

DH 290 Clinical Case Study
Fall 2024
Missouri Southern State
University- Department of Dental
Hygiene

CHARACTERISTICS

Eaglesoft ID: 14708

Gender: Female

Birthday: 3/18/1982

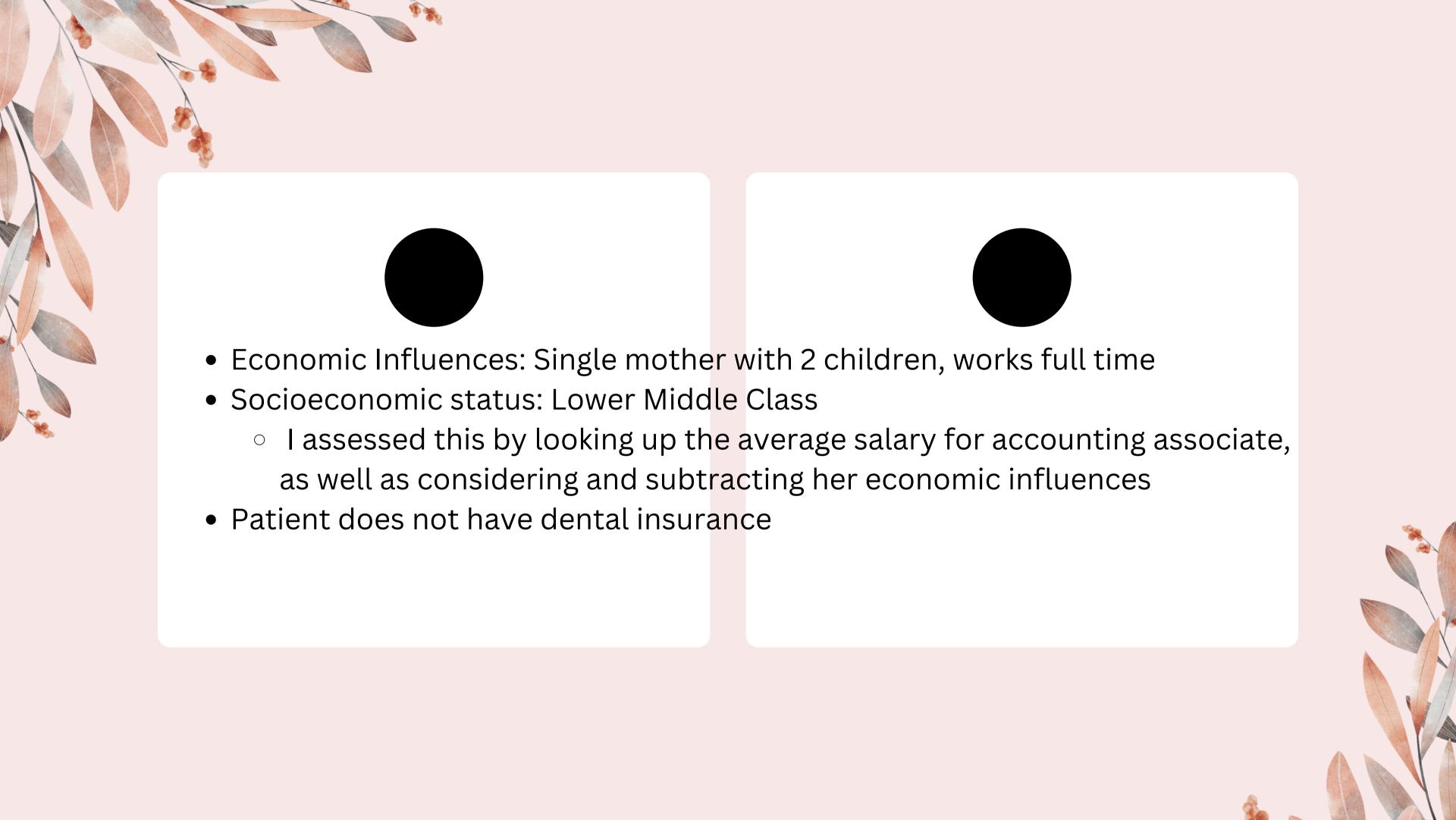
- Age: 42 years old
- Ethnicity: Filipino
- Chief Complaint: Sensitivity around gums, generalized throughout mouth

- Marital status- unmarried, engaged to fiancée
- Children- 2 children, daughter (19) and son (11)
- Occupation- Accounting Associate
 - Currently in school taking a course on taxes
- Education- Crowder College- Associate of Nursing, did not finish degree

SOCIAL HISTORY

DENTAL HISTORY

- Patient presents with gingival sensitivity
- Last dental visit- July 2023 at Four States Dental Care for cleaning and X-rays
- Patient brushes, flosses, uses mouthwash 3x per day
 - Hard-bristled manual toothbrush
 - Crest toothpaste
 - Listerine mouthwash
- Last Radiographs: July 2023 at Four States Dental Care (Webb City, MO)
 - Panoramic
 - 4 Horizontal Bitewings
 - Anterior Maxillary Periapical



PATIENT'S ATTITUDE

Patient had a real desire to gain control of her oral health. Patient was willing to go through nutritional counseling, full FMX, anesthetic, scaling and root planing, and every treatment phase. Patient was complaint and eager throughout every treatment phase.

HEALTHHISTORY

Primary Care

Vitamins

Surgeries

- Pt primary care provider Dr. Maria Bruce at Mercy Clinic 202 E. 50th Street Joplin, MO 64804, (417) 556-3400
- Pt is on no medication takes Centrum multivitamin (Lexcomp Drug Handbook, page. 1673 no complications)
- Pt had a Cesarean section in June 2013 overseas in the Phillipans and does not remember the provider's name, no complications.
- Pt had hysterectomy in 2023 at Mercy in Joplin, does not recall the provider's name, under general anesthesia, no complications.

Date	Temperature	Pulse (Left Wrist)	Respirations	Blood Pressure		
8/29/2024	8/29/2024 98.1 Farenheit (temporal) 11/21/2024 98.0 Farenheit (Temporal)		14 rpm normal, regular, irregular, easy, labored, no odor, no noise, wheezing	122/64 mmHg left arm		
11/21/2024			12 rpm normal, regular, irregular, easy, labored, no odor, no noise, wheezing	120/78 mmHg left arm		

Smoking Status: Current non-smoker, quit smoking successfully in April 2024

Patient MIL: 150 mmHg

ASA: II

Alcohol Use: Drinks clear liquor (2 oz) once per week

PATIENT VITALS





















<u>Habits</u>

- candy: 1x per month.
 - o Intervention: swish with water after consumption, wait 30 minutes to brush to reduce bacteria/acid on teeth, and to reduce caries risk.
- Drinks at least 2 cups black coffee per day.
 - Intervention: swish with water and wait 30 minutes to brush, to reduce staining and acid on teeth.

Cosmetic

- Stain Statement: Generalized extrinsic light marginal yellow stain.
- Missing teeth: 13, 15, 17, 19, 30
- Attrition statement: slight incisal attrition/chipping localized to the maxillary anteriors. on 7,8,9,10

EOIO: CENICAL ABOUT ABOU

- Head
- all lymph nodes non tender and nonpalpable
- Generalized acne scaring
- 3 brown macule below left eye (1-2mm)
- right cheek scarring pt states she just shaved
- bilateral ear piercing scars
- bilateral linea alba in line with occlusion
- 1 black/purple macules on left buccal mucosa 3x1, somewhat linear in shape
- bilateral fordyce granules near labial commisures
- mandibular and maxillary diffuse brown gingival appearance on #6-11 and #22-28
- white coating on dorsal of tongue with slight fissures
- scalloped borders on tongue
- tooth #5 linguoverted
- afternoon: red linear mark inferior to tooth #28 on gingi

EOIO: CISICAL ABOUT ABOU

Occlusion

• R Cuspid: Class 2

• L Cuspid: Class 1

• R molar: Class 2

• L molar: Class 1

• Overbite: moderate

Midline deviates 4mm to the right

All molars (posterior) end to end

TMJ_

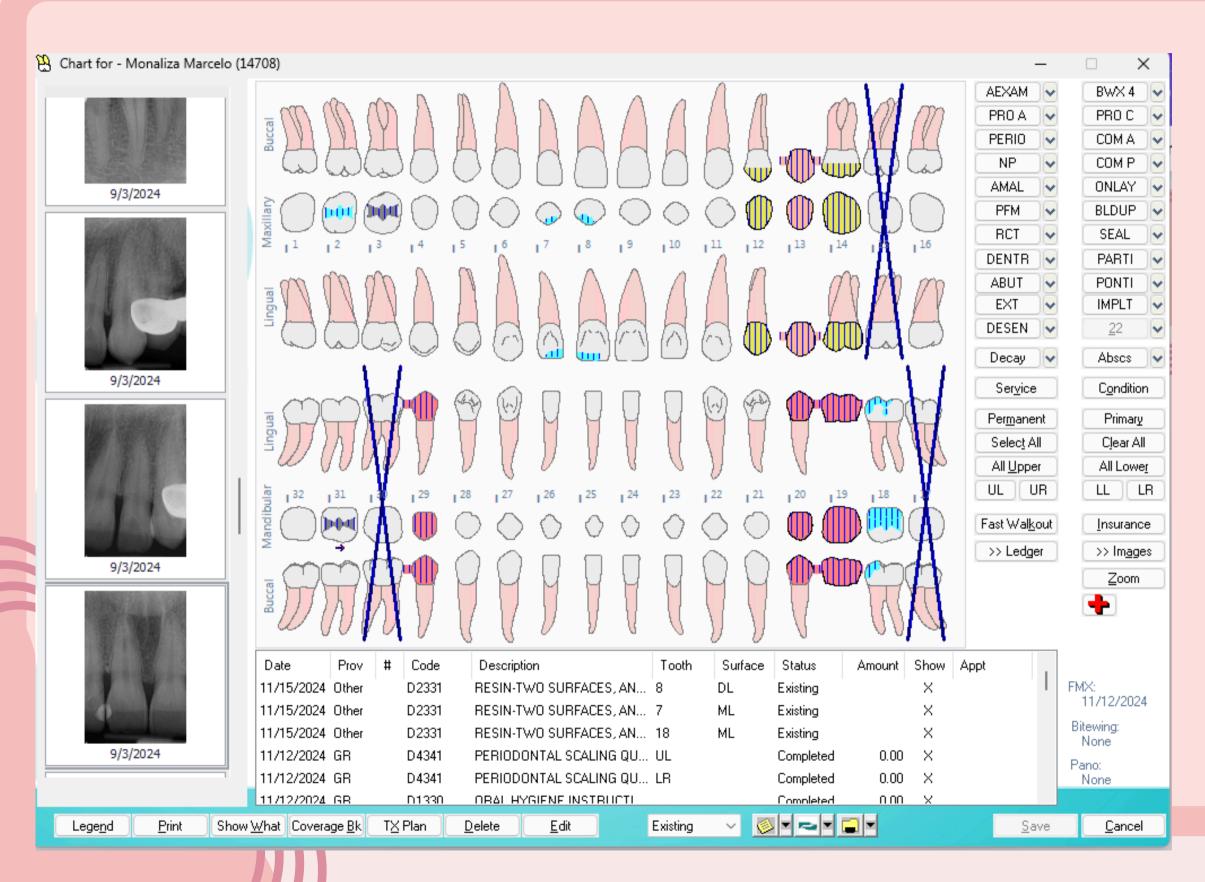
- Deviation to the right upon opening, no deviation upon closing
- patient opens fully unassisted

<u>Perio</u>

 Gingival Statement: Generalized slight papillary inflammation with localized diffuse dark hyper pigmentation on #6-11 and #22-28



DENTAL CHARTING



Amalgam Restorations:

- O-#3
- O-#31

Composite Restorations

- O-#2
- ML-#7
- DL-#8
- O-#18

Missing

• #13, #15, #17, #30

Crown

• #12, #20, #29

Abudtment

• #13, #19

Date:	8/29/2024
Completed by:	Erin R

Risk Factors

Visible heavy plaque on teeth

Deep pits and fissures

Protective Factors

Fluoride toothpaste 1-2x daily

Fluoridated water intake

Disease Indicators

Visible caries and/or

Active white spots on

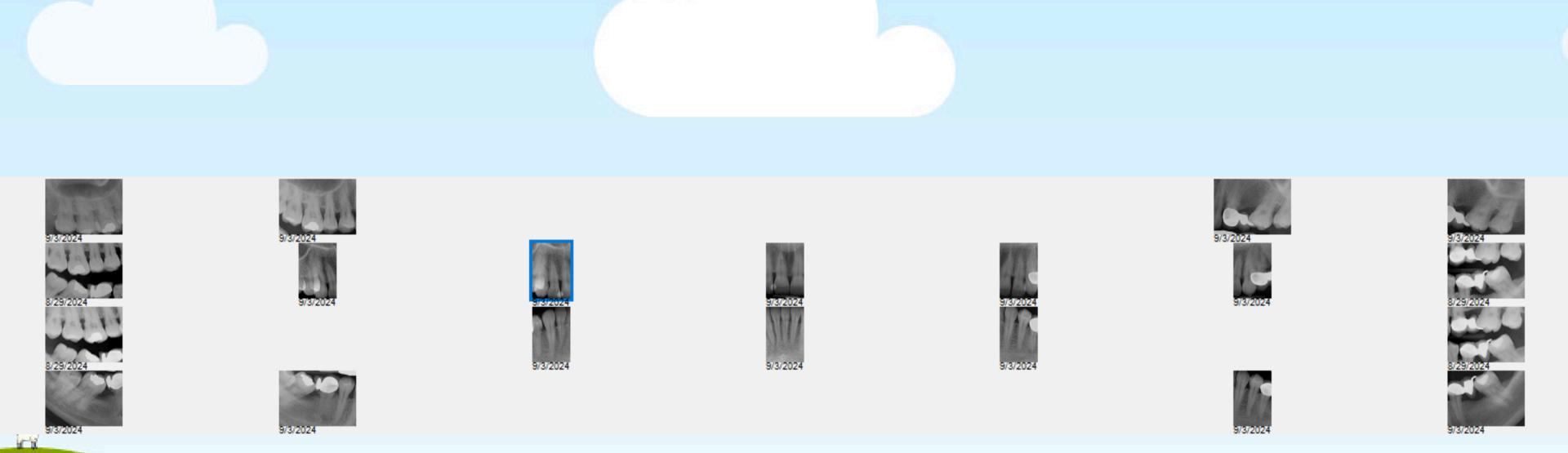
lesions

	smooth surfaces				l
	Restorations (for caries) in last 3 years	Saliva reducing factors/meds		OTC fluoride rinse daily	
	Extractions (due to caries), last 3 years	Patient reports "dry mouth"		Rx 5000 ppm fluoride toothpaste daily]
		Restorations with overhangs, open margins, or open contacts	Х	Fluoride varnish in last 6 mg	
		Exposed roots		Chlorhexidine 1x week/mg	
		Ortho appliances, partial dentures		MI Paste in last 6 mg	
CAMBRA				Normal salivary function	
		Infrequent or irregular dental care	Х	Note risk level, 'High,	
		Frequent snacks (>3x/day)		Medium or Low" in the box to the right. (H, M, L)	
		High sugar intake or >6 exposures			
		Recreational drug use			ł



v. Patient has very low sugar intake

. Patient has infrequent access to dental care ii.Patient works 5-6 days a week with little breaks throughout the day iii. Patient does have reliable method of transportation iv.Patient did not have access to fluoridated water as a child, but currently has access to fluoridated water source



Radiographs

FMX- 9/03/2024
Taken at MSSU by
Kiyah Gilmore

Panoramic

7/24/2023- Sent over from Four States Dental













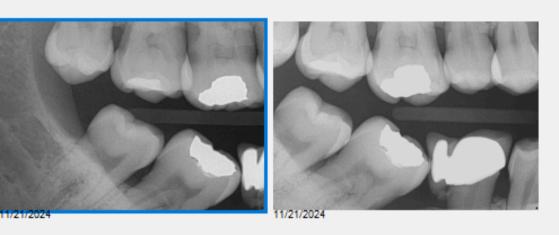




Horizontal Bitewings

7/24/2023- Sent over from Four States Dental









Post SRP Bitewings:

PHOTOGRAL PHOTOGRAPHS 0/1/2021- BFF0RF







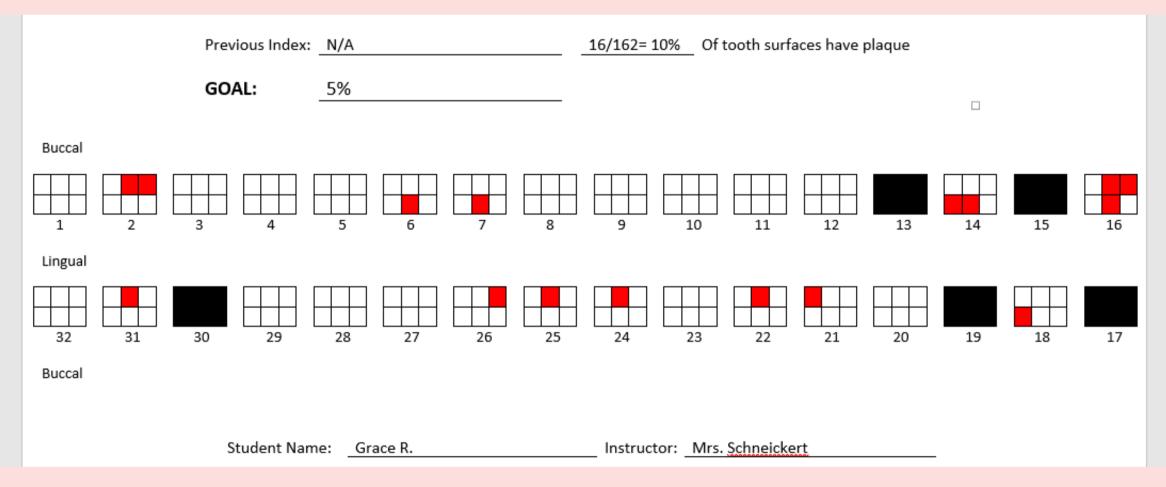






INTRAORAL IMAGES: TREATMENT COMPLETED

APPOINT MENT SCORE-10/1/2024



Patient had 16/162 surfaces with plaque, which equals a 10% plaque index score. Patient agreed that if they follow OHI instructions, they could get the score down to 5%



Oral Hugiene Instructions

OHI statement: Recommended modified bass method Place toothbrush at 45-degree angle to the gum line. Brush each tooth (or two to three at a time) using a gentle circular movement. Brush each tooth well and when finished, flick the toothbrush down the tooth, away from the gum line. Brush for at least 2 minutes, floss using C-shaped method

Last Appointment (reeval), will be done in the spring

PISCORE

PERIODONTAL CHARTING: FIRST APPOINTMENT 10/1/2024



Periodontial Charting Comparison: Last Appointment (Spring Semester)

Periodontal Charting: First Appointment 10/1/2024

Gingival Description

Generalized slight papillary inflammation with localized diffuse dark hyper pigmentation on #6-11 and #22-28

Periodontal Diagnosis

AAP: Stage III; Grade B

Patient DOD per quad: Q1: P3; Q2: P3; Q3: P2; Q4: P3

H

ASSESSIEST ASSESSIEST

1	10/01/2024	1,2,3,4,5	,6,7,8,9,10,11,12,	14 100.00	100.00 %						3				
		1-32													
4		_			5						5		_		
Comments															
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Calculus Classification Per

Quad



Calculus Deposit Assessment-

Q1:C3

Q2:C3

Q3:C3

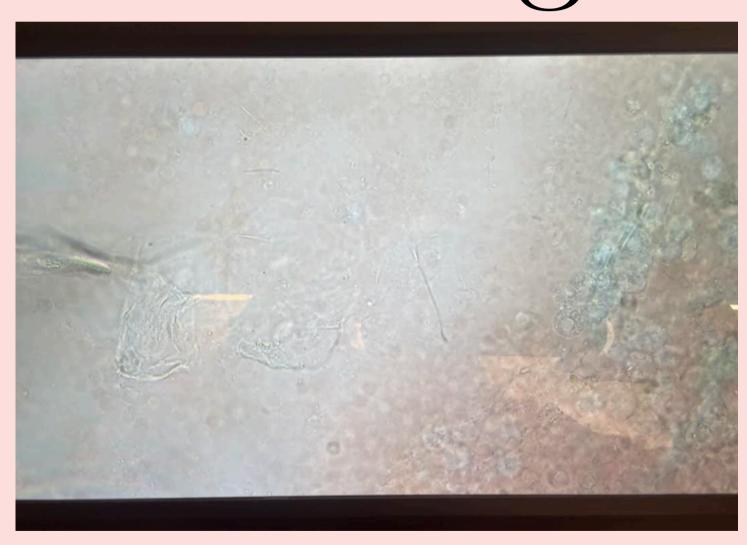
Q4:C3

Sample taken 10/1/2024:

PHASE MICROSCOPE Sample #1: Before cleaning

Multiple spirochetes (can cause Lyme disease); 1-2 weeks (older bioflilm); filamentous rods- gram positive (days 4-7)

Distal Lingual pocket of tooth #29





Filamentous bacteria
A few cocci (well-cleaned mouth)
Epithelial cells
Distal Lingual Pocket of tooth #29



NOTRITIONAL COUNSELING

Date Started: 10/1/2024

Date Completed: 11/12/2024

Jane Doe

Relating nutrition to oral health, Jane Doe has a very good diet. Jane Doe does not consume many fermentable carbohydrates, and the only sugar she consumes is from carbohydrates and vegetables. Jane Doe did not have more than 2 sugar exposures per day, which is great in terms of sugar-producing acid on the teeth.

DESTAL HYGENE TREATMENT OF THE ATTACK.

ADPIE

Narrative

Jayanti Utami

I assessed Jane Doe and classified her as Calculus 3 and Perio 3 (except quad 2, which was perio 2). I also staged and graded her as Stage III Grade B.

- Treatment Plan:
 - Oral Hygiene Instructions
 - Nutritional Counseling
 - 4 Quadrants of SRP, 4 quadrants or local anesthesia not in conjunction with operation
 - Phase microscope slide (pathology)
 - Comprehensive periodontal evaluation
 - Fluoride varnish application

- a. At Jane Doe's initial appointment, she was screened by another clinician (8/29/2024), and treatment planned for a FMX, which was completed on 9/03/2024. When I first assessed her, I staged and graded her. She was Perio 3 and Calculus 3 in all quadrants, except quad 2, which was perio 2.
- b. A motivational technique that worked very well was showing the xrays to the patient, showing her where her gumline is, and how the calculus is under the gums. I explained to her that even if she flosses, after that bacteria has mineralized and turned into calculus, you cannot get it off by yourself. That is why receiving routine prohpylaxis from a hygienist is so important.
- c. I explained how calcuus left under the gums will "dissolve" or "eat away" her bone. THis discussion motivated Jane Doe to take her oral health more seriously.
- d. Jane Doe was referred to KCU Dental School during her doctors exam on 11/21/2024
- e. Nutritional counseling was excellent for this patient. We discussed number of exposures to sugar and fermentable carbohydrates throughout the day, and I explained how these kinds of foods could demineralize the enamel if left on the tooth. These discussions were very motivational and educational for my patient, ad her attitude became more positive after these discussions.

Treatment Variative

Treatment of Jane Doe

Appointment #1: Screening by Erin Rischer (8/29/2024)

Patient was screened using PSR screening method

Appointment #1: FMX 9/03/2024

Preformed by Kiyah Gilmore Appointment #3:
First hygiene
cleaning
appointment,
morning of
10/1/2024

Medical history, EOIO, plaque index, OHI, assessment of calculus and periodontal probing Appointment #4:
Hygiene
appointment,
afternoon of
10/1/2024

SRP in quad 3, IA, lingual, buccal and mental injections in quad 3, microscope sample taken fron distal lingual pocket #29, nutritional counseling initial appointment

Appointment #5:
Hygiene
appointment,
morning of
11/12/2024

Anesthesia quad 4, IA,lingual, buccal, mental, infiltration on #32 in quad 4, began SRP on quad 2, concluded nutritional counseling Appointment #6:
Hygiene
appointment
afternoon of
11/12/2024

PSA, MSA, ASA in quad 2, SRP quad 2

Appointment #7:
Hygiene cleaning
appointment,
morning of
11/21/2024

PSA, MSA in quad 1, SRP distal of #14 and in quad 1, Drs. exam by Dr. Jahraus

Appointment #8:
Hygiene
appointment,
afternoon of
11/21/2024

PSA, ASA, Inflitration #5, SRP quad 1, postoperative bitewings, fluoride varnish Patient was Staged and Graded AAP Stage III, Grade B Probing depths extended beyond 6mm, patient presented with some vertical bone loss, and interdental clinical attachment loss exceeded 5mm. Jane doe was a recent smoker (quit 4 months prior to first appointment) but did have a moderate rate of bone loss over the past 5 years.

- a. Patient received SRP in all 4 quadrants on at least one tooth per quadrant. This was decided because of probing depths, clinical attachment loss, and amount of subgingival calculus.
- b. Anesthesia was used in all 4 quadrants, due to extreme sensitivity when assessing the patient.
- c. Arestin was placed in the distal lingual pocket of tooth #29, due to the 8mm pocket depth. I was unable to reassess this pocket this semseter because of limited time, but plan to bring this patient in for reevaluation in the Spring semester.
- d. Patient received nutritional counseling to better understand if her diet was contributing to her periodontal disease. Patient received a grade of Moderate in her CAMBRA.

JUSTIFICATION

OUTCOME OF SRP

Following SRP, Jane Doe has experienced an extreme decline in her gingival sensitivity. Her gums have healed nicely, encapsulating her teeth much tighter than prior to her cleaning.



Wynn, R. L., Meiller, T. F., & Crossley, H. L. (n.d.). Drug Information Handbook for Dentistry (28th ed.). Lexicomp.