

Case Study

Grace Schroeder

LCC Dental Hygiene Class of 2015

Patient Profile and Chief Complaint

- Sex: Female
- Age: 30
- Occupation: Waitress/Cashier - Currently laid-off
- Home Life: [Recently] Single mother with two children, ages 5 and 10.
- Chief complaint: Has not had “cleaning” since high school



Medical History

- Is not currently taking any medications
- Familial history of high blood pressure, diabetes, and various cancers
- Smokes approximately 7 cigarettes a day; interested in smoking cessation
- Eats/drinks sugary foods/drinks several times per day
- BP: 110/65, P: 73, R: 16
- ASA II





Dental History

- Has history of extractions, amalgam fillings in posterior teeth, one composite MIFL on #9
- Last dental exam 1/2014 at White Bird for extraction
- Last radiographs at LCC Dental Clinic 2/2014 - FMS
- Last cleaning was 10+ years ago
- Patient reports history of moderate dental anxiety during hygiene visits, and a slightly sensitive gag reflex

Clinical Exam: Tissue Statements

Color: Generalized moderate hyperemia

Contour: Generalized moderate enlarged with localized slight recession

Consistency: Generalized slight fibrotic with localized moderate edematous

Clinical Exam: EO/IO Exam

2 mm abrasion on the facial gingival surface of tooth #27 due to tissue trauma

No other significant findings

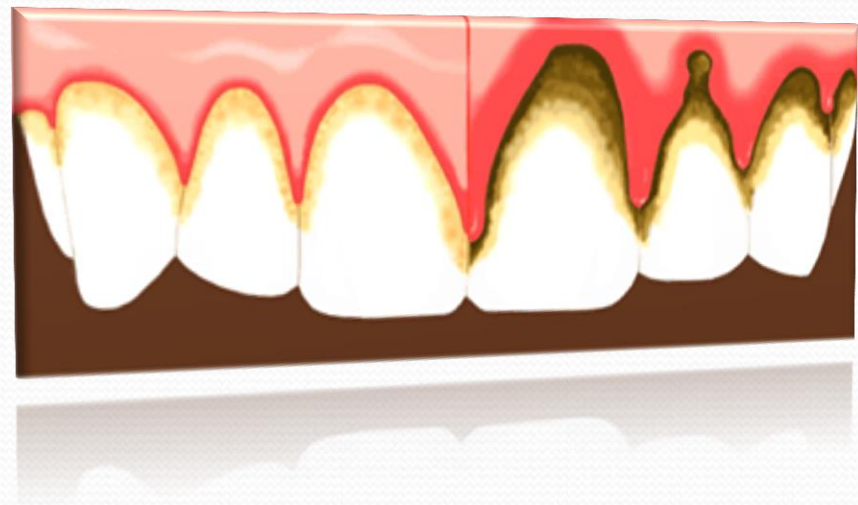
Initial Plaque-Free: 45%

Microscopic Risk Factor C

CRT: Mutans S. $>10^5$, lactobacilli $<10^5$

Periodontal Exam

- Bleeding: Slight BOP
Clinical Assessment Markers: Generalized slight CAL with localized moderate CAL, slight recession, and class I furcations
- Radiographic Evidence of Bone Loss: Generalized slight radiographic bone loss
- Statement of Inflammation: Generalized moderate papillary and marginal inflammation
- DHD Diagnosis: Generalized Case Type II
- Deposit Evaluation: 2.5/3



Periodontal Exam

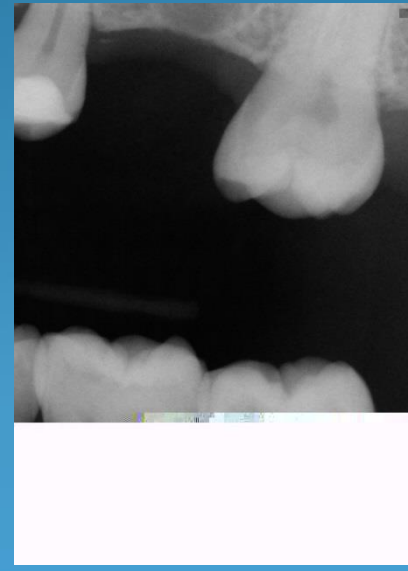
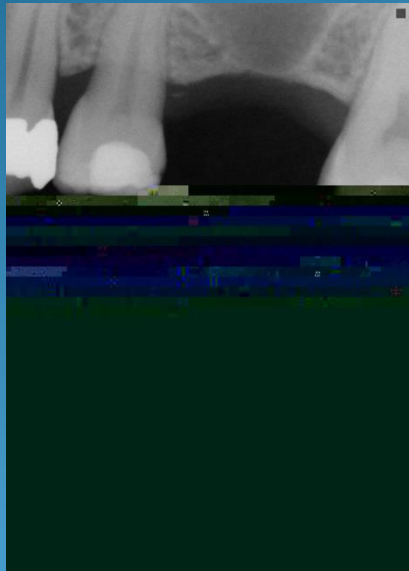
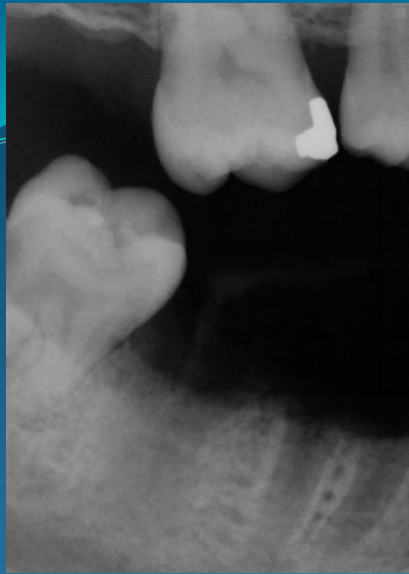
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- Probing Depths: Generalized 1-3 mm, with localized 4 mm
- Missing teeth include: #1, 2, 14, 16, 17, 30, and 31
- Slight CAL present on 25 teeth
- Moderate CAL present on 5 teeth

MOB																	
PD			3 1 3	3 2 4	3 2 3	3 3 4	3 2 2	2 1 2	3 2 3	3 2 3	3 2 3	3 2 2	3 2 3		3 3 3		
GM				1	1								1	1			
CAL			3 1 3	3 3 4	3 3 3	3 3 4	3 2 2	2 1 2	3 2 3	3 2 3	3 2 3	3 3 2	3 3 3		3 3 3		
MGJ																	
Bcl			●														
FG			1														
Ling							●					●					
PD			3 2 3	3 2 3	3 2 3	2 2 3	2 1 1	2 1 2	2 2 1	2 1 1	3 2 3	3 2 2	3 3 2		3 3 3		
GM																	
CAL			3 2 3	3 2 3	3 2 3	2 2 3	2 1 1	2 1 2	2 2 1	2 1 1	3 2 3	3 2 2	3 3 2		3 3 3		
MGJ																	
Tooth	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
MOB																	
PD	3 2 3			2 2 3	3 2 3	2 2 2	2 1 2	1 1 2	1 1 2	2 1 1	2 1 2	2 2 3	3 3 4	3 3 3	4 3 4		
GM																	
CAL	3 2 3			2 2 3	3 2 3	2 2 2	2 1 2	1 1 2	1 1 2	2 1 1	2 1 2	2 2 3	3 3 4	3 3 3	4 3 4		
MGJ																	
Ling																	
FG														1	1		
Bcl	●						●										
PD	3 2 3			2 2 3	3 1 2	2 1 2	3 2 2	2 1 2	2 1 2	2 1 2	2 1 2	2 2 1	3 1 2	3 2 3	3 3 3		
GM				2	2								3	1	1		
CAL	3 2 3			2 4 3	3 3 2	2 1 2	3 2 2	2 1 2	2 1 2	2 1 2	2 1 2	2 2 1	3 4 2	3 3 3	3 4 3		
MGJ																	
Tooth	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	

Summary Information

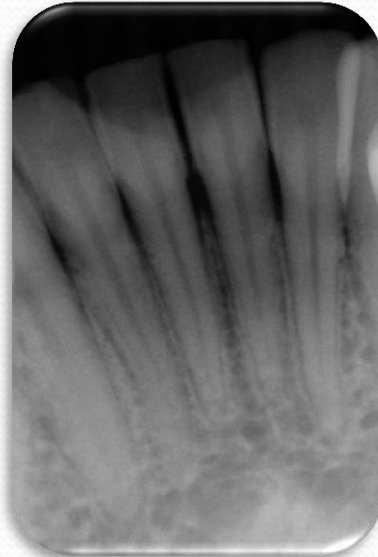
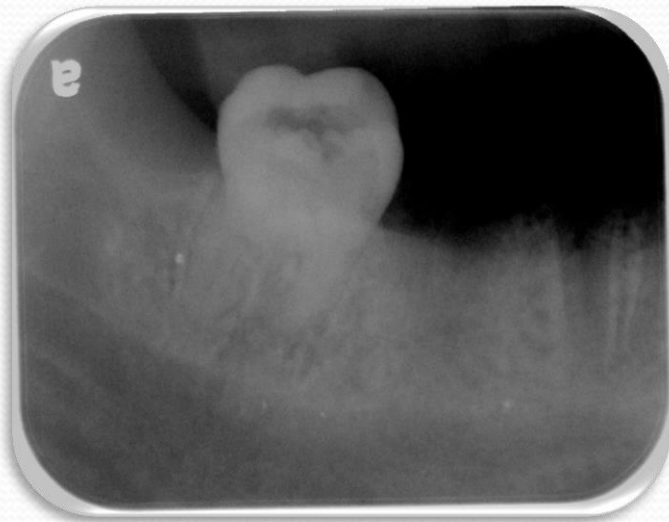
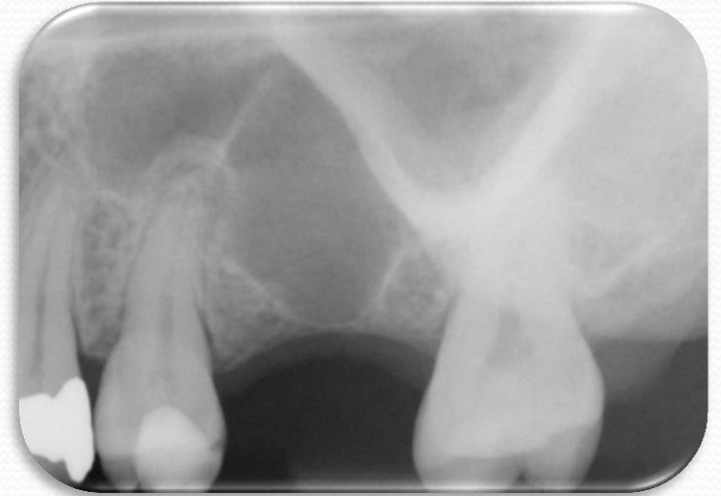
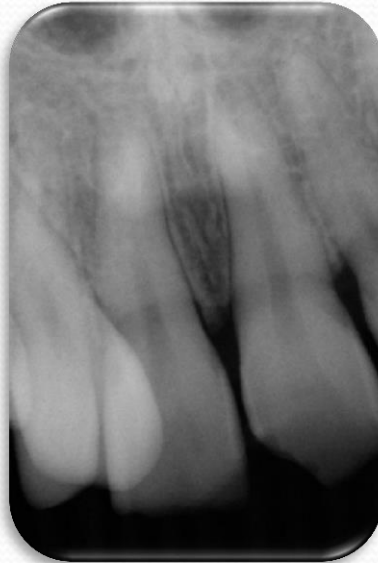
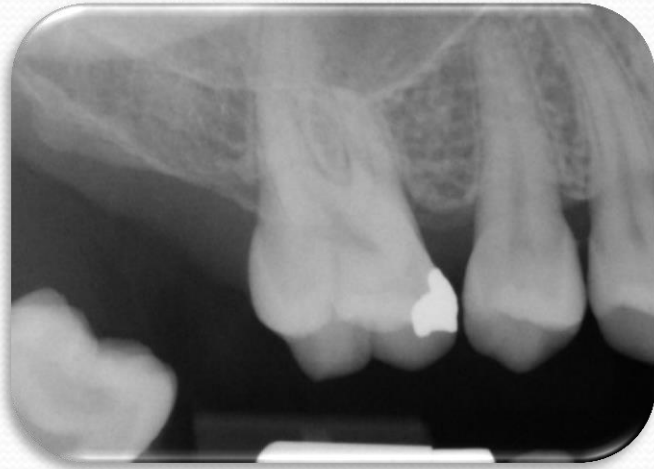
Date	Bleeding		Suppuration		Furcation		Mobility	PD > Alert		CAL < 0		CAL 1-3		CAL 4-5		CAL 6+	
	Teeth	Sites	Teeth	Sites	Teeth	Sites	Teeth	Teeth	Sites	Teeth	Sites	Teeth	Sites	Teeth	Sites	Teeth	Sites
1/5/2015	5	5	0	0	3	3	0	0	0	0	0	25	142	5	8	0	0



Radiographs - Bitewings

Bitewings reveal horizontal bone loss. Radiolucencies are visible where the root systems of #30 and #31 once were.

Radiographs – Select Periapicals

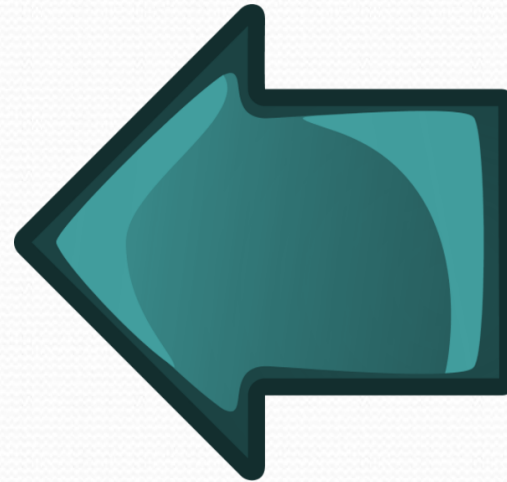


Study Model



Rationale for Case Selection

- Systemic & oral risk factors
 - Smoking
 - Moderate calculus levels
- Dental hygiene diagnosis
 - Perio: uncontrolled
 - Caries: uncontrolled
 - Homecare and Plaque Control: inadequate
- Influencing cultural & social factors: single mother with high stress levels
- Referrals
 - Decay: #3-L, 8-ML, 9-MIFL (recurrent), 15-O, 18-O, 19-O; C – extract retained root tips





Goals

- Maintain good oral homecare
- Reduce Plaque Index each appointment, increase caries management
- Stop progression of periodontal disease and attachment loss
- Return oral biota to state conducive with health
- Smoking cessation and nutritional counseling

Treatment (Tx) Plan & Implementation

Appt 1

Comprehensive Exam, Assessments, OHI, PI, Smoking Cessation

Appt 2

PI, OHI, Perio Scale UL & UR, Nitrous Oxide Sedation, Varnish, Smoking Cessation

Appt 3

PI, OHI, Perio Scale LL & LR, Nitrous Oxide Sedation, Varnish, Nutritional Counseling, Smoking Cessation

Appt 4

PI, OHI, Varnish

Continuing Care/Recare – 12 weeks later

Periodontal Re-evaluation, OHI, Perio Maintenance, Nitrous Oxide Sedation

Oral Hygiene Instruction

OH AIDS	Appt 1	Appt 2	Appt 3	Appt 4	Recare
45-Degree Sulcular Brushing	X	X	X	X	X
C-shaped Flossing	X				X
Soft Picks			X	X	
Perio-Aid	X	X			
Xylitol Gum		X	X		
CHX Prescription – 2x daily		X			X
Flouride Mouthrinse					X

Initial Appointment and Recare (Before and After)



Note the reduction in both dental biofilm and tissue inflammation.

Before and After



The clinician explored repeatedly around the retained root tips of C. This loosened the tips enough for the patient to remove them at home using floss.

Before and After



Before and After



Continuing Care/Recare Appointment

- Treatment plan was modified for recare appointment. Patient was unable to have nitrous oxide due to pregnancy. We added a Topical Desensitizing Medicament to the Tx plan.
- Deposit Evaluation: 1.5/2
- Final Plaque-Free score was 75%
- Smoking cessation achieved, but patient still consumes excessive sugar
- Statement of Inflammation: Generalized slight papillary and marginal with localized moderate
- Recall interval: 3 months
 - Rationale: check for signs of CAL, signs of healing/decrease in gingival inflammation

Personal Reflections

This patient was moderately difficult to manage during most appointments, but became unmanageable during the recare appointment when nitrous oxide sedation could not be used. Treatment on the patient was determined complete despite remaining deposits.

Homecare instruction and regular appointments were very beneficial for this patient. Although progress towards periodontal stability could be seen clinically, this patient still has a long road ahead of her. In addition to improving homecare to reduce gingival inflammation and calculus accumulation, the patient's restorative needs should be met.

QUESTIONS?

