

Ivy Lin

NYC College of
Technology

Department of Dental
Hygiene

FALL 2019

DEN2300 CASE PRESENTATION

PATIENT PROFILE

- Mr. B is a 73 years old European male.
- Does not have a dental home. He used to go to his friend who is a dentist but is now retired. Patient does not have insurance either, so he does not visit a dentist regularly.
- He is married and has a 1-year old daughter. He is retired but he owns multiple buildings that he collects rent from.
- His last dental exam was over 10 years ago, and he only comes in to NYCCT for cleanings.
- 4 horizontal bite wings and 1 periapical were taken here during his recare visit. A full mouth series was taken here by another student in 2017.
- Patient states brushing once or twice a day with a soft bristle manual toothbrush and flosses occasionally. He also does not use any oral rinse.

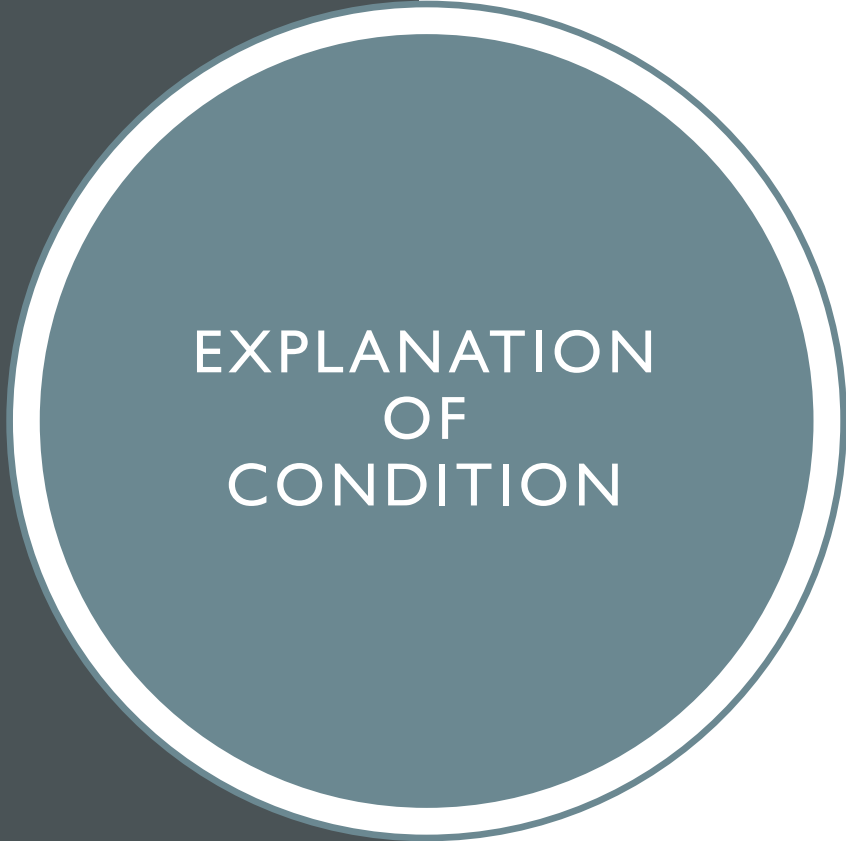
- Patient here for a routine cleaning and feels no discomfort.
- Patient also presents with a fistula on the tooth with root canal therapy (#19).



CHIEF COMPLAINT

HEALTH HISTORY OVERVIEW

- Blood Pressure: 122/80
- Pulse: 86
- ASA II
- Health Conditions: hypertension
- Takes Lisinopril 20mg, once a day for over 5 years for hypertension.



EXPLANATION OF CONDITION

- Hypertension means high blood pressure. This happens when the heart is pumping at a greater force against the walls of the blood vessels. The normal blood pressure reading is 120/80. This condition can increase the chances of having a heart attack, stroke, heart failure, kidney disease, and cardiovascular disease.
- This condition is a result of a high sodium and high fat diet. Other risk factors could also be genetics and family history.
- Signs and symptoms: There are usually no symptoms of high blood pressure. This is usually detected with regular blood pressure screenings during physical exams.

HOW CONDITION IS MAINTAINED

- The suggested treatment for this condition is lifestyle changes and medication.
- Lifestyle: healthy diet, exercise, and refrain from smoking.
- There are many types of drugs taken for high blood pressure:
- This patient is currently taking Lisinopril 20mg once a day.

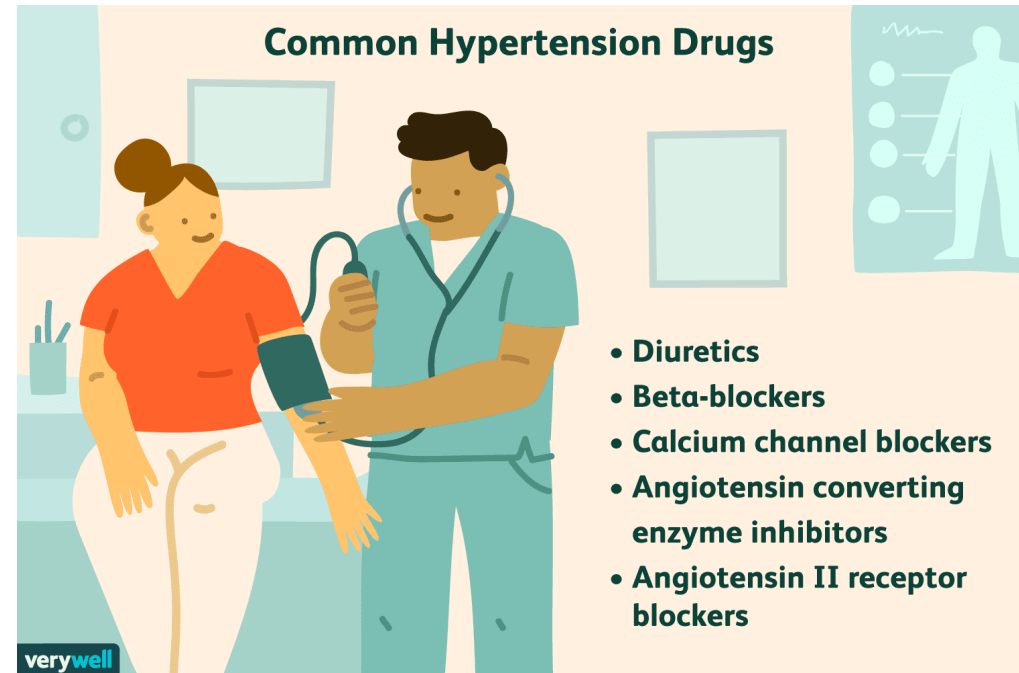


Image source: Fogoros, Richard N. "Your Complete Guide to Hypertension Drugs." *Verywell Health*, Verywell Health, 16 June 2019, <https://www.verywellhealth.com/hypertension-drugs-1745989>.



DENTAL HYGIENE MANAGEMENT

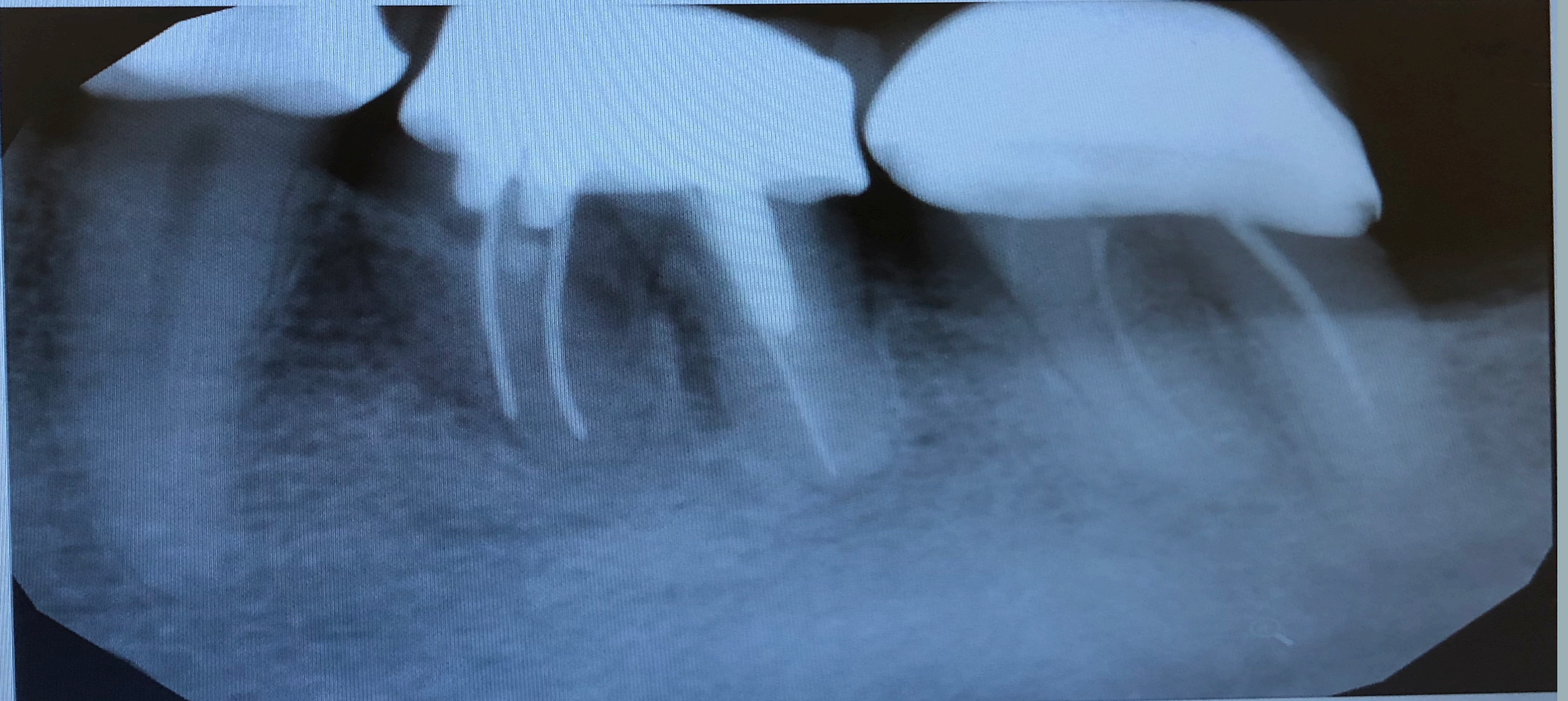
- Contraindications:
 - Uncontrolled hypertension (if patient is not taking medication for the condition)
 - Blood pressure reading is over 180/110
 - Drug to drug interactions
- If patient presents with hypertensive blood pressure, have patient drink 2 cups of cold water and retake blood pressure again after 20 minutes.
- If blood pressure does not go down, patient will get dismissed.
- The dental professional needs to be aware of the side effects, oral manifestations and drug interactions of antihypertensive drugs.

COMPREHENSIVE ASSESSMENTS



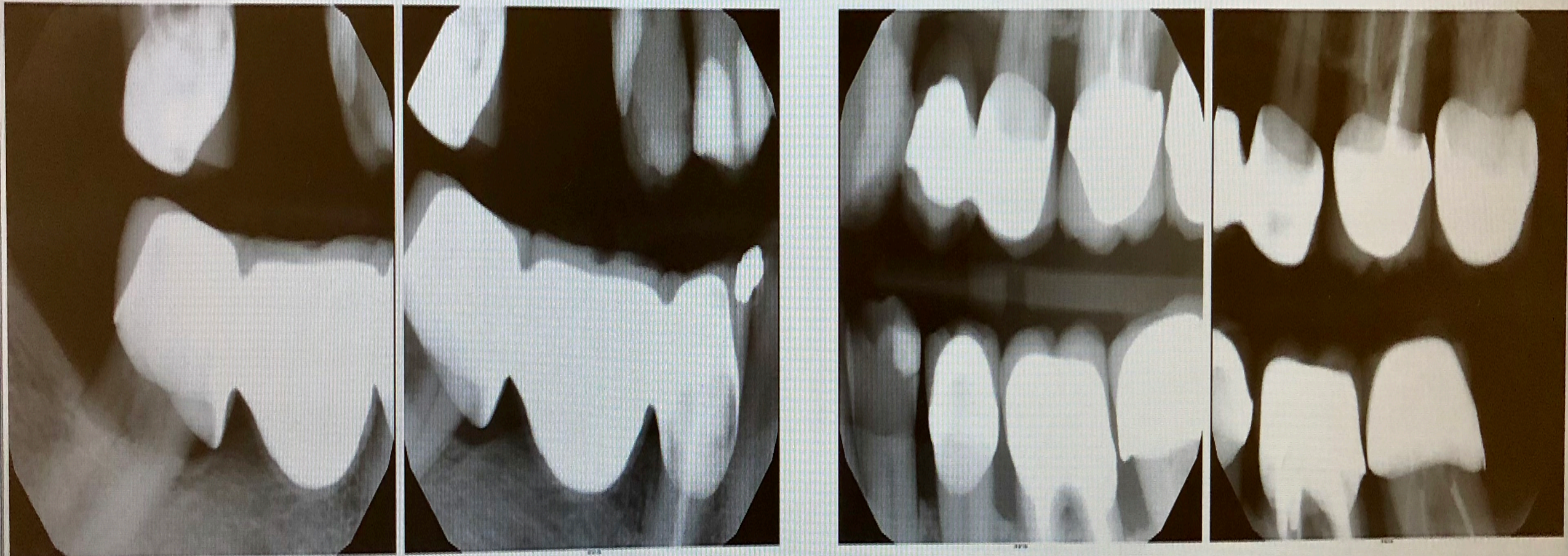
FULL MOUTH SERIES OCTOBER 2017

RADIOGRAPHIC FINDINGS: GENERALIZED HORIZONTAL BONE LOSS WITH NO VISIBLE DEPOSITS AND DECAY. RADIOLUCENCY OF THE APICAL ROOT OF #19 INDICATES PATHOLOGY AND POSSIBLE INFECTION.



POSTERIOR MANDIBLE PERIAPICAL NOVEMBER 2019

RADIOGRAPHIC FINDINGS: COMPARED TO FMS OF 2017, RADIOLUCENCY SEEN ON #19 HAS INCREASED IN SIZE. PERIAPICAL PATHOLOGY OF ROOT CANAL THERAPY.

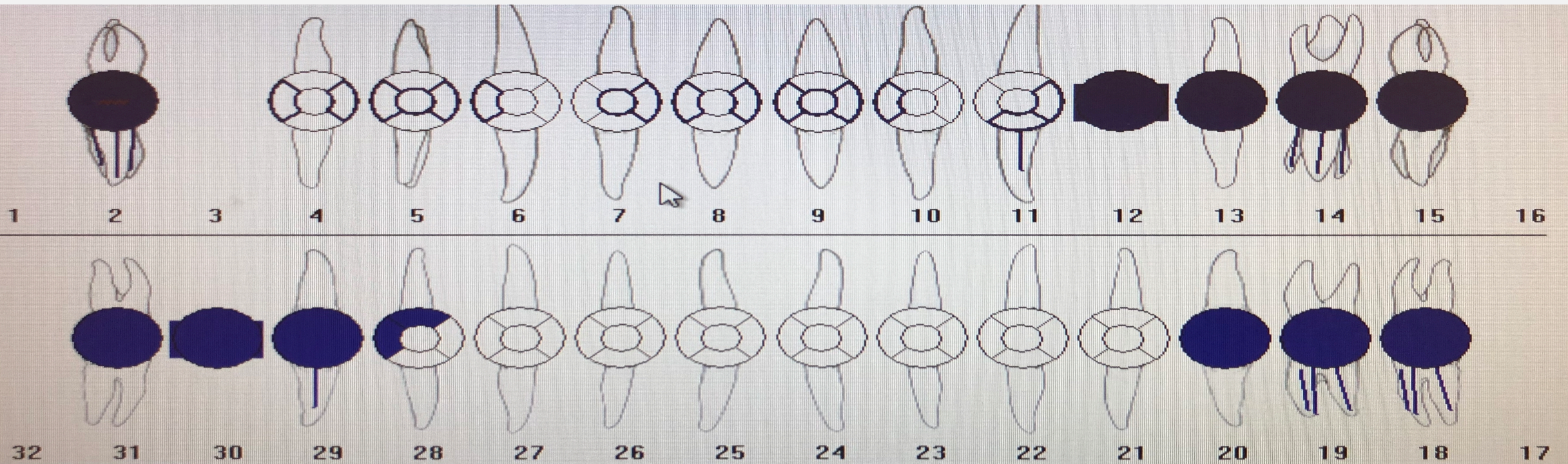


HORIZONTAL BITEWINGS NOVEMBER 2019

RADIOGRAPHIC FINDINGS: EVIDENCE OF FRACTURE IS SEEN ON #2

SUMMARY OF CLINICAL FINDINGS

- Extraoral Examination
 - Flat brown macule on right ear
 - Herpetic red lesion on labial mucosa and (as per patient) on left shoulder and arm.
- Intraoral Examination
 - Geographic and fissured tongue
 - Fistula on buccal gingiva of #19
- Hard tissue
 - Class of occlusion: I bilaterally
 - Overbite: 1mm
 - Overjet: 0%
 - Generalized attrition
 - Abfraction on #21
 - Class I mobility on # 13 and 19
 - Root canal therapy # 2, 11, 14, 18, 19, 29
- Generalized moderate subgingival calculus



DENTAL CHARTING

- Missing # 1, 3, 16, 17, and 32
- Pontic # 12 and 30
- PFM crown on # 2, 12, 13, 14, 15, 18, 19, 20, 29, 30, and 31
- Root canal therapy on # 2, 11, 14, 18, 19, 29
- Overhang restoration on # 18 and 31
- Fractured tooth # 2
- Class I and II amalgam restoration on # 28
- Class I and II composite restoration on # 5
- Class II composite restoration on # 4
- Class III composite restoration on # 6, 8, and 10
- Class III and IV composite restoration on # 7 and 9
- Class III and V composite restoration on 11

Caries Risk Assessment Form (Age >6)

Patient Name: [REDACTED]
 Birth Date: [REDACTED] Date: [REDACTED]
 Age: [REDACTED] Initials: IL

		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)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
II.	Sugary Foods or Drinks (including juice, carbonated or non-carbonated soft drinks, energy drinks, medicinal syrups)	Primarily at mealtimes <input type="checkbox"/>		Frequent or prolonged between meal exposures/day <input type="checkbox"/>
III.	Caries Experience of Mother, Caregiver and/or other Siblings (for patients ages 6-14)	No carious lesions in last 24 months <input checked="" type="checkbox"/>	Carious lesions in last 7-23 months <input type="checkbox"/>	Carious lesions in last 6 months <input checked="" type="checkbox"/>
IV.	Dental Home: established patient of record, receiving regular dental care in a dental office	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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)	<input checked="" type="checkbox"/> No	Yes (over age 14) <input type="checkbox"/>	Yes (ages 6-14) <input type="checkbox"/>
II.	Chemo/Radiation Therapy	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes
III.	Eating Disorders	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
IV.	Medications that Reduce Salivary Flow	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
V.	Drug/Alcohol Abuse	<input checked="" type="checkbox"/> No	<input type="checkbox"/> 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 <input type="checkbox"/>	1 or 2 new carious lesions or restorations in last 36 months <input checked="" type="checkbox"/>	3 or more carious lesions or restorations in last 36 months <input type="checkbox"/>
II.	Teeth Missing Due to Caries in past 36 months	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes
III.	Visible Plaque	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
IV.	Unusual Tooth Morphology that compromises oral hygiene	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
V.	Interproximal Restorations - 1 or more	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	
VI.	Exposed Root Surfaces Present	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	
VII.	Restorations with Overhangs and/or Open Margins; Open Contacts with Food Impaction	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	
VIII.	Dental/Orthodontic Appliances (fixed or removable)	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	
IX.	Severe Dry Mouth (Xerostomia)	<input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes

Overall assessment of dental caries risk: Low Moderate High

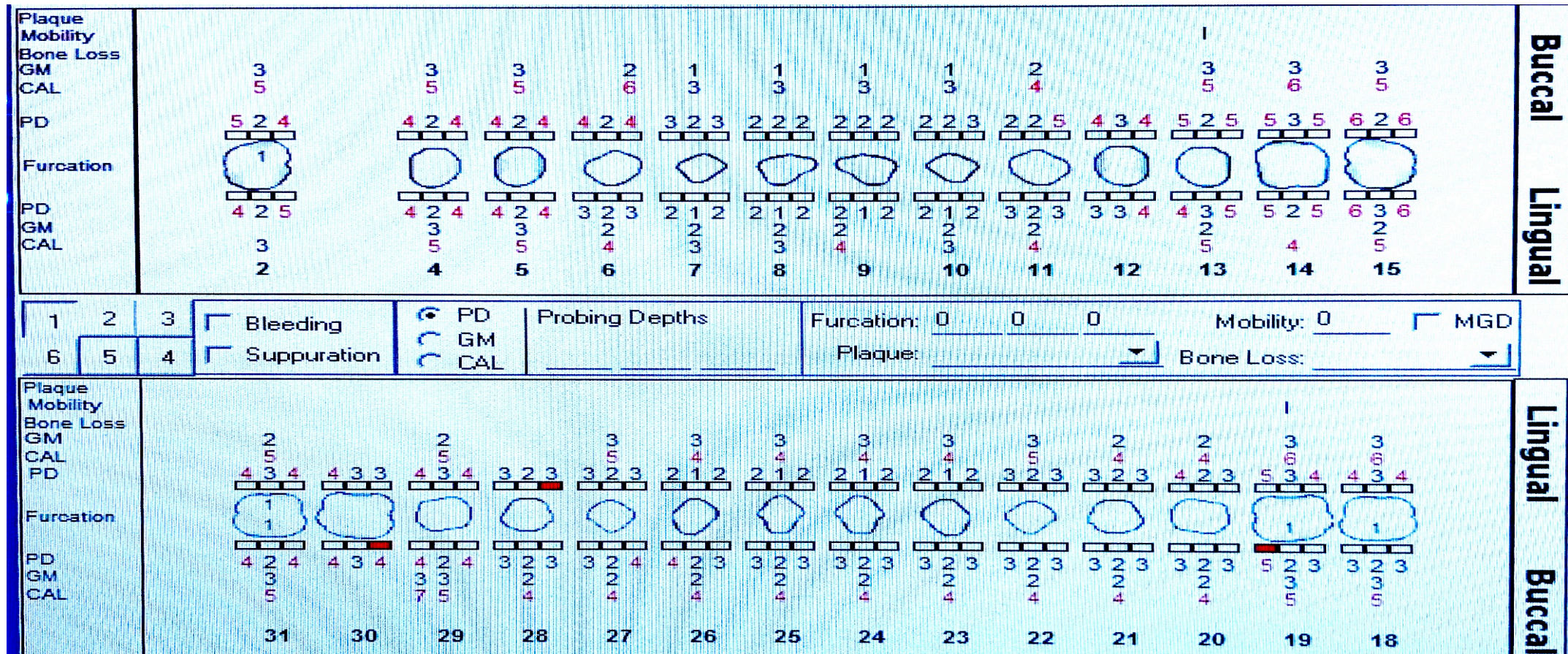
Patient Instructions:
 Have sweets with meals and ^{avoid} skip snacking throughout the day
 Keep up with home care and brush 2 times a day
 Drink water after sweets to help balance pH level.

CARIES RISK ASSESSMENT

- No clinical or radiographic evidence of caries present
- However, patient is at a moderate risk for caries due to:
 - fractures and overhang restorations
 - no dental home
 - Fixed dental appliance (fixed bridge)
 - Exposed root surfaces

GINGIVAL DESCRIPTION & PERIODONTAL STATUS

- Gingival description: Generalized pinkish red gingiva with slight marginal inflammation. Generalized 1-3mm recession noted.
- Type II periodontal status due to 4-5mm probing depths with radiographic bone loss, furcation involvement and bleeding on probing.
- Localized 6mm pocket depths in upper right posteriors.
- Class I mobility on # 13 and 19.



PERIODONTAL CHARTING

- Type II active periodontal case with BOP
- 4-5mm PD and localized 6mm PD
- Generalized CAL and I-3mm recession noted
- Grade I furcation involvement on #2, 18, 19, and 31
- Grade I mobility on # 13 and 19



DENTAL HYGIENE DIAGNOSIS

- Type II active periodontitis due to generalized 4-5 mm probing depths, moderate BOP, CAL, radiographic evidence of bone loss, and grade I furcation noted on buccal of # 2, 18, 19, and buccal and lingual of 31. Tooth # 13 and 19 also have grade I mobility.
- Patient is at a moderate risk for caries due to multiple risk factors (overhang restorations on # 18 and 31, fractured # 2 and generalized recession) and minimal protective factors (poor home care and no dental home)

DENTAL HYGIENE CARE PLAN

- Medical history update and blood pressure reading
- Extraoral and intraoral examination
- Assessments: dental and periodontal charting
- Review toothbrushing home care instructions
- Debridement of quadrant I and IV on the first visit
- Take bitewings and request for patient to bring in his previous radiographs for comparison and review
- Review flossing, CAMBRA, and debride quadrant II and III on the second visit
- Engine polish and apply 5% NaFl varnish

CONSENT
 FOR
 TREATMENT

Visit 1: <u>[REDACTED]</u> (Date)	Visit 2: _____ (Date)	Visit 3: _____ (Date)	Visit 4: _____ (Date)
Patient Education: <input checked="" type="checkbox"/> TB manual <input type="checkbox"/> power assisted <input type="checkbox"/> Interdental Aid _____ <input type="checkbox"/> Toothpaste _____ <input type="checkbox"/> Rinse _____ Radiographs: Digital <input type="checkbox"/> FMS <input type="checkbox"/> BWS (V/H) <input type="checkbox"/> Pan Debridement: <input checked="" type="checkbox"/> Quadrant(s) <u>I, IV</u> <input type="checkbox"/> Whole Mouth Pain Management: <input type="checkbox"/> Topical <input type="checkbox"/> Oraqix <input type="checkbox"/> Local Anesthesia Coronal Polish: <input checked="" type="checkbox"/> Engine <input type="checkbox"/> Air Polisher: Agent _____ Other: <input checked="" type="checkbox"/> Topical Fluoride: <u>varnish</u> <input type="checkbox"/> Arestin: _____ <input type="checkbox"/> Sealant(s): _____ <input type="checkbox"/> Impressions _____	Patient Education: <input type="checkbox"/> TB manual <input type="checkbox"/> power assisted <input checked="" type="checkbox"/> Interdental Aid _____ <input type="checkbox"/> Toothpaste _____ <input type="checkbox"/> Rinse _____ Radiographs: Digital <input checked="" type="checkbox"/> FMS <input type="checkbox"/> BWS (V/H) <input type="checkbox"/> Pan? Debridement: <input type="checkbox"/> Quadrant(s) <u>II, III</u> <input type="checkbox"/> Whole Mouth Pain Management: <input type="checkbox"/> Topical <input type="checkbox"/> Oraqix <input type="checkbox"/> Local Anesthesia Coronal Polish: <input checked="" type="checkbox"/> Engine <input type="checkbox"/> Air Polisher: Agent _____ Other: <input checked="" type="checkbox"/> Topical Fluoride: <u>varnish</u> <input type="checkbox"/> Arestin: _____ <input type="checkbox"/> Sealant(s): _____ <input type="checkbox"/> Impressions _____	Patient Education: <input type="checkbox"/> TB manual <input type="checkbox"/> power assisted <input type="checkbox"/> Interdental Aid _____ <input type="checkbox"/> Toothpaste _____ <input type="checkbox"/> Rinse _____ Radiographs: Digital <input type="checkbox"/> FMS <input type="checkbox"/> BWS (V/H) <input type="checkbox"/> Pan Debridement: <input type="checkbox"/> Quadrant(s) _____ <input type="checkbox"/> Whole Mouth Pain Management: <input type="checkbox"/> Topical <input type="checkbox"/> Oraqix <input type="checkbox"/> Local Anesthesia Coronal Polish: <input type="checkbox"/> Engine <input type="checkbox"/> Air Polisher: Agent _____ Other: <input type="checkbox"/> Topical Fluoride: _____ <input type="checkbox"/> Arestin: _____ <input type="checkbox"/> Sealant(s): _____ <input type="checkbox"/> Impressions _____	Patient Education: <input type="checkbox"/> TB manual <input type="checkbox"/> power assisted <input type="checkbox"/> Interdental Aid _____ <input type="checkbox"/> Toothpaste _____ <input type="checkbox"/> Rinse _____ Radiographs: Digital <input type="checkbox"/> FMS <input type="checkbox"/> BWS (V/H) <input type="checkbox"/> Pan Debridement: <input type="checkbox"/> Quadrant(s) _____ <input type="checkbox"/> Whole Mouth Pain Management: <input type="checkbox"/> Topical <input type="checkbox"/> Oraqix <input type="checkbox"/> Local Anesthesia Coronal Polish: <input type="checkbox"/> Engine <input type="checkbox"/> Air Polisher: Agent _____ Other: <input type="checkbox"/> Topical Fluoride: _____ <input type="checkbox"/> Arestin: _____ <input type="checkbox"/> Sealants: _____ <input type="checkbox"/> 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 the modifications to care and photographs may be required based on my individual needs. A thorough discussion 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 referral 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.

IMPLEMENTATION: INITIAL VISIT

PREVENTATIVE SERVICES

- Reviewed patient health history & blood pressure screening
 - ASA II for hypertension. Takes Lisinopril 20mg 1x/day. Allergic to Penicillin.
 - Last medical exam in June 2019. Last dental exam and cleaning in 2017. FMS done in 2017.
- Extraoral and intraoral examination
 - Herpetic lesion on labial mucosa and left shoulder and arm
 - Geographic and fissured tongue. Fistula on buccal gingiva of #19.
- Assessments: M/II Moderate amount of calculus subgingivally. 4-5mm probing depths with radiographic bone loss, CAL, furcation involvement and BOP. Localized 6mm PD in upper right posteriors. Class I mobility on # 13 and 19 and a cracked root on #2.
- Reviewed toothbrushing with patient. Plaque score of 1.2 Fair.
- Advised patient to bring in previous radiographs for assessment. Referral to dermatologist given for herpetic lesions and to dentist for evaluation of #19.

DEBRIDEMENT performed on quadrant I and IV with ultrasonic.

IMPLEMENTATION: REVISIT

PREVENTATIVE SERVICES

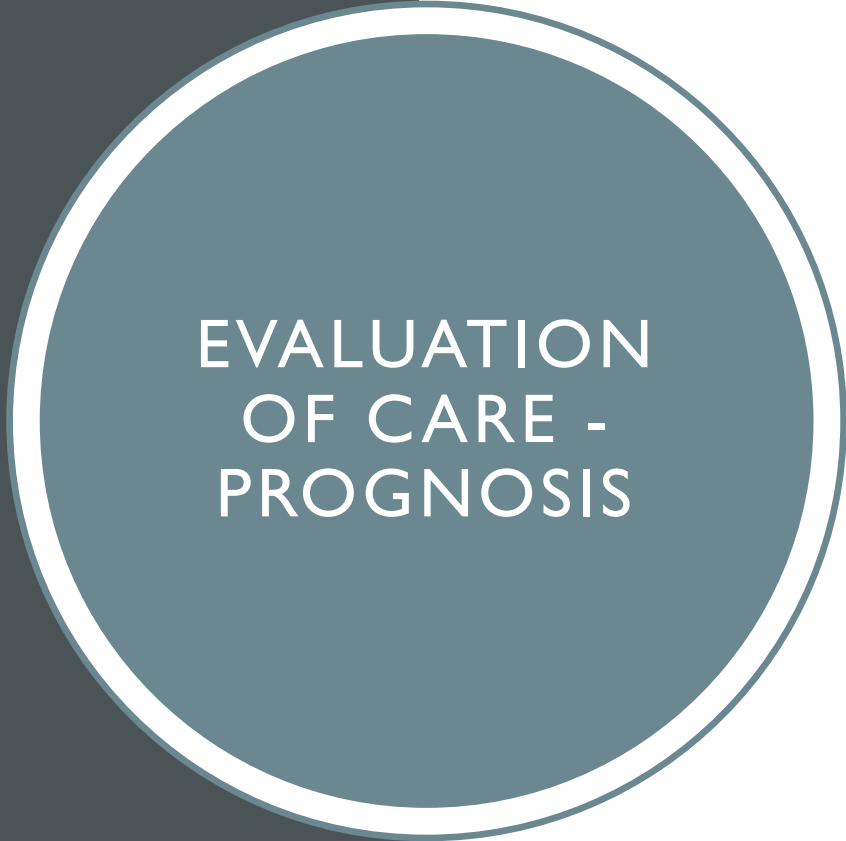
- Medical history reviewed. Patient brought his 2017 FMS and 2012 PAN on his second visit. He was shown the periapical pathology noted on #19. On the third visit, we took new BWs and a PA and shown how the PAP has gotten larger over the years. Reassessed areas debrided. Generalized pinkish red gingiva with slight marginal inflammation was noted.
- Reviewed flossing with dental floss and was given a Listerine access flosser to try at home.
- Patient brought in FMS from 2017 and reviewed with patient of findings. There was a periapical pathology noted and discussed with patient. Advised to see a specialist for the pathology.

DEBRIDEMENT PERFORMED on quadrant II and III with ultrasonic and hand scalers.

Engine polished and administered 5% NaFl varnish. List of dental clinics in NYC was given to patient for assessment of RCT.

IMPLEMENTATION: REVISIT

- Revisit for radiographs. Patient says his dentist recommended that he come back for updated radiographs. Patient feels no post-op discomfort and has not followed home care instructions given on the previous visit. He reported that he did not brush his teeth that morning because he was in a rush to get here. He also reported that his fistula comes and goes.
- Intraoral examination: No sign of fistula on #19.
- Exposed 4 HBW and 1 PA. Discussed findings of radiographs: generalized bone loss especially around #19 suggestive of failed RCT.
- Patient was not convinced that this requires attention and he did not want to visit the dentist.



EVALUATION OF CARE - PROGNOSIS

Outcome of care for patient:

Increased efforts for oral self care. Brush twice a day for two minutes each time and start flossing more frequently.

REFERRALS

- Referral to dermatologist given for herpetic lesions and to DDS for evaluation of #19.

ADULT REFERRAL FORM

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

Date: ~~_____~~

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:

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

- Caries: _____
- Restorative Care: ✓ #19 Ketula
- Oral Pathology: _____
- Oral Surgery: _____
- Periodontal Disease: _____
- Elevated Blood Pressure: 1st reading: _____ 2nd reading: _____
- Other: dermatologist - evaluate & treat. Repeat when follow-up.

Thank you,

Dental Hygiene Student: IVY LIN

Attending Faculty: [Signature]

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 Signature: [Signature]



CONTINUED CARE
RECOMMENDATIONS

- The recare interval I recommended to the patient was 3 months.
- The rationale is that he needs more motivation and counseling on home care. Patient does not value good oral health and in efforts to keeping a stable oral environment, frequent visits for cleanings and exams would be ideal.




FINAL REFLECTION

- My experience with this patient was rather difficult.
- Difficult in terms of patient management and charting.
- The periodontal charting was challenging because there was a lot to chart due to the generalized recession, furcation involvement, and mobility.
- With Dr. Ekelman's help, we made sure to chart everything that we saw clinically.
- Some things on the dental charting were updated after radiographs were exposed like the bridges, pontics, and abutments and the multiple root canal therapies.



FINAL REFLECTION CONTINUED

- He was a tough patient to deal with in terms of getting him to work on oral self care and visit the dentist more often for examinations.
- Patient was very adamant on wanting to finish the cleaning in one visit. Fortunately, patient was convinced to come back to complete treatment with Professor Childs' help.
- After completion, patient was worried about the noted fistula on #19 and communicated with his friend, a retired dentist, who recommended him to come back in to take updated radiographs. A copy of 4 BWs and a PA that I exposed were given to patient along with a referral and a list of dental clinics. Patient was informed of the infection, suggestive of failed root canal therapy and was told that it can result in the loss of the tooth if treatment is ignored.
- Unfortunately, patient has still not seen the dentist and continues to express no interest in treating it. He has said that he does not like spending his money. Although his condition was explained with radiographic evidence, he did not seem trusting of dental professionals.



FINAL REFLECTION CONTINUED

- Overall, it was a learning experience with this patient.
- I became more adept in periodontal charting and was able to utilize radiographs to complete a full assessment of his current oral health.
- Although I had difficulty with the attitude of the patient, I was able to get him to come back for his revisit as well as for updated radiographs.