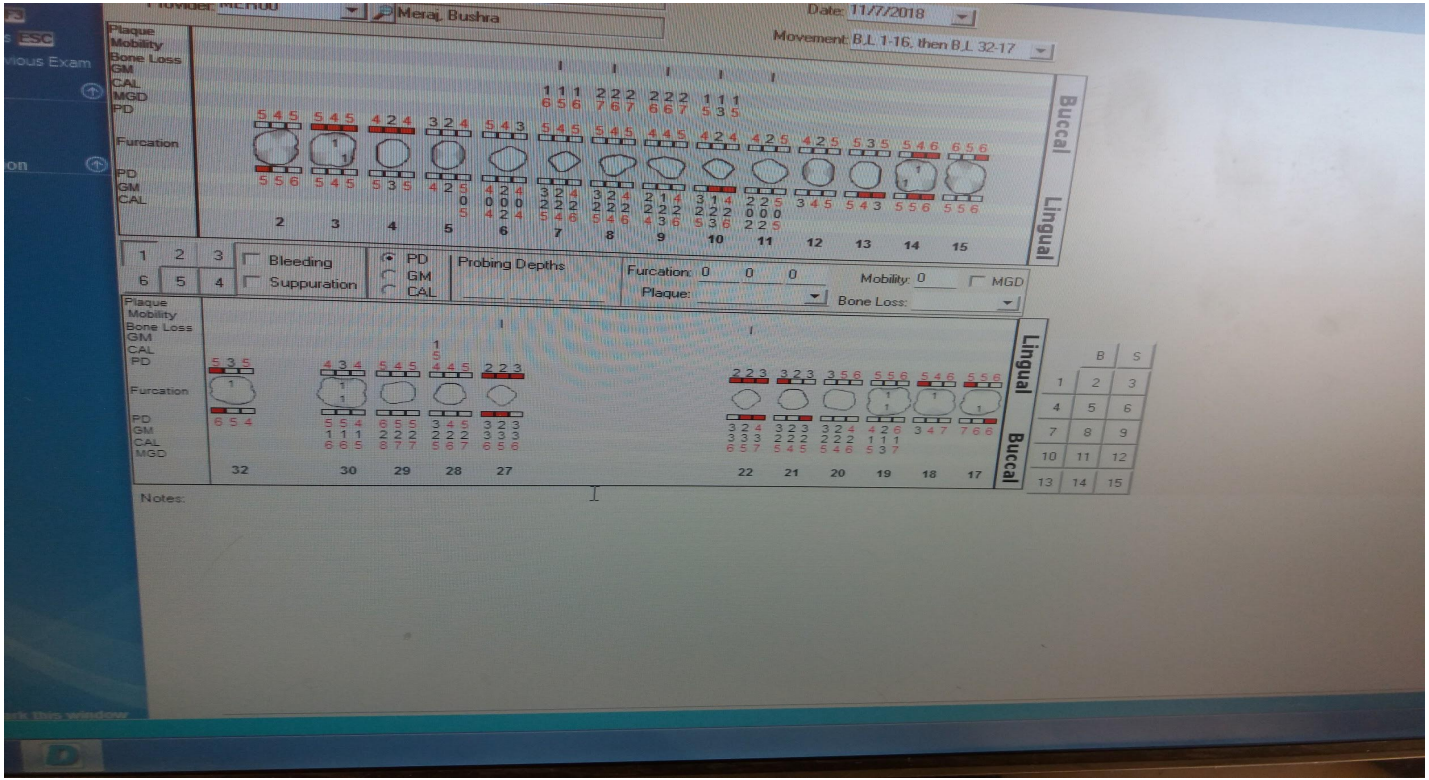




ASSESSMENT-PERIO EXAM

1. Probing depths were generally 4-5 mm
2. Recession of about 2 mm present on mostly all mandibular teeth and teeth #7-10 in maxilla
3. CAL of 5-7 mm
4. FMS confirmed generalized horizontal bone loss and localized vertical bone loss
5. Moderate bleeding upon probing
6. Type 1 mobility on #7-10
7. Type 1 furcations on #3, 14, 17-19, 30 and 32 (molar region of both arches)
8. Gingiva was pigmented with stippling, soft spongy consistency in mandible, more firm and resilient in the maxilla, rolled margins, embrasure type 3, blunted missing papilla, BUP but no exudate

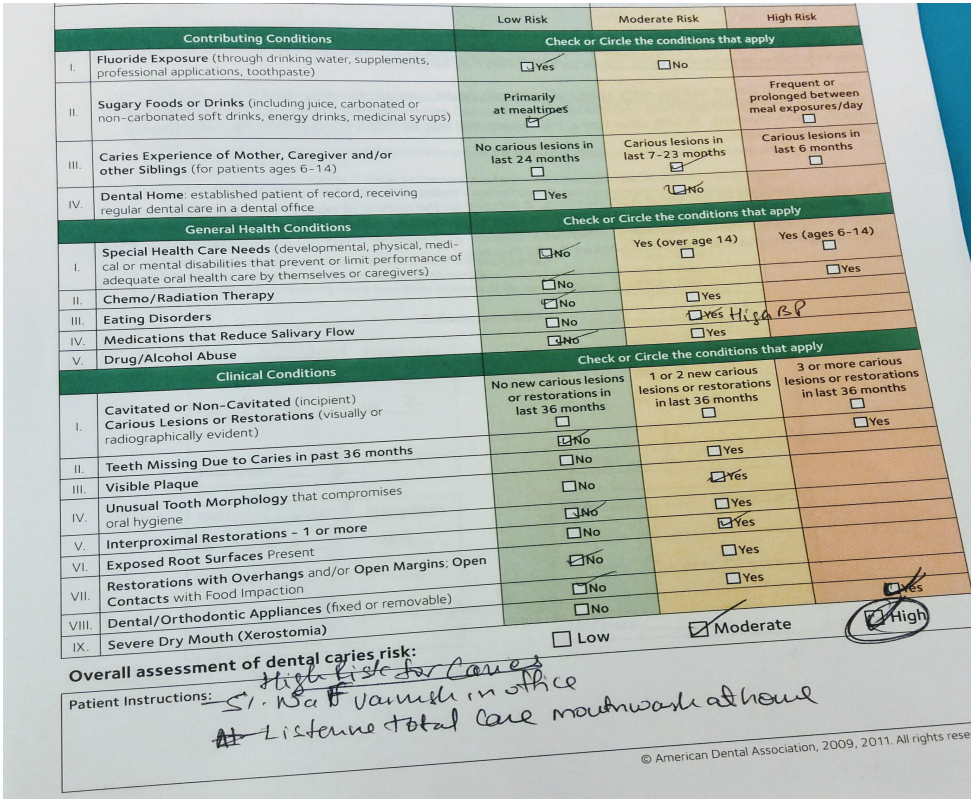
PERIO EXAM SUMMARY



ASSESSMENTS-CAMBRA

- Pt was at high risk for caries.
- Risk factors were:
  - severe xerostomia due to meds
  - exposed root surfaces
  - having caries in family
  - lack of dental home.

CAMBRA FORM



		Low Risk	Moderate Risk	High Risk
Contributing Conditions		Check or Circle the conditions that apply		
I.	**Fluoride Exposure** (through drinking water, supplements, professional applications, toothpaste)	☒Yes	☐No	
II.	**Sugary Foods or Drinks** (including juice, carbonated or non-carbonated soft drinks, energy drinks, medicinal syrups)	Primarily at mealtimes ☒		Frequent or prolonged between meal exposures/day ☐
III.	**Caries Experience of Mother, Caregiver and/or other Siblings** (for patients ages 6–14)	No carious lesions in last 24 months ☐	Carious lesions in last 7–23 months ☒	Carious lesions in last 6 months ☐
IV.	**Dental Home**: established patient of record, receiving regular dental care in a dental office	☐Yes	☒No	
General Health Conditions		Check or Circle the conditions that apply		
I.	**Special Health Care Needs** (developmental, physical, medical or mental disabilities that prevent or limit performance of adequate oral health care by themselves or caregivers)	☒No	Yes (over age 14) ☐	Yes (ages 6–14) ☐
II.	**Chemo/Radiation Therapy**	☐No		☐Yes
III.	**Eating Disorders**	☒No	☐Yes	
IV.	**Medications that Reduce Salivary Flow**	☐No	☒Yes High BP	
V.	**Drug/Alcohol Abuse**	☒No	☐Yes	
Clinical Conditions		Check or Circle the conditions that apply		
I.	**Cavitated or Non-Cavitated** (incipient) **Carious Lesions or Restorations** (visually or radiographically evident)	No new carious lesions or restorations in last 36 months ☐	1 or 2 new carious lesions or restorations in last 36 months ☐	3 or more carious lesions or restorations in last 36 months ☐
II.	**Teeth Missing Due to Caries in past 36 months**	☒No		☐Yes
III.	**Visible Plaque**	☐No	☐Yes	
IV.	**Unusual Tooth Morphology** that compromises oral hygiene	☐No	☒Yes	
V.	**Interproximal Restorations – 1 or more**	☐No	☐Yes	
VI.	**Exposed Root Surfaces** Present	☒No	☒Yes	
VII.	**Restorations with Overhangs** and/or **Open Margins**; **Open Contacts** with Food Impaction	☐No	☐Yes	
VIII.	**Dental/Orthodontic Appliances** (fixed or removable)	☐No		☐Yes
IX.	**Severe Dry Mouth (Xerostomia)**	☐No		☒High

Overall assessment of dental caries risk: ☐ Low ☒ Moderate

Patient Instructions: ~~High~~ List for Caries
1. Nafl Varnish in office
~~At~~ Listerine total Care mouthwash at home

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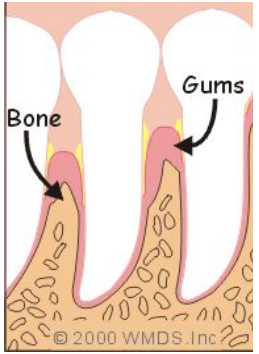
DIAGNOSIS

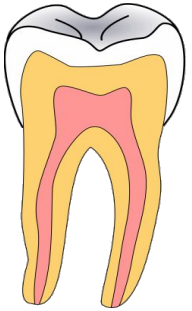
- Patient was diagnosed as a perio type 3 with localized type 4 in anterior maxillary teeth. He had active periodontal disease
- Disease indicators for perio condition were :
    1. moderate bleeding upon probing (proved gingiva was actively inflamed and pathogenic bacteria were present)
    2. generalized 5-7mm CAL (adding recession to already large probing depths gave huge CAL)
    3. Generalized horizontal and vertical bone loss as confirmed by FMS
    4. several type 1 furcations in molar teeth and type 1 mobility in #7-10.

RISK FACTORS FOR ACTIVE PERIODONTAL DISEASE:



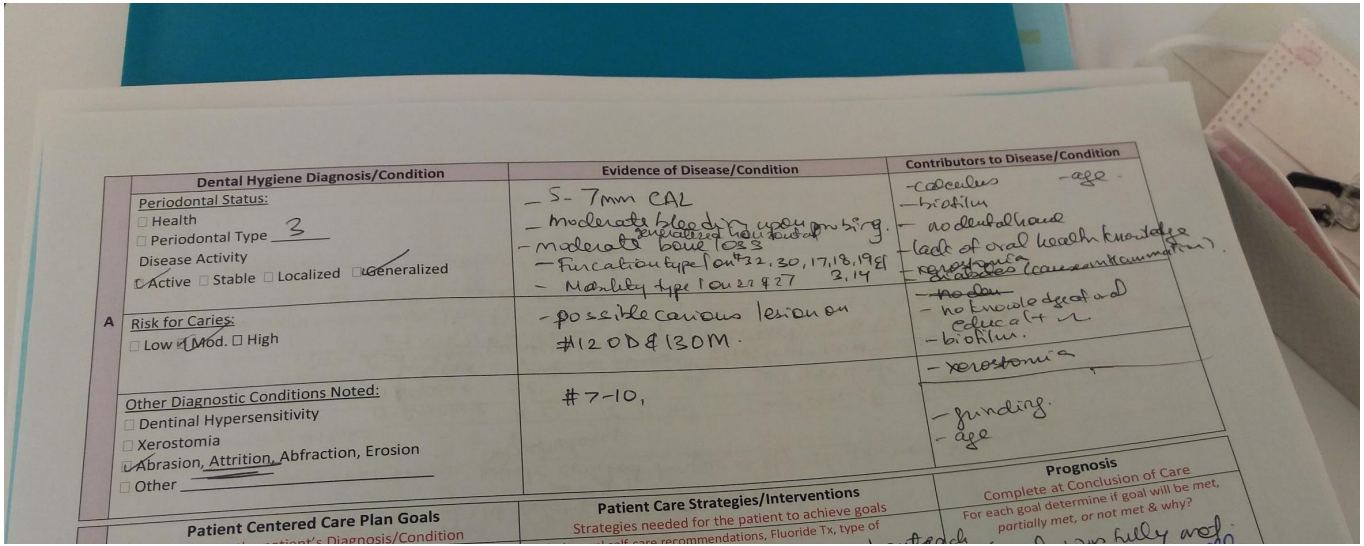
1. DIABETES-this systemic disease increases the amount of C reactive protein, an inflammatory metabolite which can lead to inflammation all over the body including gingiva
2. Poor oral hygiene (brushing too long with hard toothbrush and using no interdental aid)
3. Tenacious subgingival deposits
4. Heavy biofilm (more bacteria=more inflammation)
5. Lack of dental home (patient had not visited dentist in over 10 yrs)
6. Lack of oral health knowledge (patient did not know about importance of professional cleaning or proper oral homecare)
7. Age (increasing age often leads to bone loss)

DIAGNOSIS CONTINUED



- Patient was also diagnosed as a heavy case value due to heavy extrinsic stains and heavy subgingival and interproximal deposits
- Patient was also at high risk for developing caries according to CAMBRA form
    1. Disease indicators were tooth decay present on #12, #13 and #15
    2. Risk factors were
        - severe xerostomia (due to BP medications)
        - unusual tooth morphology (several diastemas allowed more food impaction)
        - poor oral hygiene (pt only brushed once per day)
        - No dental home (so no fluoride treatment)
        - Heavy plaque biofilm (more bacteria=more caries)
        - Lack of oral health knowledge
- Pt also had dentinal hypersensitivity (due to exposed cementum after recession) and attrition on # 6, 11, 22, 27 (due to teeth grinding, aggressive brushing and older age)

DIAGNOSIS AS RECORDED ON CLINICAL WORKSHEET



	Dental Hygiene Diagnosis/Condition	Evidence of Disease/Condition	Contributors to Disease/Condition
A	Periodontal Status: ☐ Health ☐ Periodontal Type 3 Disease Activity ☐ Active ☐ Stable ☐ Localized ☐ Generalized	- 5-7mm CAL - moderate bleeding upon probing. - moderate bone loss - furcation type I on #32, 30, 17, 18, 19 & 1 - Mobility type I on 27 & 27 3, 14	- calculus - age - biofilm - no dental home - lack of oral health knowledge - xerostomia - diabetes (cause unknown)
	Risk for Caries: ☐ Low ☐ Mod. ☐ High	- possible carious lesion on #12 OD & 13 OM.	- no fluoride - no knowledge of oral education - biofilm.
	Other Diagnostic Conditions Noted: ☐ Dentinal Hypersensitivity ☐ Xerostomia ☐ Abrasion, Attrition, Abfraction, Erosion ☐ Other	#7-10,	- xerostomia - grinding - age

Patient Centered Care Plan Goals	Patient Care Strategies/Interventions	Prognosis
	Strategies needed for the patient to achieve goals	Complete at Conclusion of Care For each goal determine if goal will be met, partially met, or not met & why?

CARE PLANNING-GOALS

- Pt had several oral health problems that needed to be addressed, goals were based on improving patient's existing conditions and addressing his chief complaints
- Goal # 1 -Pt will decrease BUP by 50% by 3 month recare

Because pt presents with active periodontal disease and diabetes (which leads to further gingival inflammation), it was important to promote his periodontal health

- Goal # 2-Pt will stabilize recession by 3 month recare

Recession was leading to tooth mobility, dentinal hypersensitivity and poor gingival health. It was important to contain it.

- Goal # 3-Pt will reduce extrinsic stain by 75% by 3 month recare

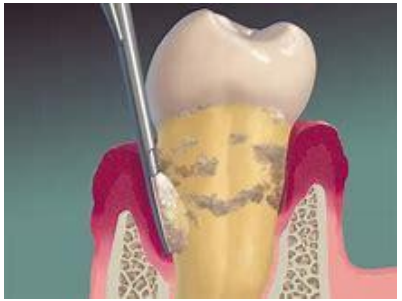
CARE PLANNING GOALS

- Goal # 4-Pt will learn to use interdental aid at least once a day to clean between teeth by last revisit appointment (2 weeks)

(Poor oral homecare was leading to accumulation of plaque which was adding to gingival inflammation and depleted oral health)

- Goal # 5=Pt will learn to reduce caries risk to moderate by 3 month recare.
- Goal # 6 Pt will accept importance of recare appts and come in every 3 months for maintenance cleaning. He will also visit dentist 1X/year to treat conditions outside scope of dental hygiene.
- Goal # 7-Pt will reduce halitosis to mild by 3 month recare.

CARE PLANNING-DENTAL HYGIENE INTERVENTIONS



- To reduce BUP, it was important the present irritants be removed, so full mouth scaling had to be done using hand instruments
- Ultrasonic does not remove burnished deposits. In fact it often makes them worse
    a. “One of the most prevalent problems in ultrasonic instrumentation is the use of smooth oblique subgingival working strokes prior to removing the bulk of large deposits, which results in burnished calculus. Endoscopic evaluations have revealed that burnished calculus often remains after ultrasonic instrumentation is completed” (Hodges, K, Dimensions of Dental Hygiene 2015_
- So use of ultrasonic was contraindicated for this patient.

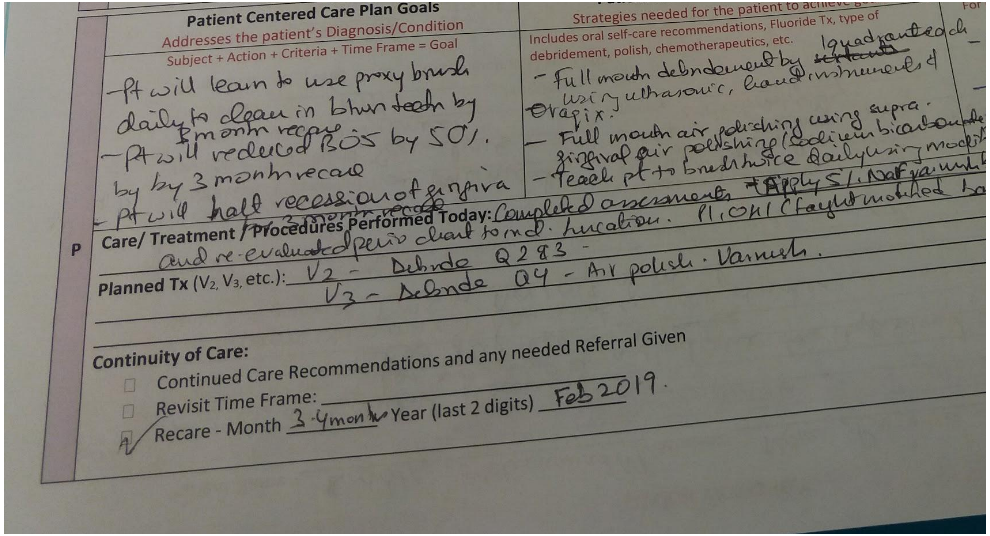
CARE PLANNING-HYGIENE INTERVENTIONS

- To improve plaque score, patient had to learn proper oral care:
  1. Pt must be taught modified bass method with emphasis on lingual mandibular teeth, and asked to brush twice a day using soft bristle toothbrush
  2. Pt must be taught use of proxabrush at least once a day to clean in between teeth

CARE PLANNING-DENTAL HYGIENE INTERVENTIONS CONTINUED

- To reduce high risk of caries, patient must be given topical fluoride application in office and asked to use fluoridated mouthwash (Listerine Total Care Zero) once daily at home. He may also chew xylitol sugar free gum to increase salivary flow since increased salivation prevents cariogenic bacteria from developing.
- To reduce extrinsic staining, patient will receive full mouth supra and subgingival air polishing using glycine (sodium bicarbonate is a contraindication for hypertensive patients)
- Pt will reduce halitosis by learning to use a tongue scraper daily and rinse daily. He may also increase salivation thru gum chewing to decrease halitosis.

GOALS/INTERVENTIONS AS RECORDED ON CLINICAL WORKSHEET



Patient Centered Care Plan Goals Addresses the patient's Diagnosis/Condition Subject + Action + Criteria + Time Frame = Goal	Strategies needed for the patient to achieve go[als] Includes oral self-care recommendations, Fluoride Tx, type of debridement, polish, chemotherapeutics, etc.
- Pt will learn to use proxy brush daily to clean in btwn teeth by 3 month recare - Pt will reduced BOS by 50% by by 3 month recare - Pt will halt recession of gingiva by 3 month recare	- Full mouth debridement by 1 quadrant each using ultrasonic, hand instruments & Oraqix. - Full mouth air polishing using supra gingival air polishing (sodium bicarbonate ...) - Teach pt to brush twice daily using modif[ied] ... + Apply 5% NaF varnish

P

Care/ Treatment / Procedures Performed Today: Completed assessments PI, OHI (taught modified ba[ss]...) and re-evaluated perio chart to md. lucation.

Planned Tx (V_2, V_3, etc.): V2 - Debride Q2 & 3 -
V3 - Debride Q4 - Air polish. Varnish.

Continuity of Care:

☐ Continued Care Recommendations and any needed Referral Given

☐ Revisit Time Frame: ______

☑ Recare - Month 3-4 months Year (last 2 digits) Feb 2019.

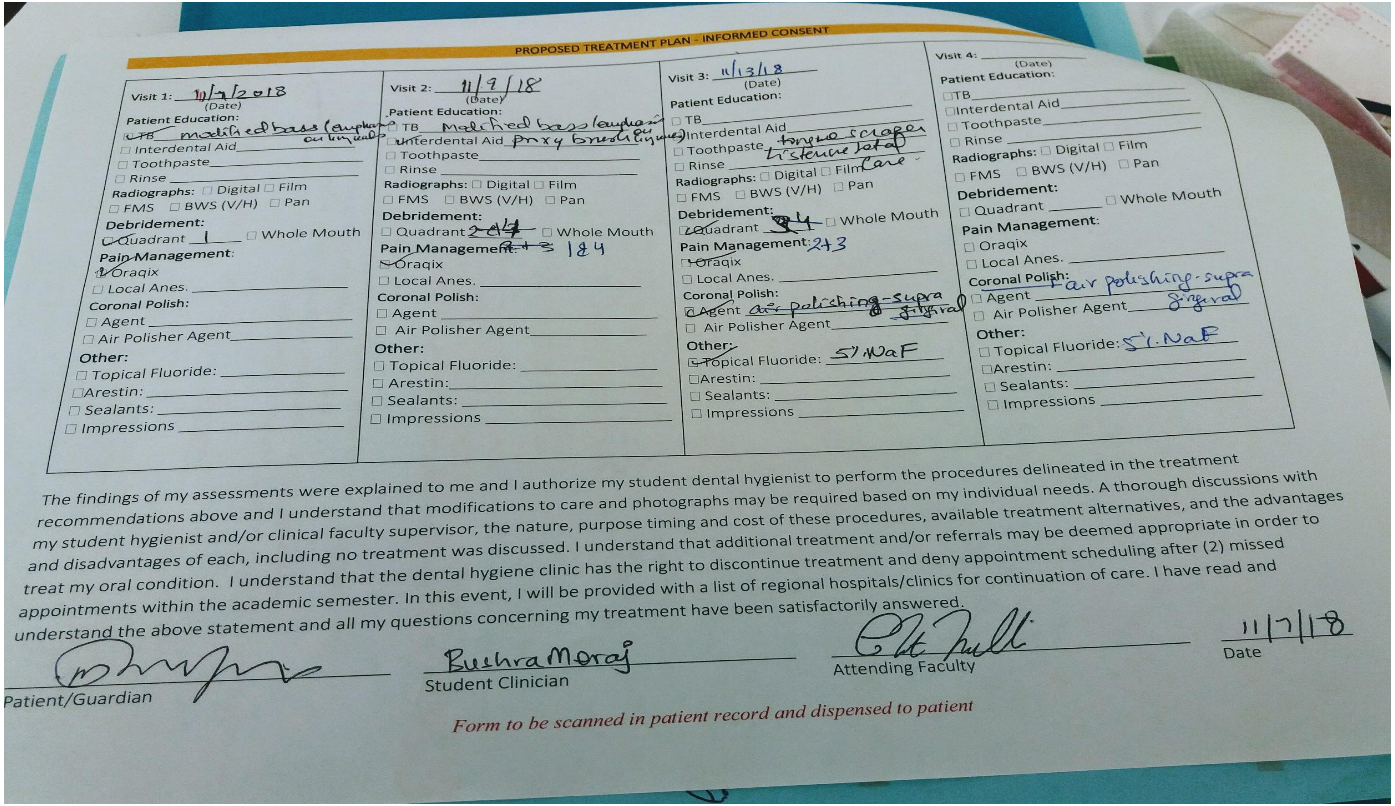
PLANNING-DETAILED SCHEDULE APPOINTMENT

- After assessments, I planned to clean the patient 1-2 quadrants at a time in 3 visits total.
- This is the detailed appt schedule that was presented to the patient and signed:
- On visit 1, I planned to finish all assessments, teach pt modified bass method and scale quadrant 1 using ultrasonic and hand instruments, using oraqix as necessary
- Visit 2, teach pt use of proxabrush and scale quadrants 2 and 3 using ultrasonic and hand instruments as necessary

PLANNING-DETAILED TREATMENT PLAN

- On visit 3, teach pt use of tongue scraper, use of rinse and scale quadrant 4 using ultrasonic and hand instruments as necessary. Polish full mouth using supragingival air polishing unit with glycine. Also apply 5%NaF varnish and give appropriate referrals to periodontist and dentist.
- Recare was scheduled in 3 months (Feb 2019) due to active periodontal disease and high risk for caries. These are problems that required frequent and maintained care, cleaning and fluoride applications.

SIGNED TREATMENT PLAN



PROPOSED TREATMENT PLAN - INFORMED CONSENT

Visit 1: 11/7/2018 (Date)
Patient Education:
☐ TB modified bass (emphasis on lingual)
☐ Interdental Aid
☐ Toothpaste
☐ Rinse
Radiographs: ☐ Digital ☐ Film
☐ FMS ☐ BWS (V/H) ☐ Pan
Debridement:
☐ Quadrant 1 ☐ Whole Mouth
Pain Management:
☐ Oraqix
☐ Local Anes.
Coronal Polish:
☐ Agent
☐ Air Polisher Agent
Other:
☐ Topical Fluoride:
☐ Arestin:
☐ Sealants:
☐ Impressions

Visit 2: 11/9/18 (Date)
Patient Education:
☐ TB Modified bass (emphasis on lingual)
☐ Interdental Aid proxy brush
☐ Toothpaste
☐ Rinse
Radiographs: ☐ Digital ☐ Film
☐ FMS ☐ BWS (V/H) ☐ Pan
Debridement:
☐ Quadrant ~~2 & 4~~ ☐ Whole Mouth
Pain Management ~~2+3~~ 1 & 4
☐ Oraqix
☐ Local Anes.
Coronal Polish:
☐ Agent
☐ Air Polisher Agent
Other:
☐ Topical Fluoride:
☐ Arestin:
☐ Sealants:
☐ Impressions

Visit 3: 11/13/18 (Date)
Patient Education:
☐ TB
☐ Interdental Aid tongue scraper
☐ Toothpaste Listerine total care
☐ Rinse
Radiographs: ☐ Digital ☐ Film ☐ Pan
☐ FMS ☐ BWS (V/H)
Debridement:
☐ Quadrant 3 4 ☐ Whole Mouth
Pain Management: 2+3
☐ Oraqix
☐ Local Anes.
Coronal Polish:
☐ Agent air polishing-supra gingival
☐ Air Polisher Agent
Other:
☐ Topical Fluoride: 5% NaF
☐ Arestin:
☐ Sealants:
☐ Impressions

Visit 4: (Date)
Patient Education:
☐ TB
☐ Interdental Aid
☐ Toothpaste
☐ Rinse
Radiographs: ☐ Digital ☐ Film
☐ FMS ☐ BWS (V/H) ☐ Pan
Debridement:
☐ Quadrant ☐ Whole Mouth
Pain Management:
☐ Oraqix
☐ Local Anes.
Coronal Polish: air polishing-supra gingival
☐ Agent
☐ Air Polisher Agent
Other:
☐ Topical Fluoride: 5% NaF
☐ Arestin:
☐ Sealants:
☐ Impressions

The findings of my assessments were explained to me and I authorize my student dental hygienist to perform the procedures delineated in the treatment recommendations above and I understand that modifications to care and photographs may be required based on my individual needs. A thorough discussions with my student hygienist and/or clinical faculty supervisor, the nature, purpose timing and cost of these procedures, available treatment alternatives, and the advantages and disadvantages of each, including no treatment was discussed. I understand that additional treatment and/or referrals may be deemed appropriate in order to treat my oral condition. I understand that the dental hygiene clinic has the right to discontinue treatment and deny appointment scheduling after (2) missed appointments within the academic semester. In this event, I will be provided with a list of regional hospitals/clinics for continuation of care. I have read and understand the above statement and all my questions concerning my treatment have been satisfactorily answered.

Patient/Guardian

Bushra Moraj
Student Clinician

Attending Faculty

11/7/18
Date

Form to be scanned in patient record and dispensed to patient

IMPLEMENTATION-CARE PLAN DETAILS

The Treatment plan was modified along the way to include necessary changes.

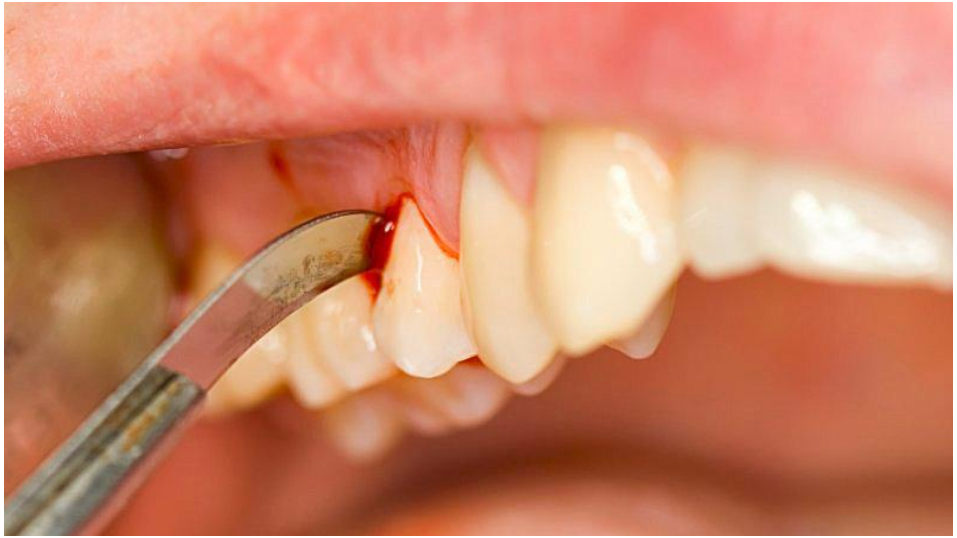
- Instead of 3 visits, treatment took 4 visits total
- Ultrasonic was not used starting second visit as it is contraindicated for burnished deposits (Hodges, K, Dimensions of Dental Hygiene 2015). Hand instruments were used instead.
- Patient did not need Oraqix as he reported no sensitivity
- On Visit 1, assessments were completed. Did plaque index,. Pt had PI of 2, so taught him modified bass method of toothbrushing and also instructed him to use a fluoridated non alcoholic mouthrinse (Listerine Total Care zero) Quadrant 1 was ultrasonic scaled. Ran out of time to hand scale and complete quadrant

IMPLEMENTATION-CARE PLAN DETAILS

- On visit 2, pt had PI of 1.83, taught pt use of proxabrush and continued debridement of quadrant 1. Scaled quadrant 4 using only hand instruments. Since quadrant 1 was worked on, we decided to limit the treatment to the right side for this visit and finished debridement of quadrant 1 using hand instruments. Then completely scaled quadrant 4 with hand instruments, sticking to right side of mouth rather than moving to quadrant 2 as treatment plan indicated.

- On visit 3, pt's PI again increased to 2 as he was not brushing correctly. So rather than teach him new self care aid (tongue scraper), treatment plan was modified to reteach him modified bass method of toothbrushing. This time I went slower, asked patient questions, and emphasized he pay more attention to brushing his lingual surfaces. Then I hand scaled quadrant 2 and 3 on patient using hand instruments as necessary.Ran out of time for polishing. Provided pt with referral to periodontist and dentist in case pt could not return for polishing due to hectic work schedule. Also provided patient home care instructions

DEBRIDEMENT WITH HAND INSTRUMENTS



IMPLEMENTATION-CARE PLAN DETAILS

- On visit 4, pt was brought in for a shorter appt to accomplish air polishing and fluoride application. Since subgingival air polishing unit was being used by another student, I had to use the supragingival polishing unit with glycine powder. I aimed both sub for biofilm removal and supra for stain removal. Then applied 5% NaF varnish.
- Recare appt was set for next Feb 2019 (3 months) due to patient having diabetes, active periodontal disease, dentinal hypersensitivity and high risk for caries.

IMPLEMENTATION-CARE PLAN DETAILS

- Also emphasized to pt to visit periodontist for bone health and dentist to have multiple caries assessed and missing teeth #23-26 temporarily/permanently replaced.It was important for pt to get partial dentures for the anterior teeth to prevent food impaction and further bone loss.
- Additionally, I encouraged pt to follow all oral home care instructions, which included incorporating Modified Bass method and proxabrush into his daily routine and using more fluoridated products such as Listerine Total Care Zero and Sensodyne Total. I additionally encouraged pt to chew more sugar free gum to increase salivary flow and decrease caries risk.
- Pt obliged and said he would take better care of his oral health and visit dentist/periodontist regularly

EVALUATION OF CARE-PROGNOSIS

Goal # 1 (Pt will decrease BUP by 3 month recare by 50%) will be fully met because pt had increasingly less bleeding upon probing at each revisit appt, as present calculus was removed and gingiva came into better shape.

Goal # 2 (Pt will stabilize recession by 3 month recare) will be partially met because even though pt promised to take better care of his teeth and gums as part of homecare and pt will come in for more regular cleanings, his busy schedule may get in the way.

Goal # 3 (Pt will reduce extrinsic stains by 75%) was only partially met as pt could not get air polishing with sodium bicarbonate due to his hypertensive history. Using the glycine did not remove most stains, though it did remove biofilm.

EVALUATION OF CARE-PROGNOSIS

Goal # 4 (Pt will learn to use interdental aid daily by last revisit appt) was met fully as pt started using proxabrush daily to clean between teeth, and he even reported he “enjoyed it”.

Goal # 5 (Pt will reduce caries risk by 50%) will be fully met because not only did pt receive in office fluoride treatment, he will also use fluoridated products at home and chew sugar free gum to treat xerostomia.

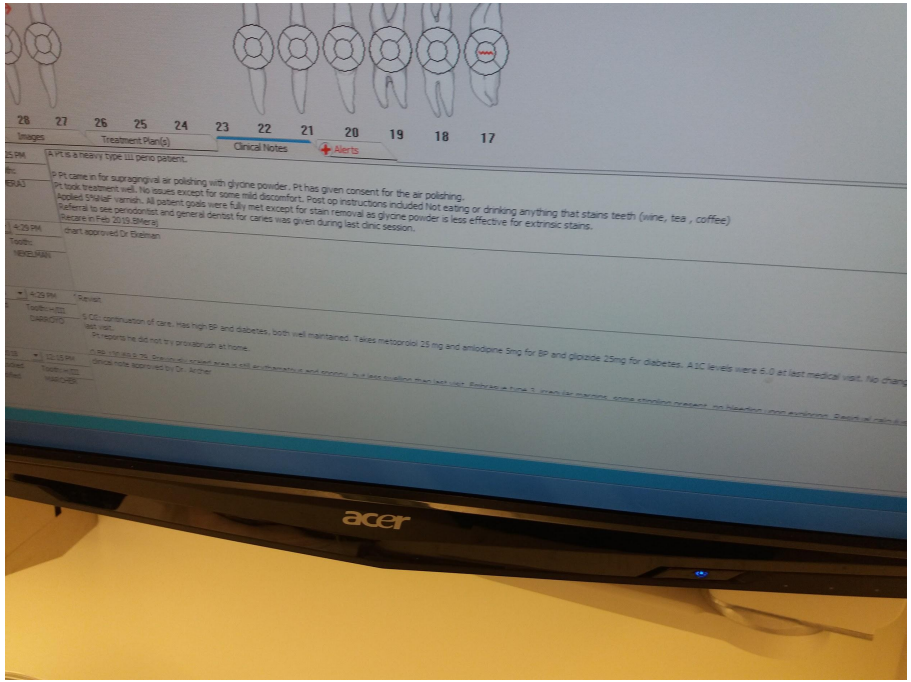
Goal # 6 (Pt will come for regular cleanings) will be partially met as his active lifestyle and cultural tendency to avoid dentist may prevent him from doing so.

Goal # 7 (Pt will reduce halitosis to mild) will be partially met only because I did not teach him use of a tongue scraper, although he was encouraged to rinse with non alcoholic mouthwash to kill odor causing bacteria.

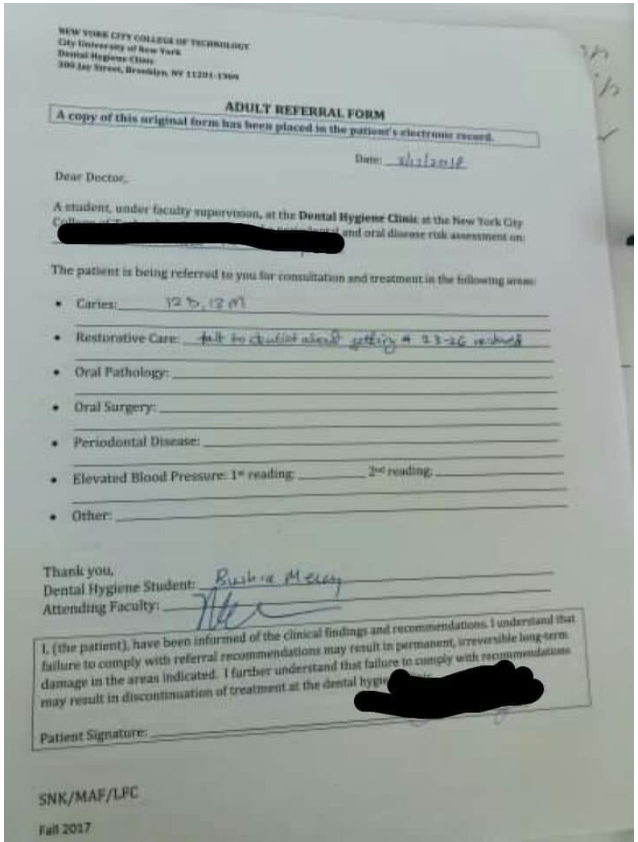
DOCUMENTATION

- After each visit, treatment rendered and pt's response to treatment was included.
- Since pt did not need Oraqix, this was also documented
- At the start of each subsequent visit, areas of residual calculus were also noted. Tissue in previously treated area was also inspected for visual changes were documented.
- PI was also documented for each visit, along with interdental aid taught that day.
- Photocopies of all referrals were scanned and saved into patient file.

NOTES RECORDED AFTER EACH VISIT



REFERRALS GIVEN TO PATIENT



NEW YORK CITY COLLEGE OF TECHNOLOGY
City University of New York
Dental Hygiene Clinic
300 Jay Street, Brooklyn, NY 11201-1909

ADULT REFERRAL FORM

A copy of this original form has been placed in the patient's electronic record.

Date: 3/12/2018

Dear Doctor,

A student, under faculty supervision, at the **Dental Hygiene Clinic** at the New York City [redacted] and oral disease risk assessment on:

The patient is being referred to you for consultation and treatment in the following areas:

- Caries: 12 D, 18 M
- Restorative Care: [illegible]
- Oral Pathology:
- Oral Surgery:
- Periodontal Disease:
- Elevated Blood Pressure: 1st reading: _____ 2nd reading: _____
- Other:

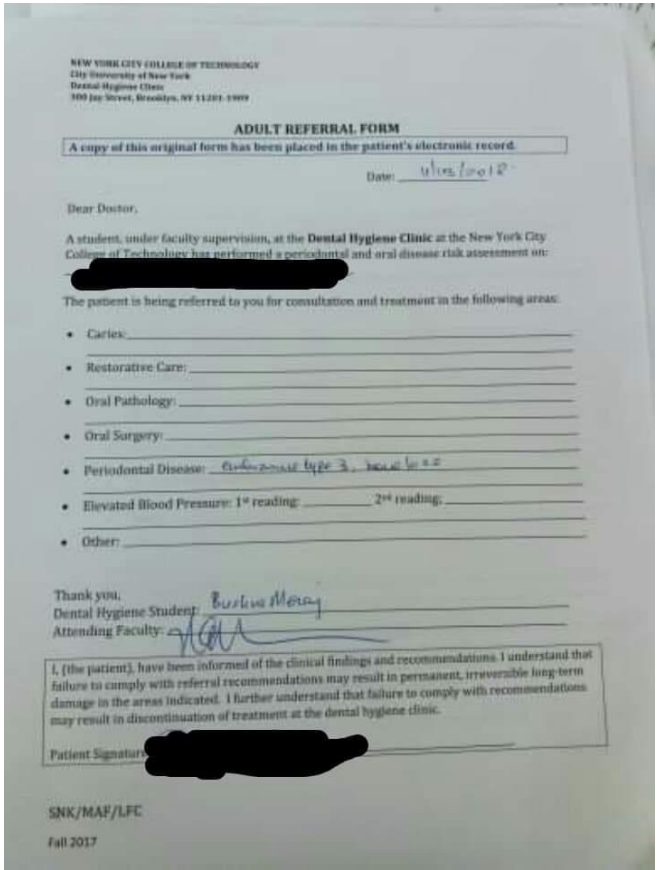
Thank you,
Dental Hygiene Student: Bushra Meraj
Attending Faculty:

I, (the patient), have been informed of the clinical findings and recommendations. I understand that failure to comply with referral recommendations may result in permanent, irreversible long-term damage in the areas indicated. I further understand that failure to comply with recommendations may result in discontinuation of treatment at the dental hygi[redacted]

Patient Signature:

SNK/MAF/LFC

Fall 2017



NEW YORK CITY COLLEGE OF TECHNOLOGY
City University of New York
Dental Hygiene Clinic
300 Jay Street, Brooklyn, NY 11201-1909

ADULT REFERRAL FORM

A copy of this original form has been placed in the patient's electronic record.

Date: 4/25/2018

Dear Doctor,

A student, under faculty supervision, at the **Dental Hygiene Clinic** at the New York City College of Technology has performed a periodontal and oral disease risk assessment on:

[redacted]

The patient is being referred to you for consultation and treatment in the following areas:

- Caries:
- Restorative Care:
- Oral Pathology:
- Oral Surgery:
- Periodontal Disease: Gingivitis type 3, localized
- Elevated Blood Pressure: 1st reading: _____ 2nd reading: _____
- Other:

Thank you,
Dental Hygiene Student: Bushra Meraj
Attending Faculty:

I, (the patient), have been informed of the clinical findings and recommendations. I understand that failure to comply with referral recommendations may result in permanent, irreversible long-term damage in the areas indicated. I further understand that failure to comply with recommendations may result in discontinuation of treatment at the dental hygiene clinic.

Patient Signatur[redacted]

SNK/MAF/LFC

Fall 2017

REFECTION-THINGS THAT WENT RIGHT

- Looking back at the patient, things that went right was that I
- increased the patient's interest in his oral health. By the end of h[illegible]nt, he was asking me questions like so why do I get xerostomia and how can I avoid it? He also became more interested in OTC products like rinses and toothpastes and wanted me to compare his current brand of dentrifice (Sensodyne) with more common ones like Colgate
- When he did not understand a concept (ex modified bass method of toothbrushing) I chose to reiterate the concept rather than going on to something different completely (such as a tongue scraper). This prevented the patient from becoming overwhelmed with the amount of information that was presented to him.

REFLECTION-THINGS THAT WENT RIGHT

- I taught the patient to use the proxabrush for cleaning large embrasure spaces and he was absolutely intrigued by the design of the brush. He started incorporating it into his daily routine.
- I was for the most part able to keep my appt schedule and finish the patient in reasonable amount of visits, considering he was a heavy case value that needed to be handscaled. He was thankful that I completed his cleaning without forcing him to take more time off from work.

REFLECTION-THINGS THAT WENT RIGHT

- I did my best to make the patient comfortable with the dental setting. Because he had hypertension and often bled too much, i allowed him enough bathroom breaks and time to rest to prevent him from becoming overwhelmed. I also made sure to raise the patient slowly to prevent postural hypotension due to the BP medications he was on.
- Referrals were also given in a timely manner and the pt was encouraged to visit the dentist regularly for optimal oral health.

REFLECTION-THINGS THAT WENT WRONG

- Because glycine powder was used for air polishing (sodium bicarbonate is contraindicated for hypertensive patients), I was unable to remove hard extrinsic stains on the patient. Nonetheless, i did remove most plaque biofilm with the polishing.
- I was unable to teach the patient proper use of a tongue scraper. Because the patient was having trouble learning the modified bass method, I chose to devote visit 3 to reteach him the modified bass method of toothbrushing. Although I did teach the patient how to reduce halitosis by using Listerine Total care zero mouthwash, I also wish I could have shown the patient the proper use of a tongue scraper.

REFLECTION-THINGS I COULD HAVE DONE DIFFERENTLY

- On visit 2, my hand instruments were not sharp enough, so for the first half of the visit, i was not scaling anything. I wish I would have sharpened my instruments ahead of time so the appt time could have been better utilized
- I wish I could have just used the engine polishing on the enamel surfaces with coarse paste to remove the extrinsic stains. Since the sodium bicarbonate was contraindicated for the patient, using the less abrasive glycine powder may not have been the best option in removing his extrinsic stains.
- I also wish I would have given the patient a high BP worksheet because in appt 2, his BP was slightly elevated. Although the patient was already under the care of his physician and taking medications to manage his condition, I should have been more proactive in my part as a DH and provide him with the educational tools to learn more about his systemic condition.

REFLECTION-OVERALL

- In general, however, I do believe I was able to accomplish a lot for the patient
- I was able to reduce gingival inflammation and reduce BUP by scaling thoroughly scaling his subgingival deposits and managing his biofilm through proper oral care
- I was able to reduce his caries risk by applying fluoride and referring his present lesions to a dentist. I additionally gave him dietary tips (chewing xylitol gum) to help increase salivary flow, which can reduce caries risk and also treat halitosis.
- I was able to recommend non alcoholic mouthwash for xerostomia and a pro-enamel dentifrice for dentinal hypersensitivity.

REFLECTION-OVERALL

- Although polishing did not remove all extrinsic stains, it was in the patient's best interest to stay away from the sodium bicarbonate for overall systemic health
- Appropriate referrals to the dentist and periodontist were also given
- All patient goals except for polishing were met and a recare of 3 months will allow me to assess the patient's hopefully improved oral condition soon

THANK YOU!