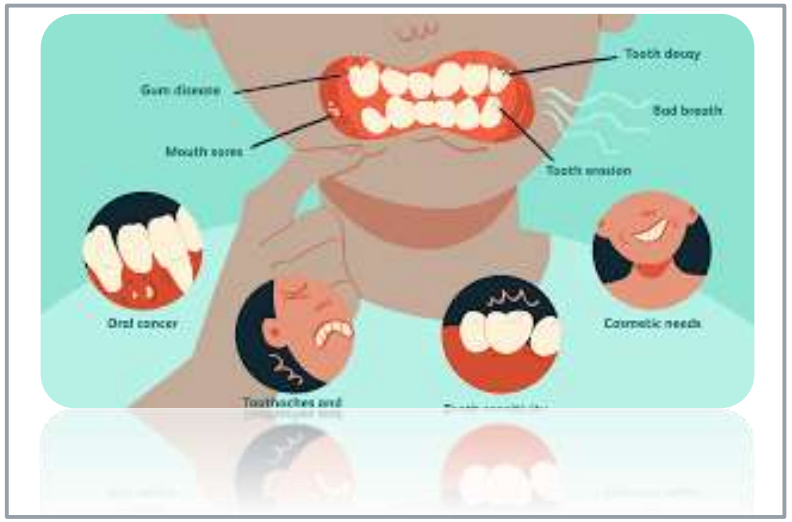
NEW YORK CITY COLLEGE OF TECHNOLOGY
DEPARTMENT OF DENTAL HYGIENE
DEN 2300 CASE PRESENTATION

SUEYI NI (SUSAN)

DECEMBER 13, 2019

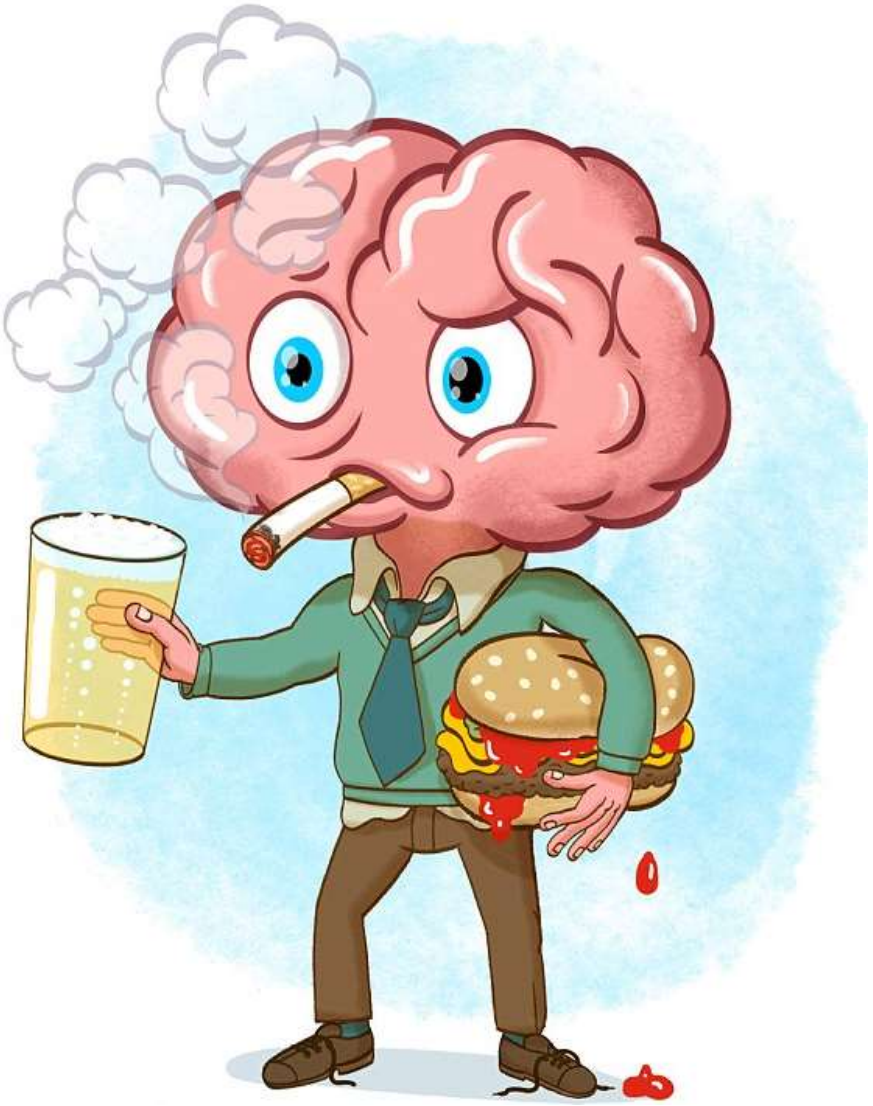
PATIENT PROFILE

- Mr. C.D is a 36-year-old African American male.
- Spends majority of his time working as a construction supervisor to provide for his family
- Has a son around 7 years old and lives with his girlfriend.
- Currently has insurance, United Health Care, provided by his employer. However, he does not have a dental home.
- Last dental visit was in 2017 in which a PA was exposed on tooth #2 for pain. The dentist informed him the need for endodontic treatment. Once it was approved by the insurance, the patient claimed that he was not experiencing pain and did not return to make an appointment.
- Last cleaning was in 2009 or later; patient does not remember.
- Oral Hygiene Routine:
  - Brushes once a day with a medium soft head manual toothbrush
  - Colgate whitening toothpaste
  - Does not use any interdental aids, oral rinse nor tongue cleaner



CHIEF COMPLAINT(S)

- Patient states "I have really bad teeth. I know it has a lot of problems."
- His main complaint was a prominent suspicious decay with a gray shadow on the mesial surface of tooth #8 and "abscess" on tooth #2.
- Mr. C.D. feels insecure with his smile and would like a consultation.
- He also knows he has visible staining and would like them to be removed.



HEALTH HISTORY OVERVIEW

- Blood Pressure: 122/81mmHg
- Pulse: 76bpm
- ASA II
- Health Condition(s)
  - Smoker for 15 years, quitted for 5 years and started again for a year (approximately 5 buds per day)
- Patient is not currently taking OTC medication, vitamins nor herbal supplements.

EXCESSIVE SMOKING

- Tobacco is one of the leading causes of preventable illness in the U.S.; it accounts for ~20% of deaths
- People start smoking tobacco in their teens or as young adults due to:
  - Rebelling against their parents
  - Peer pressure
  - Modeling their parents' or older siblings' behavior
  - Relief from stress or boredom
- Excessive smoking lead to many symptoms that associate with the risk of:
  - **Circulation:** blood viscosity, blood clots and blood pressure
  - **Heart:** coronary heart disease, heart attack, peripheral vascular disease and cerebrovascular disease.
  - **Brain:** brain aneurysm, stroke
  - **Lungs:** coughs, colds, wheezing, asthma, pneumonia, emphysema and lung cancer
  - **Bones:** weaken bone and brittle

https://www.thoracic.org/patients/patient-resources/resources/why-do-i-smoke.pdf & https://www.nhs.uk/smokefree/why-quit/smoking-health-problems

- Why is tobacco additive?
  - Nicotine is highly addictive chemical present in all forms of tobacco
  - Only takes 6-10sec to stimulate the brain
  - Cause the release of chemicals that effects a person's mood
  - Desired effects
    - Greater alertness
    - Muscle relaxation
    - Improved memory
    - Decrease in appetite
    - Decrease in irritability

HOW SMOKING IS MANAGED

HOW CAN ONE QUIT?

- COUNSELING
- OTC TRANSDERMAL NICOTINE PATCH
- OTC NICOTINE GUM
- BUPROPION
- VARENICLINE

https://www.thoracic.org/patients/patient-resources/resources/why-do-i-smoke.pdf & https://www.cancer.org/latest-news/how-to-quit-smoking.html

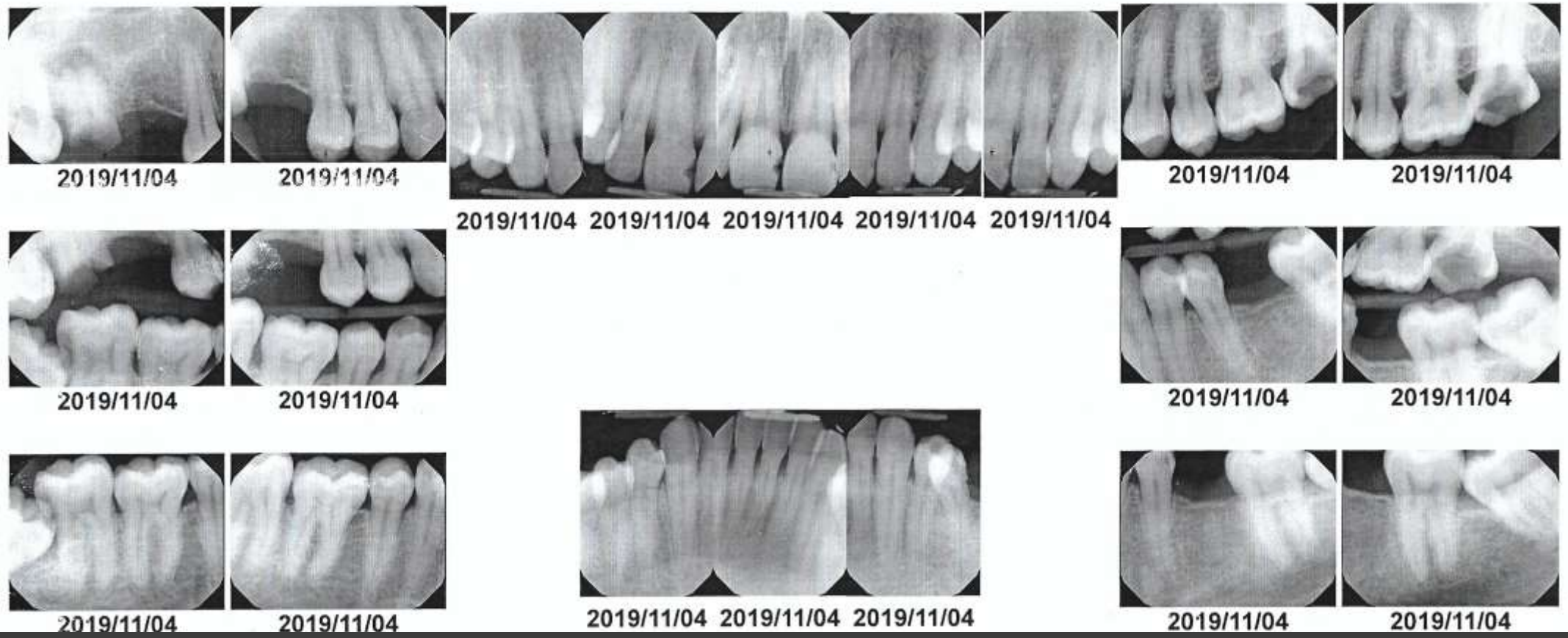
DENTAL HYGIENE MANAGEMENT

- There are no contraindications for dental care. However, dental hygiensits have two major roles when ecountoured with smoking patients.

Thorough Intraoral Examination	**Smoking Cessiation**
• Smoker's melanosis • Nicotine stomatitis • Hairy tongue • Signs of oral cancer • Xerostomia • Recession & abrasion • Peridontal disease If any are found, patient management must be altered accordingly.	If patients are interested in quitting, we needs to provide recources and ecourangemts. One method is the 5 R's: • Relevance • Risks • Rewards • Roadblocks • Repetition

https://www.lsusd.lsuhsc.edu/Documents/TCI/TobaccoOralChanges0729081.pdf & https://jada.ada.org/article/S0002-

COMPREHENSIVE ASSESSMENTS



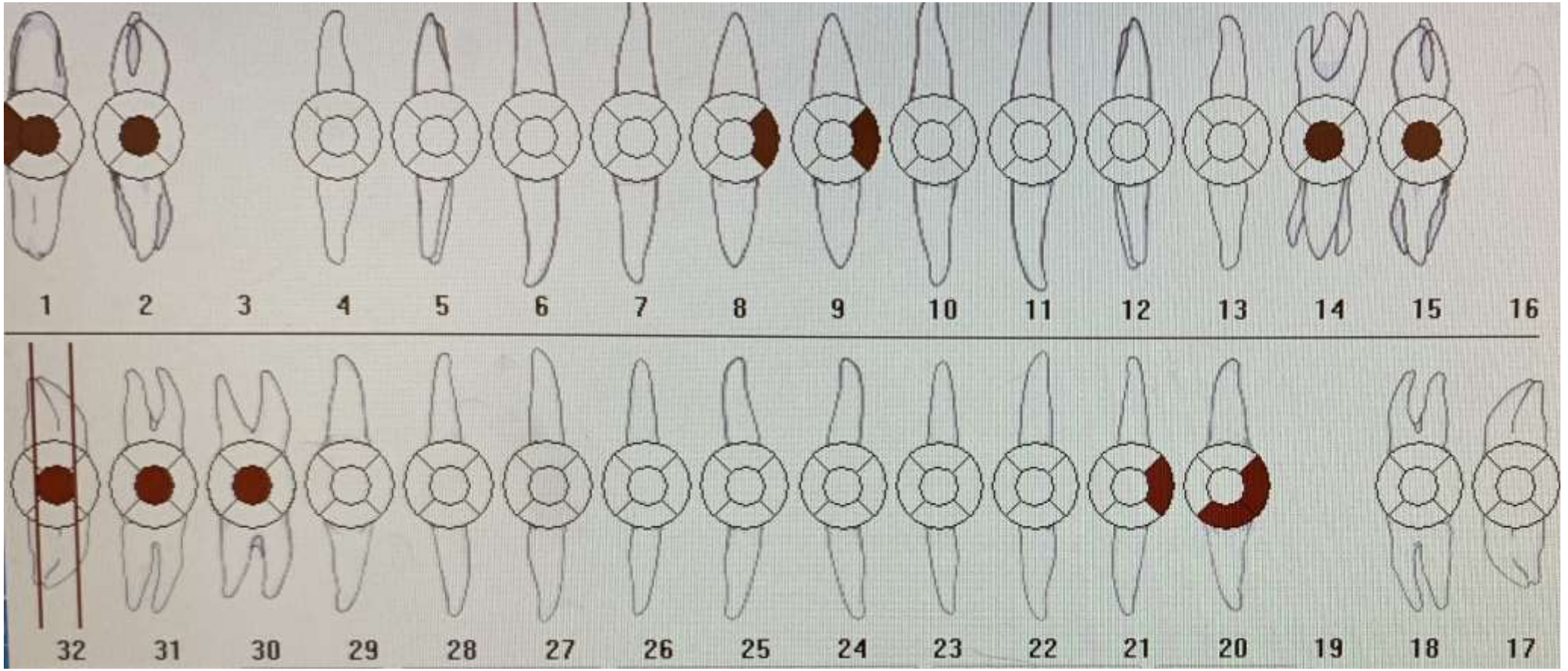
RADIOGRAPHS

- Localized calculus on the interproximal surfaces of the posterior. teeth
- No bone loss.
- PAP on tooth #2.
- Suspicious caries on #5D, 8M, 9D, 15O, 20MD, 21DO.

SUMMARY OF CLINICAL FINDINGS

Extraoral Examination: WNL	Intraoral Examination: WNL
• 2cm linear scar at the start of the right anterior cervical chain, below the ear. • Slight crepitation of the right TMJ; patient does not experience discomfort nor pain. • Large masseter muscle due to chronic clenching	• Short central frenum of the maxilla • Bilateral fibroma near teeth #17 & 31 • Red tonsils • Uvula deviates slightly to the left • Bilateral mandibular tori • Hyperkeratinization of the tongue • Coated tongue

- Bilaterally Class I of occlusion. 5mm overjet and 30% overbite.
- Generalized moderate attrition. Abrasion, abfraction and erosion is not present.
- Generalized extrinsic brown stains due to smoking and drinking.
- Localized moderate subgingival calculus on the interproximal surfaces of posterior teeth.

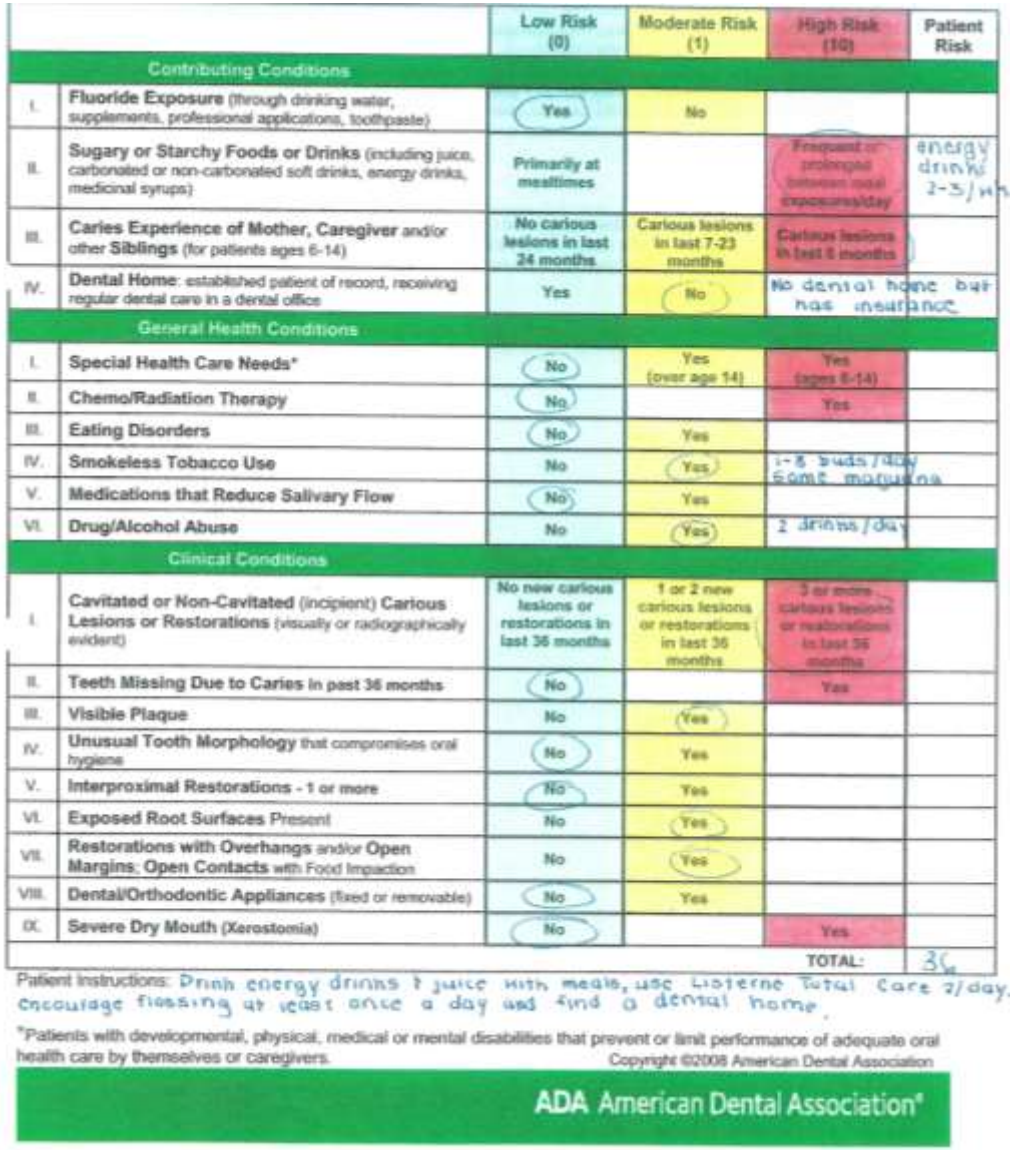


DENTAL CHARTING

- Extracted teeth #3, 16, 19 based on radiographs.
- Partially erupted #32.
- Suspicious caries on teeth #1DO, 2O, 8M, 9D, 14O, 15O, 20DB, 21D, 30O, 31O, 32O based clinical evaluation and radiographs.
- Mamelons are still present on teeth #8-10
- Crowding of the central and lateral mandibular incisors
- Crossbite of tooth #29, lingually inclined.

CARIES RISK ASSESSMENT

- CAMBRA form indicates high risk for caries. This is supported by clinical and radiographical findings.
- Radiographic evidence of suspicious decay noted on #5D, 8M, 9D, 15O, 20MD, 21DO.
- Additional suspicious decay based on clinically findings are #1DO and occlusal surfaces of #2, 14, 30, 31 and 31.



		Low Risk (0)	Moderate Risk (1)	High Risk (10)	Patient Risk
Contributing Conditions					
I.	**Fluoride Exposure** (through drinking water, supplements, professional applications, toothpaste)	Yes	No		
II.	**Sugary or Starchy 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	energy drinks 2-3/wk
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	No dental home but has insurance	
General Health Conditions					
I.	**Special Health Care Needs***	No	Yes (over age 14)	Yes (ages 6-14)	
II.	**Chemo/Radiation Therapy**	No		Yes	
III.	**Eating Disorders**	No	Yes		
IV.	**Smokeless Tobacco Use**	No	Yes	1-8 buds/day some marijuana	
V.	**Medications that Reduce Salivary Flow**	No	Yes		
VI.	**Drug/Alcohol Abuse**	No	Yes	2 drinks/day	
Clinical Conditions					
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		Yes	
				TOTAL:	36

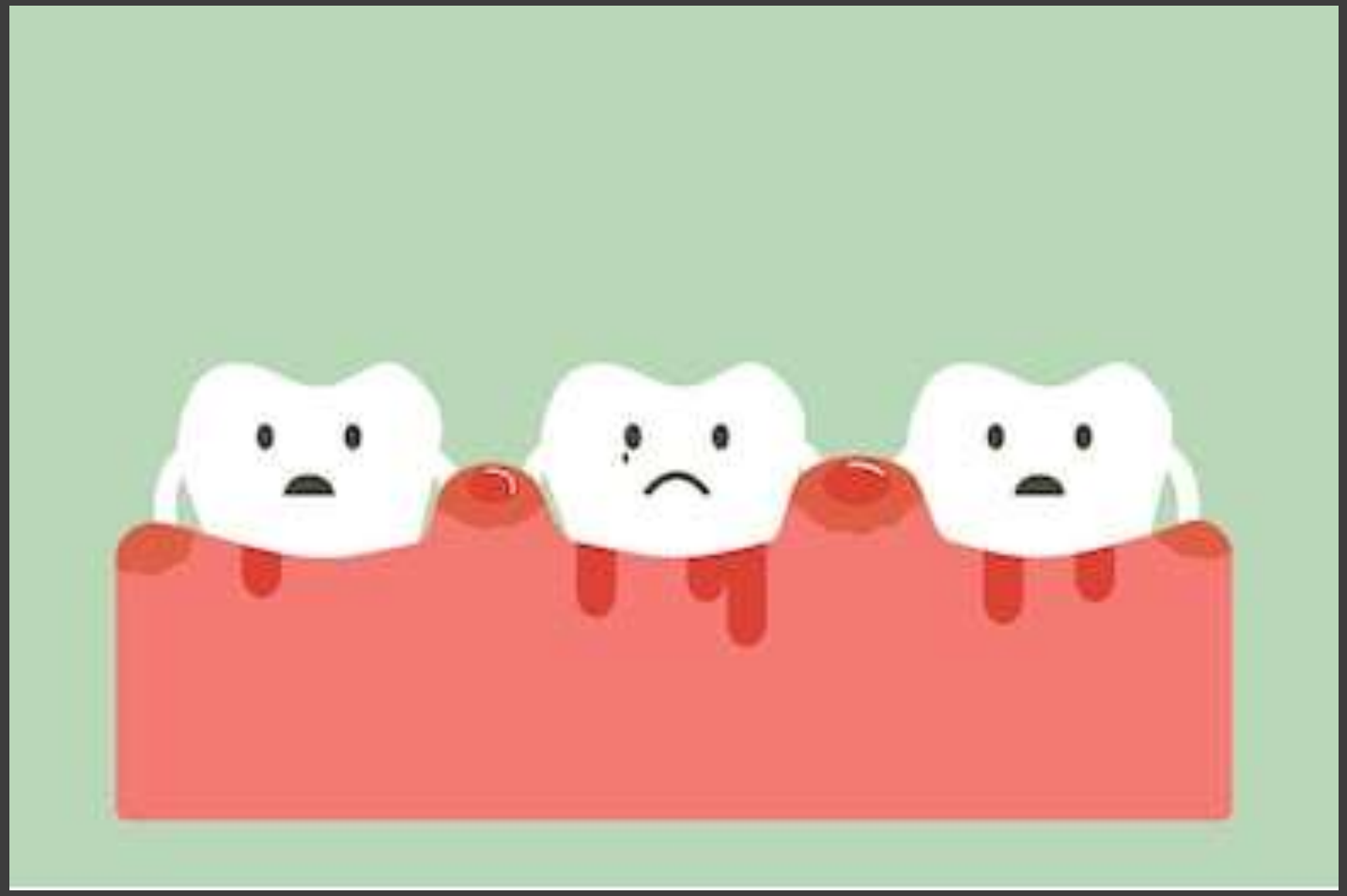
Patient Instructions: Drink energy drinks & juice with meals, use Listerine Total Care 2/day. Encourage flossing at least once a day and find a dental home.

*Patients with developmental, physical, medical or mental disabilities that prevent or limit performance of adequate oral health care by themselves or caregivers.

ADA American Dental Association®

GINGIVAL DESCRIPTION & PERIODONTAL STATUS

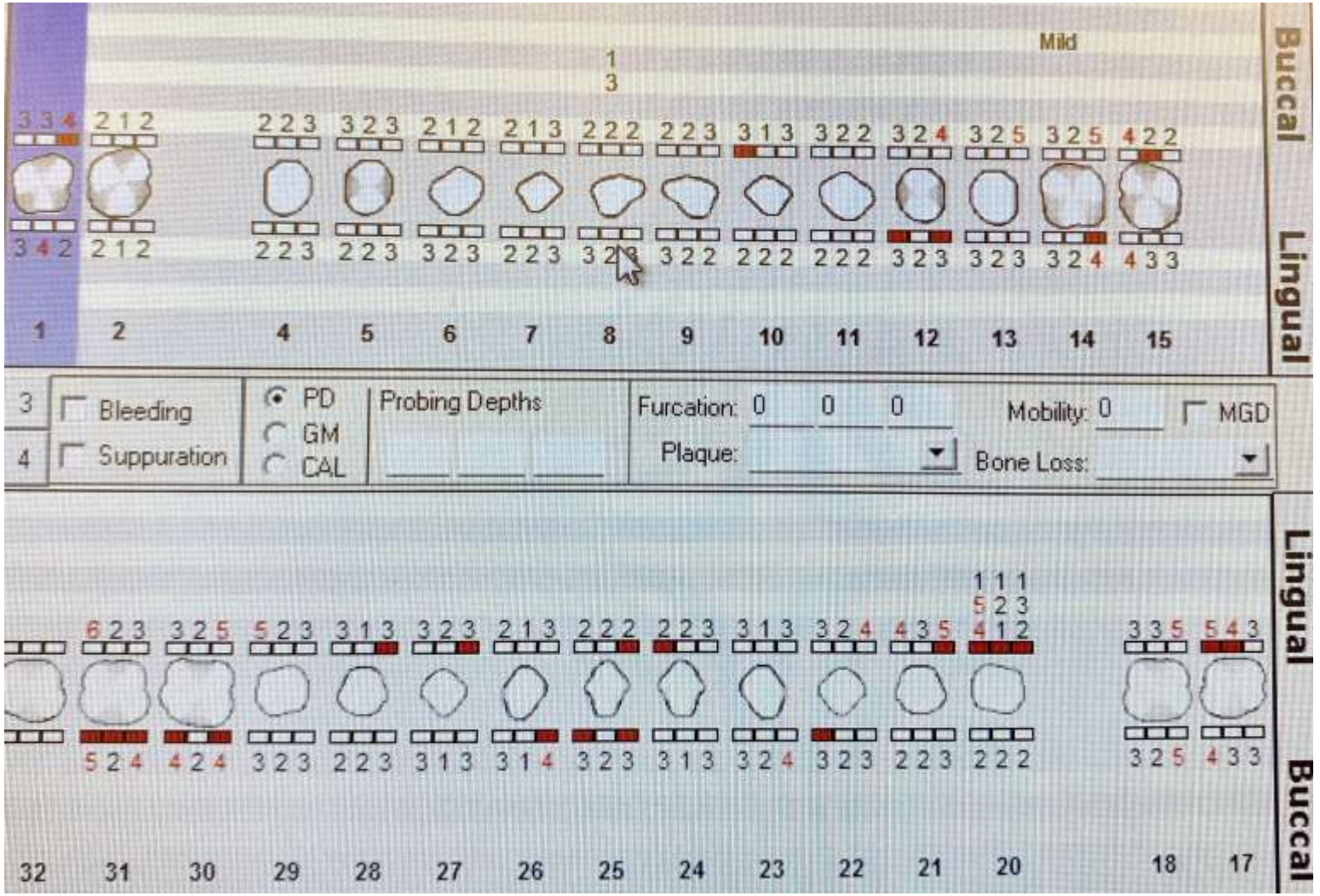
- **Gingival Description:** Generalized pigmentation, moderate gingival inflammation and loss of stippling. Localized fibrotic, rolled and mild bleeding on the mandible.
- Generalized perio type I, localized type II based on radiographs and localized mild recession on tooth #8 & 20.
- Disease is active based on probing depths ranging from 1-6mm even though radiographs do not indicate bone loss and bleeding upon probing is present.



PERIODONTAL CHARTING

- Generalized 1-3mm probing depths.
- Localized 4-6mm pockets on posteior teeth.
- Localized 1mm recession.

- Generalized perio type I and localized perio type II with mild BOP.



DENTAL HYGIENE DIAGNOSIS

High risk for caries

- Frequent intakes of energy drinks and coffee between meals.
- Frequent smoker
- Clinical & radiographic evidence of suspicious caries
- No dental home
- Does not use oral rinse containing fluoride

Generalized perio type I and localized perio type II (disease active)

- Pockets due to inflammation since no radiographic evidence of bone loss
- Mild BOP
- Localized 1mm exposed root surfaces

DENTAL HYGIENE CARE PLAN

Mr. C.D. was schedule for three visits which scaling with topical 20% Benzocaine would be used if necessary.

Visit I

- Complete all assessments except exposing radiographs.
- OHI: modified Bass
- Scale: teeth #9-11.

Visit II

- Expose FMS (20 images)
- OHI: review modfied Bass and introduce flossing.
- Scale QII & III with hand instruments and ultrasonic.

Visit III

- OHI: review modified Bass and flossing; introduce Listerine Total Care and tongue cleaner.
- Scale QI & IV with hand instruments and ultrasonic. Used topical 20% Benzocaine for pain management.
- Engine polish
- Apply 5% sodium fluoride varnish

[redacted]

Visit 1: 10/15/19 (Date)	Visit 2: TBD (Date)	Visit 3: TBD (Date)	Visit 4: _____ (Date)
Patient Education:	**Patient Education:**	**Patient Education:**	**Patient Education:**
☑ TB manual ☐ power assisted	☐ TB manual ☐ power assisted	☐ TB manual ☐ power assisted	☐ TB manual ☐ power assisted
☐ Interdental Aid _____	☐ Interdental Aid floss	☐ Interdental Aid _____	☐ Interdental Aid _____
☐ Toothpaste _____	☐ Toothpaste _____	☐ Toothpaste _____	☐ Toothpaste _____
☐ Rinse _____	☐ Rinse _____	☑ Rinse Listerine Total Care	☐ Rinse _____
Radiographs: Digital	**Radiographs: Digital**	**Radiographs: Digital**	**Radiographs: Digital**
☐ FMS ☐ BWS (V/H) ☐ Pan	☑ FMS ☐ BWS (V/H) ☐ Pan	☐ FMS ☐ BWS (V/H) ☐ Pan	☐ FMS ☐ BWS (V/H) ☐ Pan
Debridement:	**Debridement:**	**Debridement:**	**Debridement:**
☐ Quadrant(s) #9-11	☑ Quadrant(s) Q1-Q4	☑ Quadrant(s) Q1-Q4	☐ Quadrant(s) _____
☐ Whole Mouth	☐ Whole Mouth	☐ Whole Mouth	☐ Whole Mouth
Pain Management:	**Pain Management:**	**Pain Management:**	**Pain Management:**
☑ Topical if needed	☐ Topical if needed	☐ Topical if needed	☐ Topical
☐ Oraqix 20% benzocaine	☐ Oraqix 20% benzocaine	☐ Oraqix 20% benzocaine	☐ Oraqix
☐ Local Anesthesia	☐ Local Anesthesia	☐ Local Anesthesia	☐ Local Anesthesia
Coronal Polish:	**Coronal Polish:**	**Coronal Polish:**	**Coronal Polish:**
☐ Engine	☐ Engine	☑ Engine	☐ Engine
☐ Air Polisher: Agent _____	☐ Air Polisher: Agent _____	☑ Air Polisher: Agent Glycine	☐ Air Polisher: Agent _____
Other:	**Other:**	**Other:**	**Other:**
☐ Topical Fluoride: _____	☐ Topical Fluoride: _____	☐ Topical Fluoride: NaF 1	☐ Topical Fluoride: _____
☐ Arestin: _____	☐ Arestin: _____	☐ Arestin: _____	☐ Arestin: _____
☐ Sealant(s): _____	☐ Sealant(s): _____	☐ Sealant(s): _____	☐ Sealants: _____
☐ Impressions _____	☐ Impressions _____	☐ Impressions _____	☐ 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 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 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.

[redacted] Patient/Guardian

Suqi Ni Student (PRINT NAME)

[redacted] Attending Faculty

10/15/19 Date

IMPLEMENTATION OF TREATMENT

Visit I

- All assessments were completed except FMS. They could not be exposed since the patient did not bring cash. After employing the disclosing soultion, his plaque index score was 1.0 (fair). Biofilm was visible generally on the cervical third and interproximal surfaces of the teeth. Additionally, he has pockets due to gingival inflammation. Thus, I decided to introduce him to the modified Bass method. Our goal was to decrease the plaque score and implement the correct method of toothbrushing even if it was only once a day.
- Since FMS was not available to aid in the comprehension in the severity of his caries, only teeth #9-11 was scaled with hand instruments.

Visit II

- FMS (20 images) was exposed at 7mA and 70kVp (refer to slide 9 for more details). Our goal was accomplished! The plaque score decreased to 0.67 (good). Biofilm was generally found on the mandible lingual and interproximal surfaces of the teeth. Thus, we reviewed how to correctly angle the toothbrush head while brushing and introduced flossing. Our goal was to decrease the plaque even more, brush with the correct technique twice a day and floss at least every other day.
- QII and III was scaled with the ultrasonic and hand instrument.

IMPLEMENTATION OF TREATMENT

Visit III

- New interproximal stains were found on the mandibular lingual. Plaque score was decreased to 0.5 (good). Biofilm was found on the mandibular lingual and interproximal surfaces. Thus, we review modified Bass and proper sequencing while brushing. It was emphasized to focus two teeth at a time while brushing and for the anterior lingual to focus on one tooth at time. We also reviewed flossing and we adjusted his technique by decreasing the length of the floss to allow for better control. I also introduced him to the Listerine Floss Reacher for the interproximal surfaces in the posterior teeth. It was his last visit, so I wanted to also give him other options since he was struggling to floss. Furthermore, I introduce him to Listerine Total Care Rinse. It was emphasized that even if he only brushes and floss, he is only cleaning 25% of his oral cavity. Thus, employing an antiseptic oral rinse is vital. Additionally, low dose but frequent exposure to fluoride is beneficial for him since he is at high risk for caries and gets rid of halitosis. Furthermore, the use of tongue cleaner was encouraged.
- Rescale #14MD and scaled QI and IV with ultrasonic and hand instruments. Topical 20% Benzocaine was employed for pain management. Engine polish. 5% Sodium fluoride varnish was applied.

Challenges

- Some ares the gingivia is fibrotic so it was a bit hard to hand scale directly. Thus, I used the thinsert the lavage the quadrant and open the gingiva. Then I would go back with slim-lime inserts. Lastly, I would hand scale. I felt this method was thorough and effective.
- My patient had moderate to heavy staining. I thought that solely engine polish would remove stains. Thankfully, with the help of two professors I was taught how to remove stains with the cavitron. I've learned that patience is vital to remove stain and to start from the incisal surface and make the way down,

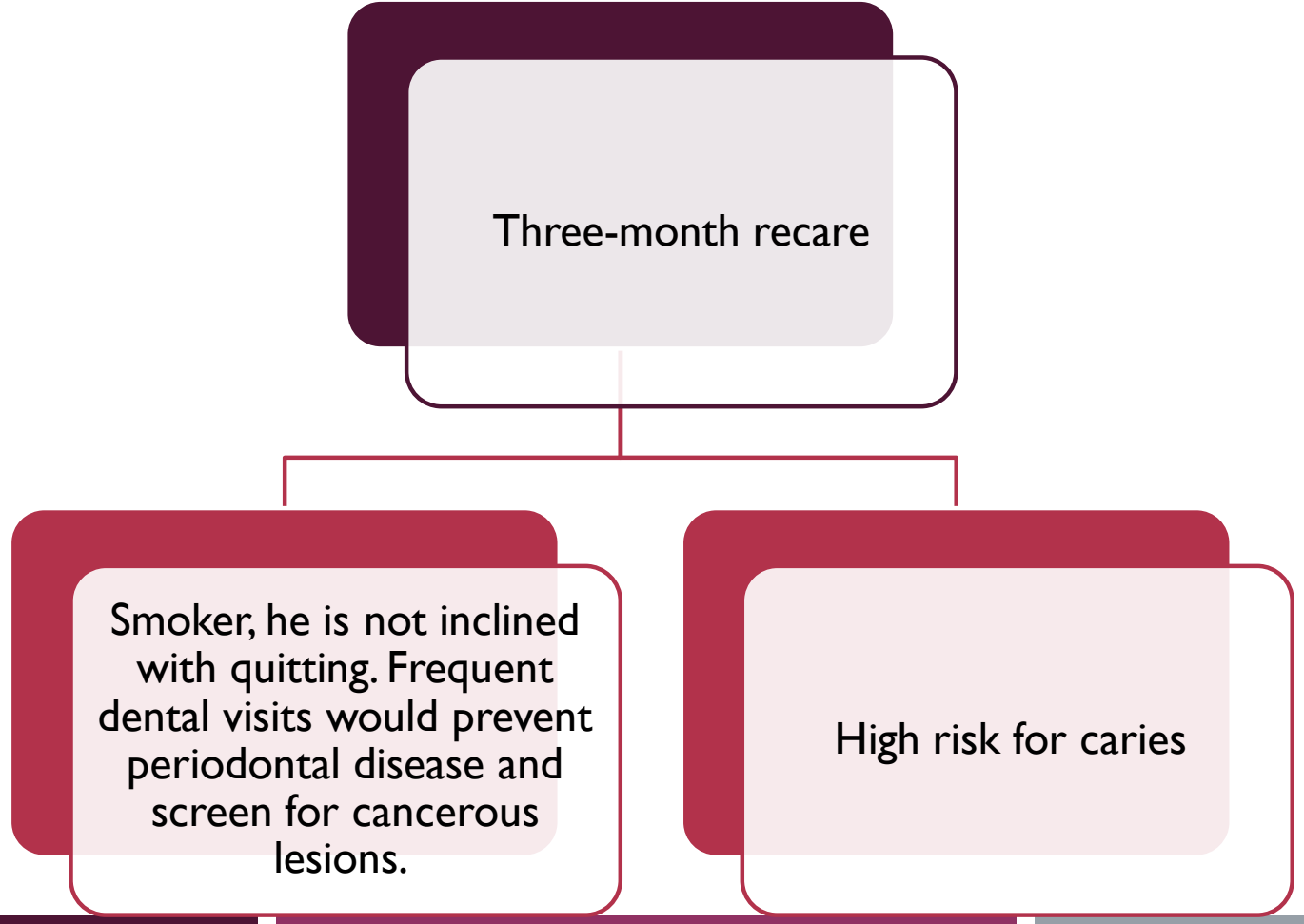
EVALUATION OF CARE – OUTCOME OF CARE - PROGNOSIS

- Although I was unable to see the gingiva completely heal, after each visit I notice a decrease in BOP. After four quadrant scaling, I expect not to see rolling of the gingiva.
- The patient was also quite compliant with home care; he loved the modified Bass method and even decided to put a toothbrush in his car. He said that way he can make the time to brush twice a day. I also think he would use oral rinse for now on because it helps with halitosis but it also had additional use such as fluoride. Additionally, I'm glad he was taught the proper way to floss so at least he has that knowledge at his disposal.
- I am confident he is leaving our clinic calculus free and that the stain removal boosts his confidence. I hope that will be enough incentive to complete his dental care with a dentist.

REFERRALS

Referral was given to the general dentist for suspicious caries and PAP. (Please refer to slide #9 & 12 for more information.)

CONTINUED CARE RECOMMENDATIONS



FINAL REFLECTION

- One thing I wish I could have done differently was to provide him with topical on the second visit. I find that a lot of my patients do express if they are feeling discomfort. Instead of just verbally asking my patients, I need to pay more attention on their facial cues. Wearing loupes causes me to solely focus on their oral cavity, so I need to be mindful. In this way, I can provide an even better service.
- The hallmark of this patient experience is the importance of establishing rapport. I have been struggling with confidence, but this incidence forced it out of me. My patient was giving up on his oral care. He knows he needed a lot of work to be done but did not know where to start. Empathy allowed me to maintain professional and employ all the knowledge we have been learning the past three semesters. I was able to establish plans, create goals and in the end give my patient a sense of direction. I feel proud to know that he was leaving with the best care and hope for his oral health.