



comprehensive
care

Case Presentation

Shahrzad Afghani

Jill Alderfer

Moham Ansari

Mina Hashemian

Rebecca Hsieh

Danielle Jaul

Narita Leong

Lee Lo

Outline

1. NPV

- Med Hx, Dent Hx, Soc Hx
 - HIV+, Medications & Effects
 - Marijuana Use

2. FMX, COE, Tx Plan

- Perio Consult
- Prosth Consult
- Endo Consult



3. Phase 1

- OHI
- UR SRP, LR Lim SRP, UL SRP, LL Prophy

4. Phase 2

- #11 F Composite
 - Pulp Cap EBD
- #7ML Composite
- #22 ML DF Composite
- #2 MOD Composite
- #15 MO Composite
 - Sandwich Technique EBD

5. 1 Month Evaluation

6. Phase 1 Extractions

7. Phase 3

- #13 RCT
 - MOD Sedative Fill
 - Cleaning Shaping
 - Obturation
- #13 PFM
- #14 PFM
 - #14 Laser Gingivectomy

8. Stay Plate

- Pre-Appointment Lab Work
- Facebow & Centric
- Advantages vs Disadvantages

9. Discussion/Q & A

10. Treatment Outlook

- Prognosis
- Alternative Treatment Options
- Considerations for Tx Planning

NPV – 12/14/16

Patient Profile:

- 69 year old male
- Medical Hx:
 - Stroke in 2009
 - HIV+
 - Dx. 1986
 - Viral Load = non-detectable
 - CD4 Count = 884
- Medications:
 - Atorvastatin
 - Descovy (HIV NRT I)
 - Viracept (HIV antiviral)
- Allergies:
 - NKDA
- Dental Hx:
 - Exam & Prophylaxis = 4-5 years ago
 - FMX = 12/14/16
- Social Hx:
 - Smokes marijuana 1x/day



Date	Prov./User	Code	Tx Note	Appr. User	Description
12/14/16	N. Leong	Note		R. Bajoria	Last Modified: 12/14/16
NPV					
__68 y.o. _M presents w/ cc of __having "lousy teeth" and needing extractions____					
MedHx: Stroke in 2009, HIV+ Dx 1986					
Meds: Atorvastatin, Ciracept, Descovi					
Allergies: NKDA					
Social Hx: None					
Surgical Hx: Basal cell on face that were surgically removed several years ago.					
DentalHx: Referred by SFGH 11/17/16 for comprehensive Tx Plan					
Clinical Exam: 4-5yrs ago with prophylaxis					
L&S Classification: Class 2					
Findings: Horizontal bone loss, with visible plaque and likely perio. High DMFT with likely EXTs on likely #19, 29, 30 with lower RPD					
Explained clinic policies, including length of appt and attendance policy.					
Assign to S1740					
Plan for FMX and COE					

Oral Manifestations of HIV :

HIV can make patients more susceptible to:

- Oral warts, which can also progress to oral cancer
- Fever blisters
- *Oral hairy leukoplakia*
- Thrush
- Canker sores
- Periodontal disease:
 - Necrotizing ulcerative periodontitis (NUP)
 - Linear gingival erythema (LGE)
- Caries (root or coronal)
- Poorly controlled recurrent ulcers or herpetic infections
- In addition to lesions of the oral mucosa, individuals with HIV may develop other oral problems resulting from changes in the specialized protective mechanisms of the oral environment:
 - alteration of the mucosal barrier
 - decreased salivary secretion
 - altered composition of saliva
 - changes in the oral microbial flora



Medication Side Effects Affecting Oral Health

Some HIV medications cause the following side effects:

- Xerostomia: reduced salivary flow.
- Frequent vomiting.
- Headache

Note: The combination of periodontal disease, reduced salivary flow, exposure to gastric fluids and poor oral hygiene increases the likelihood rampant caries.



What Should You Do As A Dentist?

- The principles of oral health care are the same for people with HIV as they are for all patients.
- Treatment planning for the patient with HIV follows the same principle as for other patients:
 1. Alleviate pain
 2. Restore function
 3. Prevent further disease
 4. Consider esthetic results
- Xerostomia should be addressed by a treatment consisting of replacement or stimulation of saliva
- Early identification of periodontal lesions and prevention of further periodontal deterioration.
- Educate patient about HIV and it's impact on their oral hygiene.

**THE MOST COMMON ORAL PROBLEMS LINKED
WITH HIV CAN BE TREATED.**



**TALK WITH YOUR DOCTOR OR DENTIST ABOUT
WHAT TREATMENT MIGHT WORK FOR YOU.**



Cannabis Use



- Most Beneficial Use:
 - Antiemetic properties especially for patients receiving chemotherapy
 - Ability to reduce intraocular pressure in the treatment of glaucoma
 - Used widely for cancer patients, AIDS patients, and other chronic diseases
- Heavy Use Associated with:
 - Respiratory problems
 - Bronchial complaints
 - Diarrhea
 - Abdominal cramps
 - Tachycardia
 - Acute panic and paranoia
 - Impairment with short-term memory and motor skills

Effects of Marijuana On Oral Health:

- Users report brushing their teeth less frequently than non-users
- Users are less likely to visit their dentist
- More likely to report feeling **dry mouth** after smoking
- Cannabis can affect leptin, a hormone that regulates appetite, which leads users to frequent snacking
- Gingival enlargement and alveolar bone loss is commonly seen in heavy users
- Candida is more commonly seen in cannabis users
- Research is still inconclusive if there is a link between cannabis and oral cancer, but cannabis does contain many known carcinogens.
- **Increased risk of caries and periodontal disease!!!**



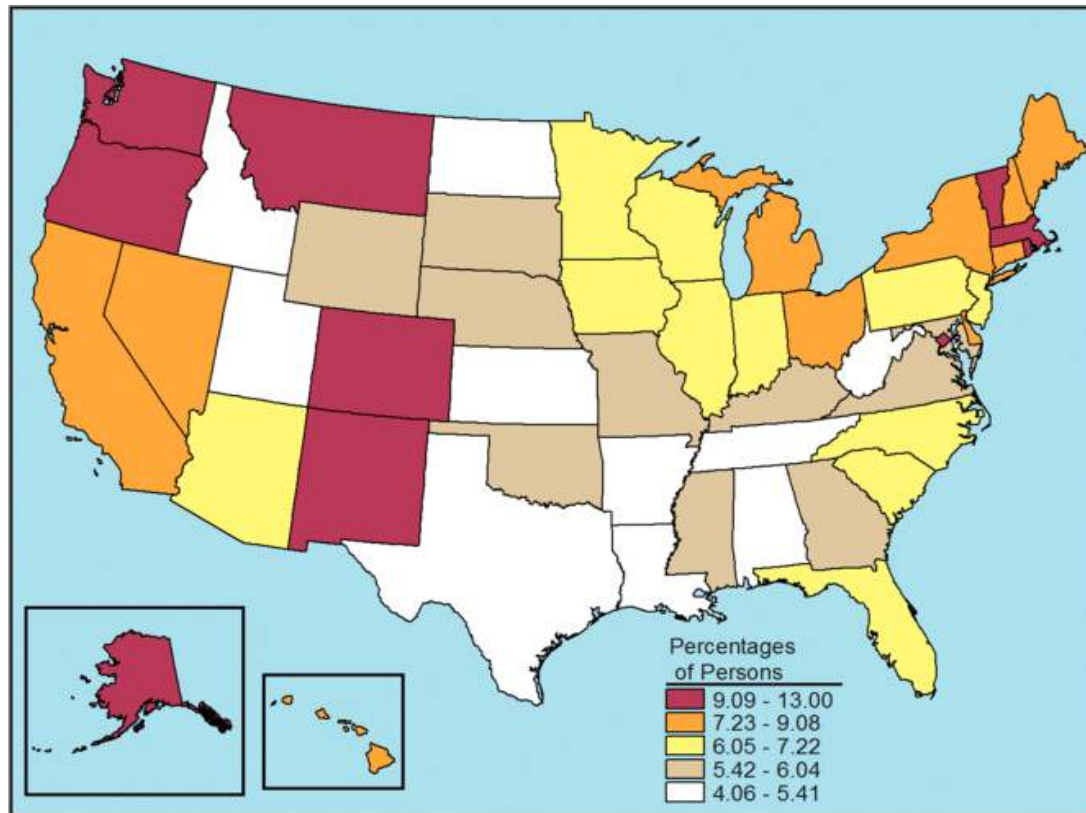
What Should You Do As A Dentist?

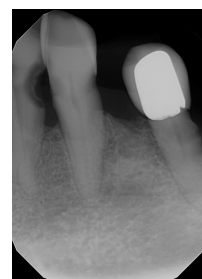
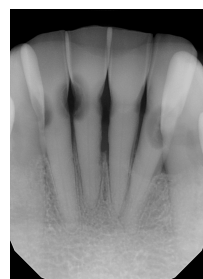
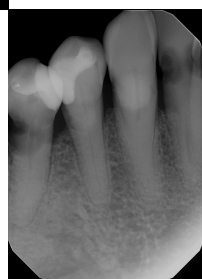
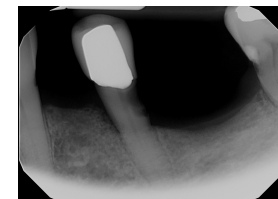
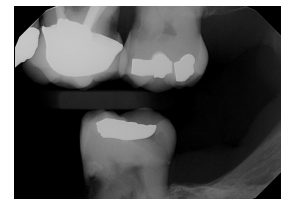
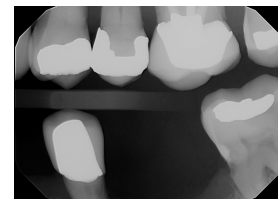
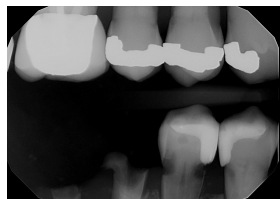
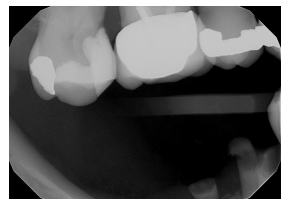
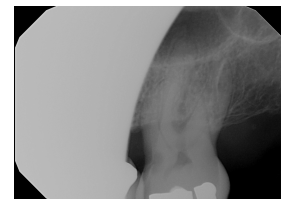
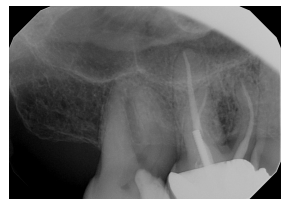
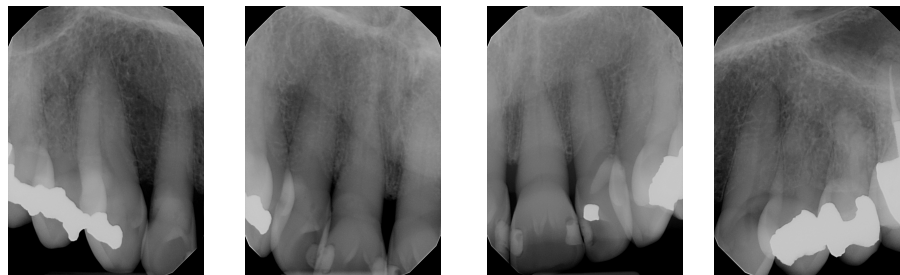
- Ask in a non-judgmental manner about usage.
- In certain states, marijuana usage is illegal. Patient may not want to disclose this illegal activity.
- Educate your patient on proper hygiene practices and how marijuana impacts oral health.



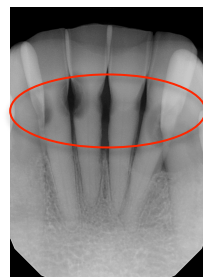
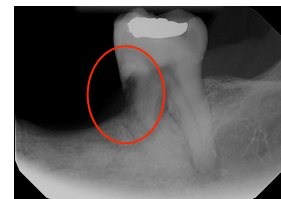
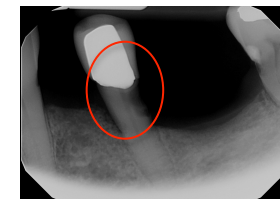
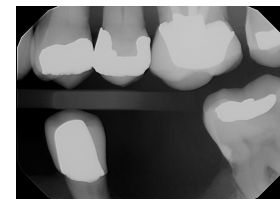
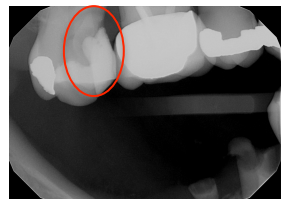
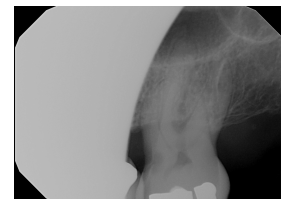
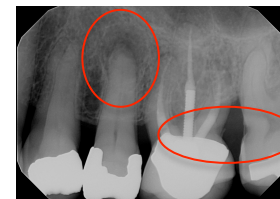
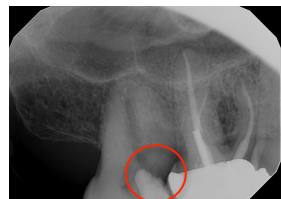
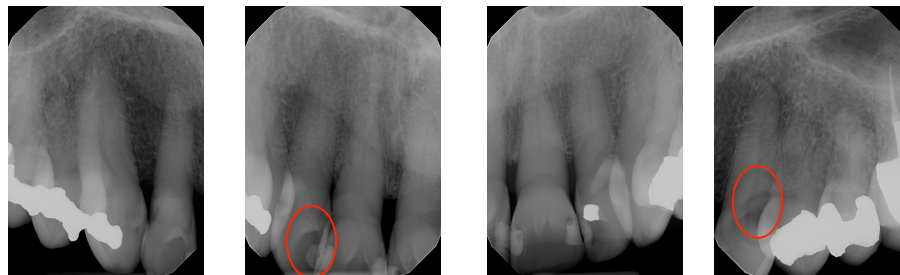
It's more common than you think....

- ***Marijuana Use in the Past Month among Persons Aged 12 or Older, by State: Percentages, Annual Averages Based on 2011 and 2012 NSDUHs***





FMX
12/14/16



FMX
12/14/16

COE - EO/IO - 2/1/17

EO/TMJ/IO/X-RAY		
Form Question	Answer	Date
CLINICAL FINDINGS		
Extra and Intraoral Examination Description		
Intraoral	WNL	02/01/2017
Extraoral	WNL, no lymphadenopathy or swelling	02/01/2017
☐ Diagram of Extra-Intraoral Examination (double click to display) ☐ Guidelines for Prescribing Dental Radiographs (pg 1) ☐ Guidelines for Prescribing Dental Radiographs (pg 2) ☐ Clinical Situations for Radiographs (pg 3)		
RADIOGRAPHIC INTERPRETATION SUMMARY		
Significant Xray Findings (please describe)	High DMFT with generalized horizontal bone loss	
☒ Periodontal Bone Loss?	Y	
Generalized	Y	
Moderate	Y	
Horizontal	Y	
☒ Radiographic caries activities?	Y	
Moderate	Y	
Gross	Y	
☒ Bone Pattern/Pathology?	N	
CRANIOMANDIBULAR ARTICULATION: INFORMATION REQUIRED		
1) History of TMJ signs/symptoms?	N	
a) Comments		
2) History of trauma to jaws, head, neck?	N	
a) Comments		
3) History of headache/neckache?	N	
a) Comments		
4) Joint or muscle tenderness on palpation?		
a) Masseter:		
b) Temporalis		
c) Posterior Cervical		
5) Deviation on opening/closing ?	N	02/01/2017
a) Straight, how many mm	36mm	02/01/2017
b) Laterotrusion, how many mm?	13mm left and 16mm right	02/01/2017
6) Maximum opening, how many mm?	60mm	02/01/2017
a) Limited?	N	02/01/2017
7) Joint noises?	N	02/01/2017
a) Comments:		
8) Parafunction?	N	02/01/2017
a) Clenching?	N	02/01/2017
b) Attrition, history, signs or symptoms?	N	02/01/2017
c) Fremitus mobility?	N	02/01/2017
9) Adequate interarch space for restorations?	N	02/01/2017
a) Interdisciplinary Classification of Restorative Dentistry	Class II Crown and Bridge	02/01/2017
PROSTHODONTIC EXAMINATION		
A Prosthodontic Consultation is recommended in any of the following situations and at the discretion of the attending faculty.		
1) A patient has missing teeth?	Y	02/01/2017
2) A patient will have teeth extracted?	Y	02/01/2017
3) Patient has short clinical crowns?		
4) Patient has compromised teeth?		
5) Patient has occlusal trauma?		
6) Comments:		

EO/TMJ/IO/X-RAY		
Form Question	Answer	Date
☒ Bone Pattern/Pathology?	N	02/01/2017
CRANIOMANDIBULAR ARTICULATION: INFORMATION REQUIRED		
1) History of TMJ signs/symptoms?	N	02/01/2017
a) Comments		
2) History of trauma to jaws, head, neck?	N	02/01/2017
a) Comments		
3) History of headache/neckache?	N	02/01/2017
a) Comments		
4) Joint or muscle tenderness on palpation?		
a) Masseter:		
b) Temporalis		
c) Posterior Cervical		
5) Deviation on opening/closing ?	N	02/01/2017
a) Straight, how many mm	36mm	02/01/2017
b) Laterotrusion, how many mm?	13mm left and 16mm right	02/01/2017
6) Maximum opening, how many mm?	60mm	02/01/2017
a) Limited?	N	02/01/2017
7) Joint noises?	N	02/01/2017
a) Comments:		
8) Parafunction?	N	02/01/2017
a) Clenching?	N	02/01/2017
b) Attrition, history, signs or symptoms?	N	02/01/2017
c) Fremitus mobility?	N	02/01/2017
9) Adequate interarch space for restorations?	N	02/01/2017
a) Interdisciplinary Classification of Restorative Dentistry	Class II Crown and Bridge	02/01/2017
PROSTHODONTIC EXAMINATION		
A Prosthodontic Consultation is recommended in any of the following situations and at the discretion of the attending faculty.		
1) A patient has missing teeth?	Y	02/01/2017
2) A patient will have teeth extracted?	Y	02/01/2017
3) Patient has short clinical crowns?		
4) Patient has compromised teeth?		
5) Patient has occlusal trauma?		
6) Comments:		

COE – Maxillary – 2/1/17

[illegible]

COE – Mandibular - 2/1/17

COE Periodontal Chart

[illegible][illegible]

COE –Caries Risk Assessment– 2/1/17

Chart In Progress Tx History Forms Attachments Perio Tx Plans Medications

Change Date: 02/03/2017 Last Appr: Hirose, Ronald Approve

EO/TMJ/IO/X-RAY Specialty Consults CRA-Adult 2015 CAMBRA II CRA-Adult 2009

Form Question Answer

CARIES RISK ASSESSMENT FORM FOR AGES 6 YEARS - ADULTS

1) COE, POE or Recall COE

DISEASE INDICATORS

2) Cavitated carious lesions in dentin (clinically evident, radiographic radiolucencies) Y

3) Approximal non-cavitated enamel lesion? Y

4) Smooth surface non-cavitated enamel lesion (white spots) N

5) Restorations or extractions due to caries, within last 3 years for initial visit (COE) or within last 1 year for recall (POE or CRA Recall)? N

RISK FACTORS (Biological predisposing factors)

6) Visible heavy plaque? N

7) Are There significant caries experience (high DMFT, interproximal restorations, root caries, direct and indirect restorations, fillings, crowns and bridges)? Y

8) Difficulty with home care, compliance issues (physical and psychological restrictions) N

9) Is there caries experience of the Mother, Caregiver and/or Siblings for patients age 6-14? N

10) Orthodontic or prosthodontic appliances (removable partial dentures)? N

11) Retentive pits and fissures likely to become carious? N

12) Exposed roots? Y

13) Frequent snack (>3Xdaily between meals), diet high in sugar/carbohydrates Y

14) Dry mouth from age, recreational drug use, medication, radiation, systemic condition (clinical observation)? N

Bacterial Challenge - NO DATA NEEDED

15a) APT test results -NO DATA NEEDED

15b) ATP Number - NO DATA NEEDED

Saliva Flow

16a) Saliva Flow Rate ml/min? 5

16b) Date Tested? 02/03/2017

16c) Adequate saliva flow (at or above 1.9ml/min stimulated with Spry gum) Y

16d) Inadequate saliva flow (a value at or below 0.9ml/min) is indicative of salivary hypofunction. N

PROTECTIVE FACTORS

17) Adequate fluoride exposure from being in fluoridated community (lives, works or goes to school), toothpaste use, mouthrinse, varnish, topical fluoride application? Y

18) Lives, works or goes to school in fluoridated community? Y

19) Fluoride toothpaste at least 2x/d Y

20) Fluoride mouthrinse daily (0.05% NaF) Y

21) Antiseptic mouthwash or Antimicrobial rinses used? Y

EO/TMJ/IO/X-RAY Specialty Consults CRA-Adult 2015 CAMBRA II CRA-Adult 2009

Form Question Answer Date

YES DISEASE INDICATORS

2) Cavitated carious lesions in dentin (clinically evident, radiographic radiolucencies) 02/03/2017

YES RISK FACTORS

7) Are There significant caries experience (high DMFT, interproximal restorations, root caries, direct and indirect restorations, fillings, crowns and bridges) 02/03/2017

12) Exposed roots

13) Frequent snack (>3Xdaily between meals), diet high in sugar/carbohydrates

16a) Saliva Flow Rate ml/min 5

16b) Date Tested 02/03/2017

16c) Adequate saliva flow (at or above 1.9ml/min stimulated with Spry gum)

YES PROTECTIVE FACTORS

17) Adequate fluoride exposure from being in fluoridated community (lives, works or goes to school), toothpaste use, mouthrinse, varnish, topical fluoride application 02/03/2017

-> Lives, works or goes to school in fluoridated community

-> Fluoride toothpaste at least 2x/d

-> Fluoride mouthrinse daily (0.05% NaF)

18) Antiseptic mouthwash or Antimicrobial rinses used

-> Antiseptic mouthwash

-> Crest

20) LEVEL OF CARIES RISK IS: HIGH 02/03/2017

21) Caries prevention and intervention is (select one)

22) Select patient language for instructions: English 02/03/2017

23) Patient received instructional and educational material Y 02/03/2017

24) Is the patient willing to comply with preventive recommendations? Y 02/03/2017

25) IS YOUR PATIENT A DENTICAL PATIENT? IF YES PLEASE FILL OUT THE CAMBRA II FORM ON THE NEXT TAB Y 02/03/2017

CARIES RISK DETERMINATIONS/INTERVENTIONS AND RECOMMENDATIONS

Assess the balance between Risk Factors and Protective Factors to determine whether the patient is LOW-MODERATE-HIGH or EXTREME Caries Risk.

Any one YES disease indicator signifies "HIGH RISK".

****Note: EXTREME RISK = High Risk + Severe Hyposalivation****

CRITERIA - LOW TO MOD (DOUBLE CLICK TO DISPLAY)

CRITERIA - HIGH TO EXTREME (DOUBLE CLICK TO DISPLAY)

ATP METER USE TO MEASURE BACTERIAL LOAD (part A) DOUBLE CLICK TO OPEN

ATP METER USE TO MEASURE BACTERIAL LOAD (part B) DOUBLE CLICK TO OPEN



CAMBRA



Calculate

COE – Treatment Notes – 2-1-17

12/14/16 R. Nazari Note F. Vincula Last Modified: 12/14/16

FMX completed

02/01/17 N. Leong Note D. Coluzzi Last Modified: 02/01/17

S:

-CC: Pt presents for COE without any pain or symptoms. Pt says he needs a lot of dental work done.

-HPI: Most recent Exam = 4yrs ago, Prophyl = 4 yrs ago, FMX = 12/14/16

-Symptoms: None

-Med Hx: HIV+ Dx 1986, Stroke in 2009

-Surg Hx: None

-Soc Hx: Smokes marijuana 1x/day

-Allergies: NKDAs

O:

-Vitals: BP = 114/77, P = 79

-Findings: As charted on odontogram

-Results: CRA = High, due to active caries and high DMFT

-Medications: Atorvastatin, Descovy, Truvada, Viracept

A:

-Summary of Pt: 68 yr old presents WN WD NAD for COE without any pain or symptoms

PERIO

Consult w/Dr. Hiura

-CC: I need a lot of dental work done.

-Dx: Generalized severe chronic periodontitis

-Etiology: Plaque = Plaque, deep pockets

PERIO

Consult w/Dr. Hiura

-CC: I need a lot of dental work done.

-Dx: Generalized severe chronic periodontitis

-Etiology: Primary = Plaque, deep pockets

-Px: Favorable = #6,7,8,9, 24, Questionable = #4,5,10,11,12,13,18 Unfavorable = #2,3,14, 15, Hopeless = 29

-Restoratively Hopeless = 14,18,20,23,25,26,29,30

-Rec Tx: UR and UL SRPs, lim dentition SRP on remaining lower teeth.

ENDO

-Consult w/Dr. Rising

-CC: I need a lot of dental work, but no pain. #18 used to hurt but does not anymore.

Vitality Tests

#12: Pockets B(323)L(623), P/P = -/-, Cold = -, EPT = 29, Bite = -

#13: Pockets B(323)L(425), P/P = -/-, Cold = -, EPT = 52, Bite = -

#14: Pockets B(336)L(326), P/P = -/-, Cold = -, EPT = 80, Bite = -

#18: Pockets B(323)L(334), P/P = -/-, Cold = -, EPT = 80, Bite = -

-Dx:

#12: Normal pulp, normal apex

#13: Normal pulp, asymptomatic apical periodontitis PAR

#14: Previously RCT with normal apex

#18: Necrotic Pulp with asymptomatic apical periodontitis PAR on distal root

-Etiology: Primary = Plaque

-Rec Tx:

#12 - No Tx

#13 - RCT for Pre-doc, B/U, Crown

#14 - Watch, RCT is good, B/U, Crown

#18 - EXT

-Dx/Tx: To be confirmed next appointment.

-Pt's Progress: Pt will return 2/3/17 at 8:30AM to complete COE.

P:

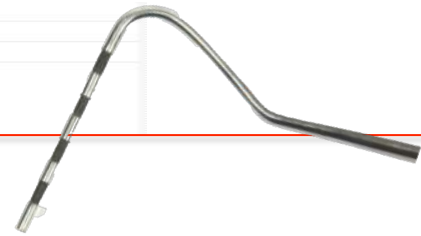
-NV: Pt will return 2/3/17 at 8:30AM to complete COE

-Further Tx Plan: TBD 2/3/17

-Medications: None

-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates

-Pt's Goal: To regain oral health and replace edentulous spaces.



COE Continued – 2/3/17

EO/TMJ/O/X-RAY	Specialty Consults	CRA-Adult 2015	CAMBRA II	CRA-Adult 2009
Form Question	Answer	Date		
SPECIALTY CONSULTATIONS				
1) ENDODONTICS:	-Consult w/Dr. -CC: I need a lot of dental work, but no pain. #18 used to hurt but does not anymore. Vitality Tests #12: Pockets B(323)L(623), P/P = -/-, Cold = -, EPT = 29, Bite = - #13: Pockets B(323)L(425), P/P = -/-, Cold = -, EPT = 52, Bite = - #14: Pockets B(336)L(326), P/P = -/-, Cold = -, EPT = 80, Bite = - #18: Pockets B(323)L(334), P/P = -/-, Cold = -, EPT = 80, Bite = - -Dx: #12: Normal pulp, normal apex #13: Normal pulp, asymptomatic apical periodontitis PAR #14: Previously RCT with normal apex #18: Necrotic Pulp with asymptomatic apical periodontitis PAR on distal root -Etiology: Primary = Plaque -Rec Tx: #12 - No Tx #13 - RCT for Pre-doc, B/U, Crown #14 - Watch, RCT is good, B/U, Crown #18 - EXT	02/01/2017		
2) ORAL MEDICINE:				
3) ORTHODONTICS:				
4) PERIODONTICS:	-Consult w/Dr. Hura -CC: I need a lot of dental work done. -Dx: Generalized severe chronic periodontitis -Etiology: Primary = Plaque, deep pockets -Px: Favorable = #6,7,8,9, 24, Questionable = #4,5,10,11,12,13,18 Unfavorable = #2,3,14, 15, Hopeless = 29 -Restoratively Hopeless = 14,18,20,23,25,26,29,30 -Rec Tx: UR and UL SRPs, lim dentition SRP on remaining lower teeth.	02/01/2017		



5) PROSTHODONTICS:

-Consult w/Dr. Preble

-CC: I need a lot of dental work, extractions, and want to replace my teeth.

-Dx:

#17,19,21,31,32 - missing

#18 - existing O amalgam - O recurrent decay, M root caries, PAR - non-restorable, EXT

#20 - existing PFM, D root caries, C>R - non-restorable, EXT

#23,25,26 - MD decay C>R - non restorable, EXT

#24 - C>R - EXT

#28 - existing DO comp, B comp - D open w/recurrent, MD root caries - would need Post/Core,RCT, Crown, poor abutment, EXT

#29 - existing MO compo w/M open and extensive caries - non-restorable EXT

#30 - root tips - EXT

Remaining teeth will be #22 and #27

-#22 will be restored first, if non restorable, then consider Lower CD

-Rec Tx: Stayplate delivered upon EXTs and RPD after 6-8wk healing.

02/03/2017

6) OTHER:

7) BEHAVIORAL:

Treatment Plan - 2/3/17

Tx Option 1 + (New Option)											Hide Expand	
Tx Option Description Tx Option 1												
Provider	Diagnosis	Procedure	Procedure Description	Site	Surf.	Phase	Seq.	Sts.	Estimate	Ins. Est.	Approve Option	
S1740	Caries risk high	D0406	Caries Risk Assessment			0	1	C	25.00	25.00	Print	
S1740	Caries risk high	D9640	5000 ppm Tooth Paste (Control Rx)			0	1	C	25.00	25.00	Pt. Accept/Print	
S1740	Caries risk high	D9901	Chlorhexidine			0	1	C	25.00	25.00		
S1740	Caries risk high	D1206	Topical fluoride varnish			0	1	C	6.00	6.00		
S1740	Subgingival calculus	D4341	Scaling/Root planing by quad	UR		1	1	C	52.00	0.00		
S1740	Subgingival calculus	D4347	Scaling and RP, 1-3 teeth per quad	LR		1	1	C	32.00	0.00		
S1740	Plaque induced gingival disease without local contributing f	D1330	Oral hygiene instr with Kit			1	1	C	0.00	0.00		
S1740	Subgingival calculus	D4341	Scaling/Root planing by quad	UL		1	2	C	52.00	0.00		
S1740	Subgingival calculus	D4950	1 Month Evaluation			1	3	C	0.00	0.00		
S1740	Caries of dentine	D2331	Composite 2 surf. - ant.	22	DF	2	1	C	60.00	60.00		
S1740	Caries of dentine	D2331	Composite 2 surf. - ant.	22	ML	2	1	C	60.00	60.00		
S1740	Recurrent caries-NOS	D2392	Composite 2 surf. - posterior	2	MO	2	2	P	48.00	48.00		
S1740	Recurrent caries-NOS	D2331	Composite 2 surf. - ant.	7	ML	2	2	C	60.00	60.00		
S1740	Caries of dentine	D2940	Protective Restoration (sedative fill)	13		2	2	C	45.00	45.00		
S1740	Caries of dentine	D3321	Bicuspid RCT - multi root	13		2	2	I	468.00	0.00		
S1740	Caries of dentine	D2950	B/U amal or composite	13		2	2	P	99.00	0.00		
S1740	Caries of dentine	D2392	Composite 2 surf. - posterior	15	MO	2	3	C	48.00	48.00		
S1740	Caries of dentine	D2330	Composite 1 surf. - ant.	11	F	2	4	C	55.00	55.00		
S1740	Caries of dentine	D2752	PFM noble metal	13	MODBL	3	1	I	450.00	0.00		
S1740	Caries of dentine	P0309	Crown Steps	13		3	1	I	0.00	0.00	Print	
S1740	Recurrent caries-NOS	D2752	PFM noble metal	14	MODBL	3	2	I	450.00	0.00	Pt. Accept/Print	
S1740	Recurrent caries-NOS	D2949	B/U block undercut	14		3	2	C	68.00	0.00		
S1740	Recurrent caries-NOS	P0309	Crown Steps	14		3	2	I	0.00	0.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	30		3	3	C	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	29		3	3	C	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	28		3	3	C	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	26		3	3	P	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	25		3	3	P	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	24		3	3	P	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	23		3	3	P	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	20		3	3	C	41.00	41.00		
S1740	Caries of dentine	D7140	Simple tooth extraction/root	18		3	3	C	41.00	41.00		
S1740	Partially edentulous mandible	D5821	Interim partial denture (mandibular)	LA		3	3	P	250.00	0.00	Print	
S1740	Partially edentulous mandible	P0315	Interim Partial Denture Steps			3	3	P	0.00	0.00	Pt. Accept/Print	
S1740	Partially edentulous mandible	D5214	Mand RPD-metal Fmk (incl. clasps-rests-teeth)			3	4	P	520.00	0.00		
S1740	Partially edentulous mandible	P0314	Rem Partial Denture Steps			3	4	P	0.00	0.00		
S1740		P0917	Recall			4	1	P	0.00	0.00		
S1740	Caries risk high	D0120	Periodic oral evaluation			4	1	P	15.00	15.00		
S1740	Caries risk high	D0406	Caries Risk Assessment			4	1	P	25.00	25.00		
S1740	Caries risk high	D9640	5000 ppm Tooth Paste (Control Rx)			4	1	P	25.00	25.00		
S1740	Caries risk high	D9901	Chlorhexidine			4	1	P	25.00	25.00		
S1740	Caries risk high	D1206	Topical fluoride varnish			4	1	P	6.00	6.00		
S1740	Subgingival calculus	D4910	Perio maintenance			4	1	P	52.00	0.00		
S1740	Caries risk high	D0406	Caries Risk Assessment			4	2	P	25.00	25.00		
S1740	Caries risk high	D0120	Periodic oral evaluation			4	2	P	15.00	15.00		
S1740	Subgingival calculus	D4910	Perio maintenance			4	2	P	52.00	0.00		
S1740	Caries risk high	D0406	Caries Risk Assessment			4	2	P	25.00	25.00		
S1740	Caries risk high	D9640	5000 ppm Tooth Paste (Control Rx)			4	2	P	25.00	25.00		
S1740	Caries risk high	D9901	Chlorhexidine			4	2	P	25.00	25.00		
S1740	Caries risk high	D1206	Topical fluoride varnish			4	2	P	6.00	6.00		
New item			Estimated Total						3588.00	1043....		

COE Finished
2/3/17

OHI + UR SRP & LR Lim SRP – 2/22/17

02/22/17

Pt's Goal: To regain oral health and replace edentulous spaces.

N. Leong Note Y. Rajendran Last Modified: 02/22/17

S:

- CC: Pt presents for UR SRP and LR limited SRP (#22 and #27) without any pain or symptoms.
- HPI: Most recent Exam = 2/2/17, Prophy = 4 yrs ago, FMX = 12/14/16
- Symptoms: None
- Med Hx: HIV+ Dx 1986, Stroke in 2009
- Surg Hx: None
- Soc Hx: Smokes marijuana 1x/day
- Allergies: NKDAs

O:

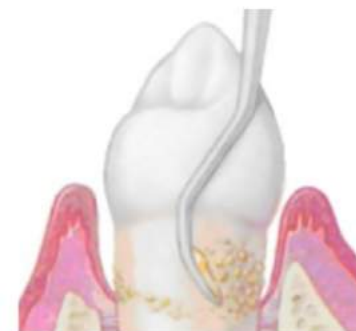
- Vitals: BP = 107/71, P = 71
- Findings: As charted on odontogram
- Results: CRA = High, due to active caries and high DMFT
- Medications: Atorvastatin, Descovy, Viracept

A:

- Summary of Pt: 68 yr old presents WN WD NAD for UR SRP and LR limited SRP (#22 and #27) without any pain or symptoms



Scaling



Planing

PERIO

- Supervised by Dr. Rajendran
- Dx: Generalized severe chronic periodontitis
- Etiology: Primary = Plaque, deep pockets
- Px: Favorable = #6,7,8,9, 24, Questionable = #4,5,10,11,12,13,18 Unfavorable = #2,3,14, 15, Hopeless = 29
- Restoratively Hopeless = 14,18,20,23,25,26,29,30
- Rec Tx: UR and UL SRPs, lim dentition SRP on remaining lower teeth.

-OHI given today focusing on flossing. Pt reports not flossing unless there is something stuck in teeth. Importance of flossing emphasized regarding interproximal plaque removal/area where bacteria harbors/periodontitis/bone loss. Flossing was demonstrated and explained to patient. Next visit (Friday) patient will be asked to demonstrate flossing, followed by instruction with brushing technique.

-UR SRP and LR limited SRP/dentition (#22 and #27) performed today. UR LA achieved using 2% Lidocaine 1:100k epi for PSA, MSA, and GP block using 1/3,1/3,1/3 carpules respectively. Local infiltration with 4%Septocaine with 1:100k epi use for areas of #22 and #27. Cavitron and handscalers used. Lower teeth were given a debridement due to extractions being done after Phase 2 and 3.

-Pt's Progress: Pt will return 2/24/17 at 8:30AM for UL SRP

P:

- NV: Pt will return 2/24/17 at 8:30AM for UL SRP and
- Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch
- #22 will be restored first, if non restorable, then consider Lower CDPhase 2 will start with restoring #22 (determines lower RPD vs CD), followed by #13 RCT, then other Phase 2 Tx's, Followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process.
- Medications: None
- RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates
- Medications: None
- Pt's Goal: To regain oral health and replace edentulous spaces.

OHI + UL SRP & LL Prophy - 2/24/17

02/24/17	N. Leong	Note	Y. Rajendr	Last Modified: 02/24/17
S:				
-CC: Pt presents for UL SRP without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx 1986, Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 111/72, P = 71				
-Findings: As charted on odontogram				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for UL SRP without any pain or symptoms				
PERIO				
-Supervised by Dr. Rajendran				
-Dx: Generalized severe chronic periodontitis				
-Etiology: Primary = Plaque, deep pockets				
-Px: Favorable = #6,7,8,9, 24, Questionable = #4,5,10,11,12,13,18 Unfavorable = #2,3,14, 15, Hopeless = 29				
-Restoratively Hopeless = 14,18,20,23,25,26,29,30				
-Rec Tx: UR and UL SRPs, lim dentition SRP on remaining lower teeth.				
-OHI given today focusing on flossing especially between #14 and #15 due to food trap area. Proxy brush dispensed with instructions.				
Patient was also asked to demonstrate flossing, followed by instruction with brushing technique.				
-UL SRP performed today. UL LA achieved using 2% Lidocaine 1:100k epi for PSA, MSA, and GP block using 1/3,1/3,1/3 capules respectively.				
-Pt's Progress: Pt will return 3/2/17 at 8:30AM to continue with Phase 2 treatment.				
P:				
-NV: Pt will return 3/2/17 at 8:30AM for Phase 2 Tx				
-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch				
-#22 will be restored first, if non restorable, then consider Lower CDPhase 2 will start with restoring #22 (determines lower RPD vs CD), followed by #13 RCT, then other Phase 2 Tx's. Followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process.				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				

#11 F Comp – 2/24/17



- Direct pulp cap
- Closed Sandwich
- Retraction Cord

02/24/17	N. Leong	Note	R. Hirose	Last Modified: 02/24/17
S: -CC: Pt presents for #11F composite without any pain or symptoms. -HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, FMX = 12/14/16 -Symptoms: None -Med Hx: HIV+ Dx 1986, Stroke in 2009 -Surg Hx: None -Soc Hx: Smokes marijuana 1x/day -Allergies: NKDAs O: -Vitals: BP = 111/72, P = 71 -Findings: As charted on odontogram -Results: CRA = High, due to active caries and high DMFT -Medications: Atorvastatin, Descovy, Viracept				
A: -Summary of Pt: 68 yr old presents WN WD NAD for #11 F composite without any pain or symptoms -LA achieved with 4% Septocaine with 1:100K epi with 1/4 caraple for local infiltration around #11. Suspect previous restoration fell out as class V preparation exists. Caries removal completed with #6 round bur on slowspeed, resulting in very deep preparation overall. Final preparation cavosurface smoothed with 330D, with retention points on M and D incisal corners and gingival incisal troughs placed with 1/4 round bur on highspeed handpiece. Incisal 1mm bevel placed with 135EF. Distal incisal pinpoint exposure less than 0.5x0.5mm observed. Direct pulp cap with DiCal placed in distal incisal area. Cavity conditioner applied followed by Fuji IX liner on the facial axial wall. #2 cord packed for gingival retraction. Etched, bond, placed C2 shade packable composite placed in 5 increments using tofflemire band to contour D and M sides of tooth. Excess removed with white stone bur, and polished with brownie point, sofex discs, and jiffy brush. -Pt's Progress: Pt was informed of deep filling and pinpoint exposure and potential possibility for symptoms in the future. Pt understands, accepts, and left happy with #11 filling. Pt will return 3/2/17 at 8:30AM to continue with Phase 2 treatment.				
P: -NV: Pt will return 3/2/17 at 8:30AM for Phase 2 Tx -Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch -#22 will be restored first, if non restorable, then consider Lower CDPhase 2 will start with restoring #22 (determines lower RPD vs CD), followed by #13 RCT, then other Phase 2 Tx's, followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process. -Medications: None -RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates -Medications: None -Pt's Goal: To regain oral health and replace edentulous spaces.				

Direct Pulp Cap

Definition: medication placed directly over the exposed pulp

Goal: maintain pulp vitality and health

Advantages: avoid extensive treatment

Materials: CaOH or MTA → different success rates



Calcium Hydroxide (CaOH)

“Gold standard” of direct pulp-capping materials for decades

Advantages:

- Possesses antibacterial properties
- Releases bioactive molecules from dentin matrix (BMP & TGF- β 1)*
→ Stimulate pulp repair and dentin remineralization

Disadvantages:

- No adhesion to dentin
- Poor seal
- Soluble and subject to dissolution over time

*BMP = Bone-Morphogenetic Protein

*TGF- β 1 = Transforming Growth Factor-Beta



Mineral Trioxide Aggregate (MTA)

New cement comprised of CaOH

Advantages:

- Forms CaOH →
Biocompatibility & pulpal repair
- Provides some seal to tooth structure

Disadvantages:

- Highly soluble
- Prolonged setting time (~2 hrs 45 min)



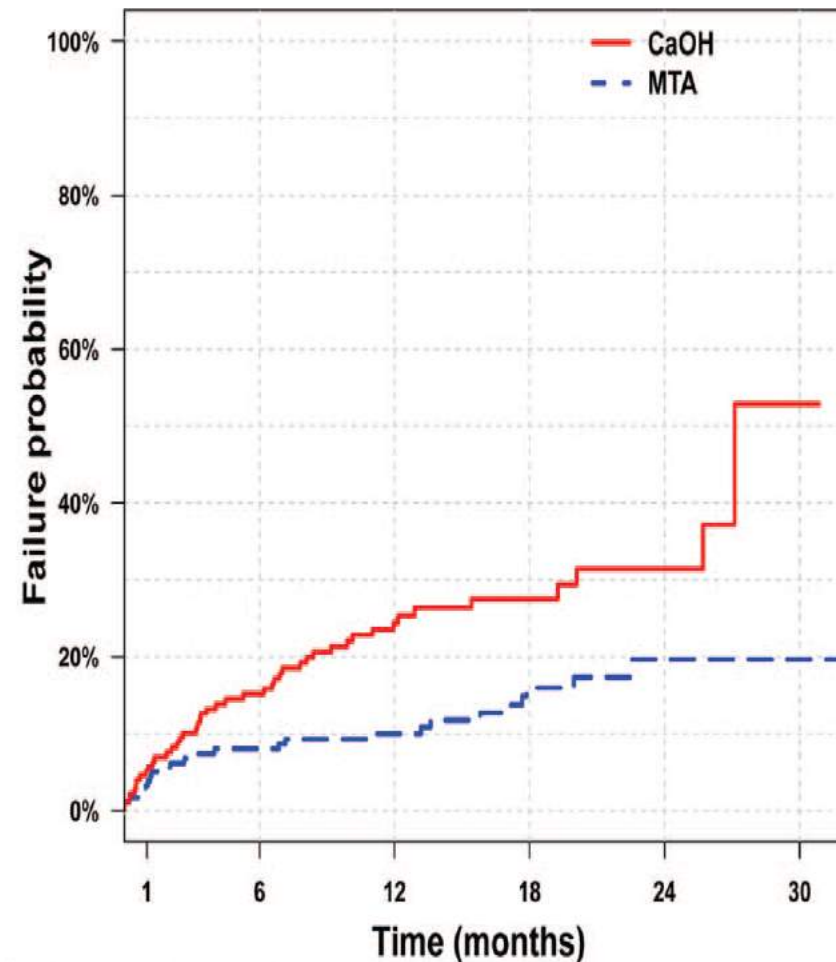
MTA vs. CaOH

- Probability of failure*
(Practice-based randomized clinical trial)

Hilton *et al.* (2013) MTA = 19.7% CaOH = 31.5%

Mente *et al.* (2010) MTA = 22% CaOH = 40%

*failure = Need for EXT or RCT



No. at risk CaOH	162 ¹	129	91	52	21	1
Cumulative cases	9	25	37	41	43	45
No. at risk MTA	172 ²	151	122	78	23	4
Cumulative cases	5	14	17	22	25	25

¹4 subjects in the CaOH group were censored prior to 1 month.

²6 subjects in the MTA group were censored prior to 1 month.

MTA vs. CaOH

Review of randomized controlled trials:

- 9 studies (325 teeth) found significantly less inflammatory response with MTA
- Higher percentage of calcified dentin bridge formation with MTA

Conclusion: MTA is found to be more effective than CaOH

#7ML Comp – 3/2/17



- Defective margin
- Classic Class III

03/02/17 M. Chavez Note M. Chavez Last Modified: 03/02/17

Competency exam class III, composite th# 7 ML / S1740 / Mch

03/02/17 N. Leong Note J. Giblin Last Modified: 03/02/17

S:

-CC: Pt presents for #7ML composite without any pain or symptoms.

-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, FMX = 12/14/16

-Symptoms: None

-Med Hx: HIV+ Dx: 1986 (viral load undetectable, CD4 count = 884), Stroke in 2009

-Surg Hx: None

-Soc Hx: Smokes marijuana 1x/day

-Allergies: NKDAs

O:

-Vitals: BP = 106/63, P = 61

-Findings: As charted on odontogram

-Results: CRA = High, due to active caries and high DMFT

-Medications: Atorvastatin, Descovy, Viracept

A:

-Summary of Pt: 68 yr old presents WN WD NAD for #7ML composite without any pain or symptoms

-LA achieved with 4% Septocaine with 1:100K epi with 3/4 carpule for local infiltration around #7. Ideal preparation completed with 34D on highspeed, demineralization removal (per approved extension) completed with #4 round bur and small spoon on axial-lingual walls. Final preparation cavosurface smoothed with 330D, with retention points on gingival and incisal comers placed with 1/4 round bur and 1mm bevels placed on all external margins with 135EF and flame bur on highspeed handpiece. Etched, bond, placed B1 shade packable composite placed in 3 increments using mylar strip and blue wedge to contour M sides of tooth. Excess removed with white stone bur, and polished with brownie point, soflex discs, interproximal strips, and jiffy brush.

-Pt's Progress: Pt left happy with #7 filling. Pt will return 3/15/17 at 8:30AM for #22MFDL composite/GI.

P:

-NV: Pt will return 3/15/17 at 8:30AM for #22MFDL composite/GI.

-Further Tx Plan: Continue phase 2. Remaining teeth will be #22 and #27 for lower arch

-#22 will be restored first, if non restorable, then consider Lower CDPhase 2 will start with restoring #22 (determines lower RPD vs CD), followed by #13 RCT, then other Phase 2 Tx's, Followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process.

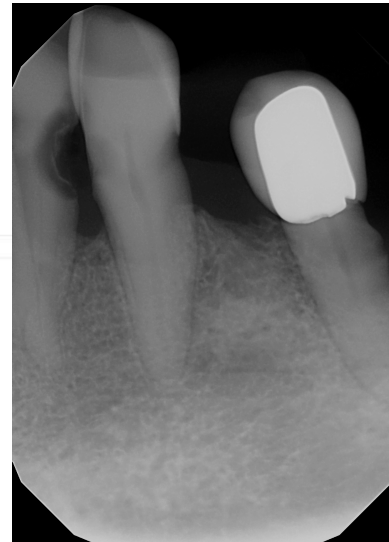
-Medications: None

-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates

-Medications: None

-Pt's Goal: To regain oral health and replace edentulous spaces.

#22 ML DF Comp – 3/15/17



- Caries on every surface
- Restored as two separate classic Class IIIs

03/15/17 N. Leong Note D. Coluzzi Last Modified: 03/15/17
S:
-CC: Pt presents for #22ML and DF composite without any pain or symptoms.
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, FMX = 12/14/16
-Symptoms: None
-Med Hx: HIV+ Dx 1986 (viral load undetectable, CD4 count = 884), Stroke in 2009
-Surg Hx: None
-Soc Hx: Smokes marijuana 1x/day
-Allergies: NKDA

O:
-Vitals: BP = 104/67, P = 66
-Findings: As charted on odontogram
-Results: CRA = High, due to active caries and high DMFT
-Medications: Atorvastatin, Descovy, Viracept

A:
-Summary of Pt: 68 yr old presents WN WD NAD for #22ML and DF composite without any pain or symptoms

-LA achieved with 4% Septocaine with 1:100K epi with 3/4 carpule for local infiltration around #22. Preparation initiated with 34D on highspeed, caries demineralization removal completed with #4 round bur on DF and ML extending to F. Final preparation with retention points on gingival and incisal comers placed with 1/4 round bur and 1mm bevels placed on all external margins with 135FF and flame bur on highspeed handpiece. Etched bond, placed B1 shade packable composite placed in 3 increments using mylar strip on M sides of tooth. Excess removed with white stone bur, and polished with white stone bur, composite polishers, and jiffy brush.

-Pt's Progress: Pt left happy with #22ML and DF filling. Pt will return 3/17/17 at 8:30AM for #2MO composite.

P:
-NV: Pt will return 3/17/17 at 8:30AM for #2MO composite.
-Further Tx Plan: Continue phase 2. Remaining teeth will be #22 and #27 for lower arch
-Since #22 was restorable, immediate stayplate (with #22 and #27 as survey crowns with future lower RPD planned), remaining Phase 2 Tx's, #13RCT, followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process with #22 and #27 survey crowns.
-Medications: None
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates
-Medications: None
-Pt's Goal: To regain oral health and replace edentulous spaces.

Extraoral Photos – 3/15/17



“At Rest”



“Smile Naturally”

Intraoral Photos – 3/15/17



Front



Maxillary Arch



Mandibular Arch



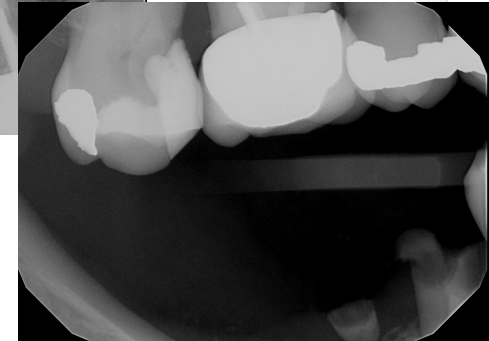
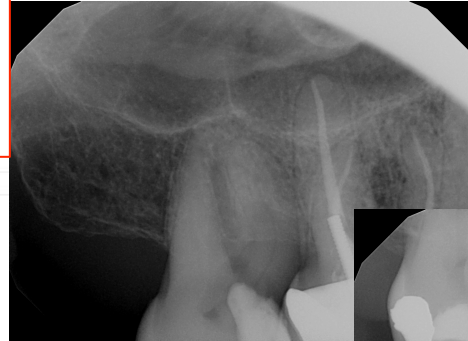
Right Side



Left Side

#2 MOD Comp – 3/17/17

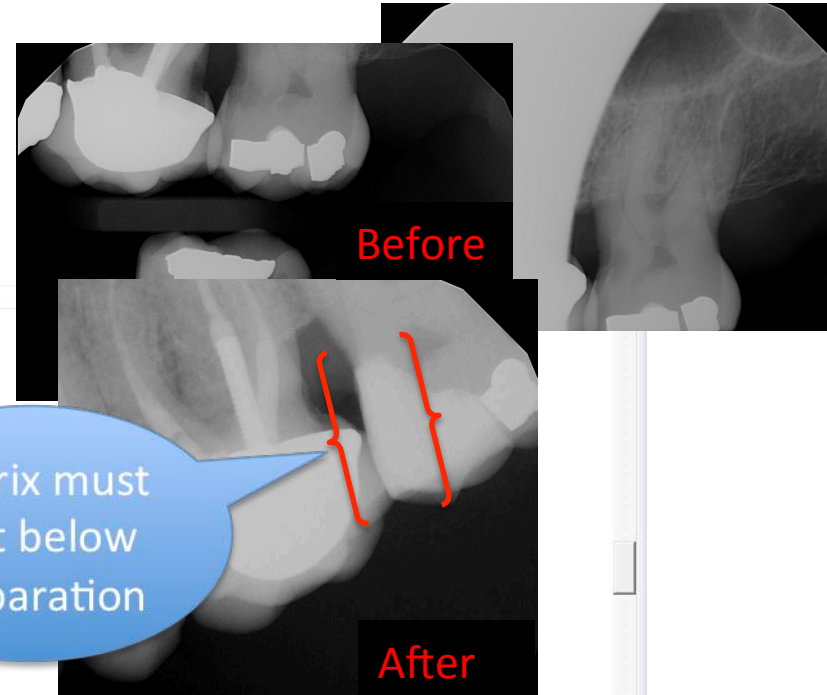
- Mesial subgingival caries
- Distal incorporated into final restoration
- Open sandwich



03/17/17	N. Leong	Note	R. Hirose	Last Modified: 03/17/17
S:				
-CC: Pt presents for #2 MO composite without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx 1986 (viral load undetectable, CD4 count = 884), Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 109/71, P = 70				
-Findings: #2 with existing MO with recurrent decay and DO amalgam that is <1mm away.				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for #2MOD composite without any pain or symptoms.				
-#2 was planned for MO composite, however due to proximity of DO filling that has crossed the oblique ridge, MOD performed. RBAs discussed regarding composite vs amalgam on posterior teeth and patient elected for composite filling.				
-Isolation achieved with Isovc and medium mouthpiece.				
-LA achieved 2% Lidocaine with 1:100k epi for PSA and GP using 2/3 and 1/3 carpule respectively. Pt reported not feeling numb so local infiltration with another carpule of 2% Lidocaine with 1:100k epi given around tooth #2. During procedure pt reported sensitivity so 4% Septocaine with 1:100K epi with 1/4 carpule for local infiltration around #2 given. Preparation completed with 330D on highspeed, caries demineralization removal completed with #4 round bur on MB on the floor of the original slot preparation, which made it subgingival. Final preparation with retention points on gingival and incisal corners placed with 1/4 round bur and 1mm bevels placed on all pulpal line angle with 135EF. Etched, bond, placed C2 flowable for open sandwich technique on M and D boxes, followed by C2 packable in 5 increments using butterfly tofflemire matrix. Excess removed with white stone bur, and polished with brownie point, and jiffy brush. Contact was verified with floss and there is no opposing tooth so marginal ridge was matched to neighboring tooth.				
Pt's Progress: Pt left happy with #2MOD composite. Pt will return 2/22/17 at 9:30AM for 1 month evaluation.				
P:				
-NV: Pt will return Pt will return 3/23/17 at 8:30AM for 1 month evaluation.				
-Further Tx Plan: Continue phase 2. Remaining teeth will be #22 and #27 for lower arch				
-Since #22 was restorable, immediate stayplate (with #22 and #27 as survey crowns with future lower RPD planned), remaining Phase 2 Tx, #13RCT, followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process with #22 and #27 survey crowns.				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, filling materials, crowns, extractions and phasing, RPD, and immediates.				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				
03/22/17	N. Leona	Note	D. Coluzzi	Last Modified: 03/22/17

#15 MO Comp – 3/22/17

- Mesial subgingival caries
- Tofflemire Matrix
- Open sandwich



03/22/17	N. Leong	Note	D. Coluzzi	Last Modified: 03/22/17
S:				
-CC: Pt presents for #15 MO composite without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx: 1986 (viral load undetectable, CD4 count = 884), Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 121/77, P = 72				
-Findings: #15 with existing MO amalgam and separate DO amalgam with recurrent decay				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for #2MO composite without any pain or symptoms.				
RBAs discussed regarding composite vs amalgam on posterior teeth and patient elected for composite filling.				
-Isolation achieved with Isovc and medium mouthpiece while completing preparation. Rubber dam isolation used while filling.				
-LA achieved 2% Lidocaine with 1:100k epi for PSA and GP using 2/3 and 1/3 caprule respectively. Pt reported not feeling numb so local infiltration 4% Septocaine with 1:100K epi with 3/4 caprule for local infiltration around #15 given. Preparation completed with 330D on highspeed, caries demineralization removal completed with #4 round bur on gingival floor of the original slot preparation, which made it subgingival. Etched, bond, placed C3 flowable for open sandwich technique on M box, followed by C2 packable in 5 increments using butterfly tofflemire matrix. Excess removed with white stone bur, and polished with brownie point, and jiffy brush. Existing open contact, which when restored still has open contact but is much smaller <0.5mm, which will be re-established when #14 crown is replaced.				
-Pt's Progress: Pt left happy with #15MO composite. Pt will return 3/23/17 at 8:30AM for 1 month evaluation.				
P:				
-NV: Pt will return Pt will return 3/23/17 at 8:30AM for 1 month evaluation.				
-Further Tx Plan: Continue phase 2. Remaining teeth will be #22 and #27 for lower arch				
-Since #22 was restorable, immediate stayplate (with #22 and #27 as survey crowns with future lower RPD planned), remaining Phase 2 Tx's, #13RCT, followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process with #22 and #27 survey crowns.				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, filling materials, crowns, extractions and phasing, RPD, and immediates.				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				

The Sandwich Technique

Closed vs Open

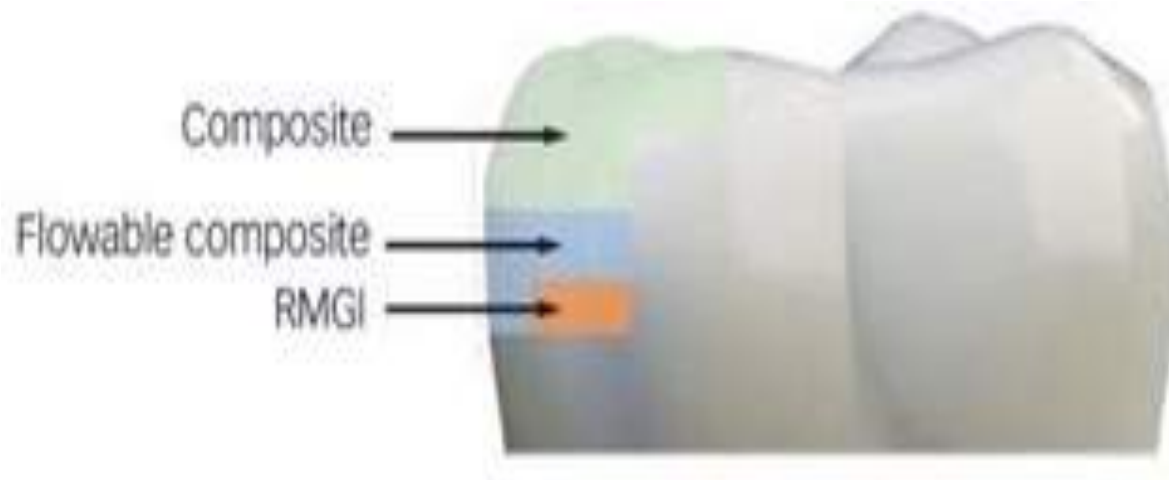


What is the Sandwich Technique?

- **Definition:** Layering of various restorative material within the cavity preparation
- **Material:** Involves placing Resin Modified Glass Ionomer (RMGI) at the base of the cavity preparation, followed by curing and addition of composite to complete restoration
- Two types of Sandwich Technique:
 - Closed and Open

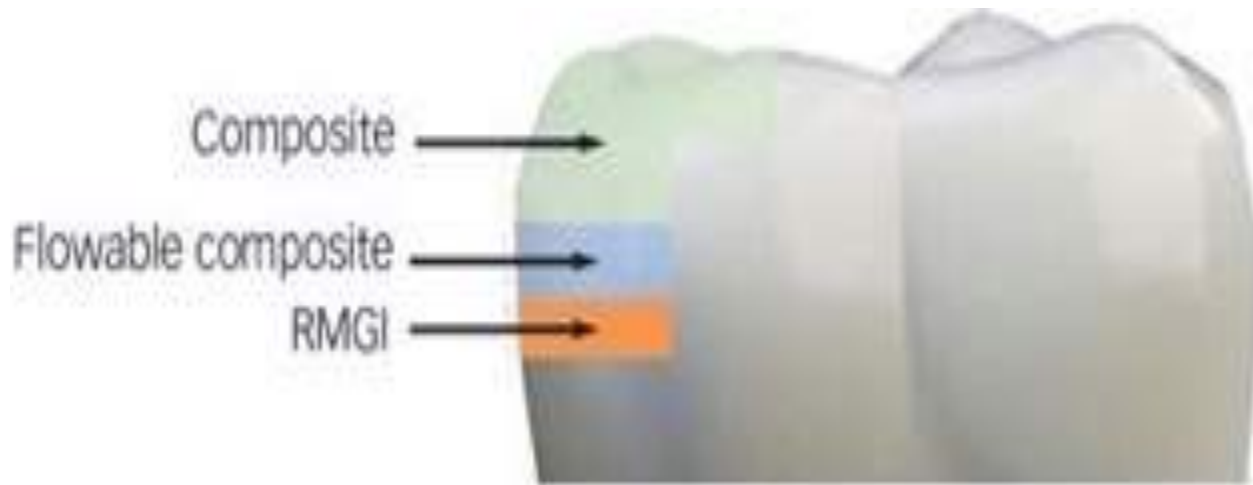
Closed Sandwich Technique

- If remaining layers of composite resin completely encase the RMGI



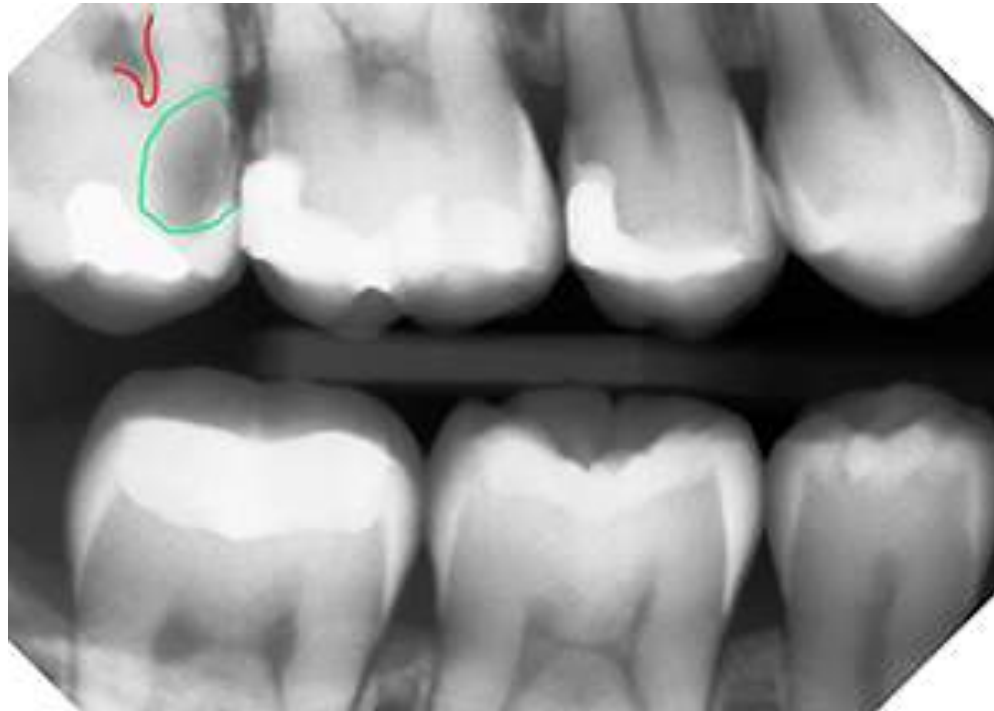
Open Sandwich Technique

- If RMGI is exposed to the oral environment at the base of restoration
- Allows least amount of microleakage of the various direct restorative options available

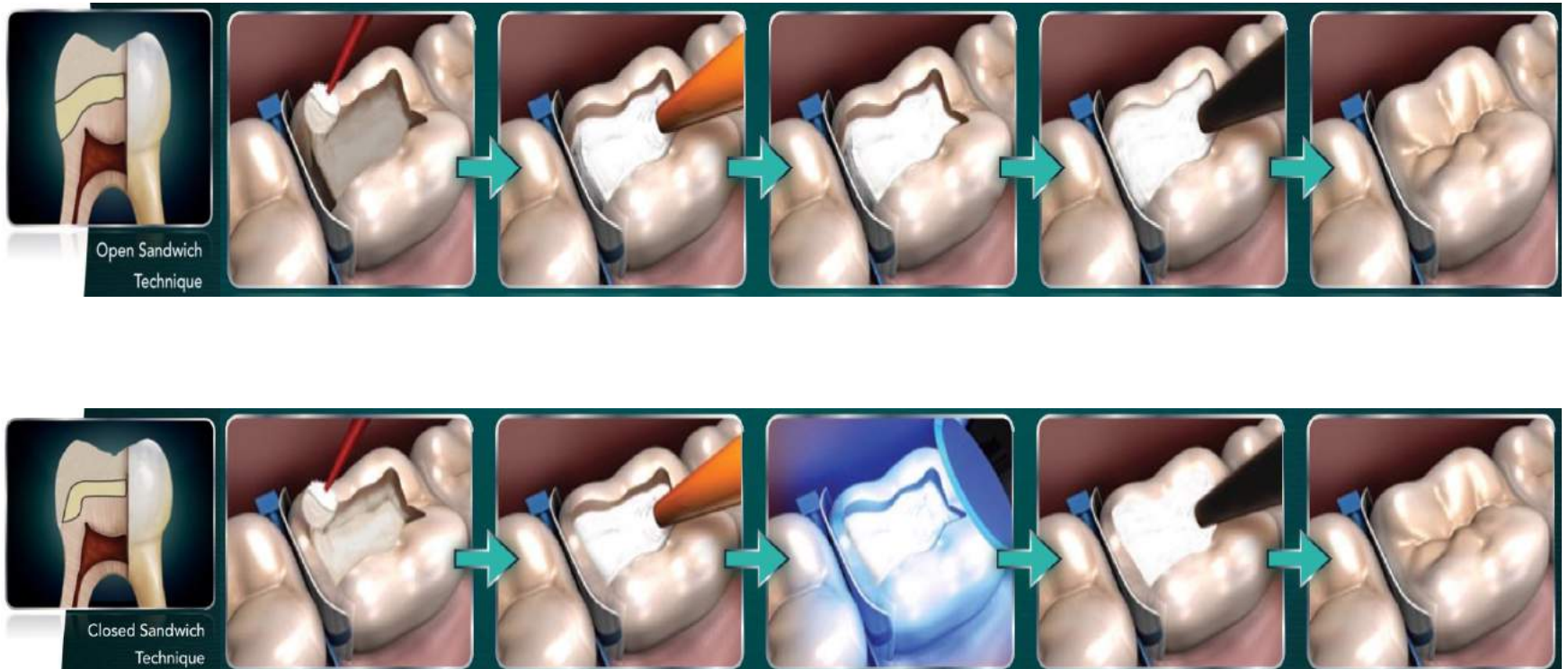


Indications

- When carious lesion and Class II cavity preparation extend near or apical to the CEJ
- Class I, II, III, and V lesions
- Deep posterior restorations
- Posterior restorations with subgingival interproximal preparations that are difficult to isolate or where no enamel remains



Clinical Technique



America, G. C. (2017). The Sandwich Technique.

Knight, G. M. (2011, May). Open and Closed Sandwiches.

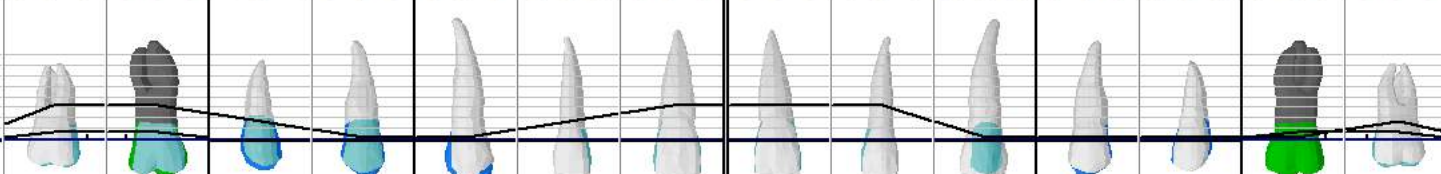
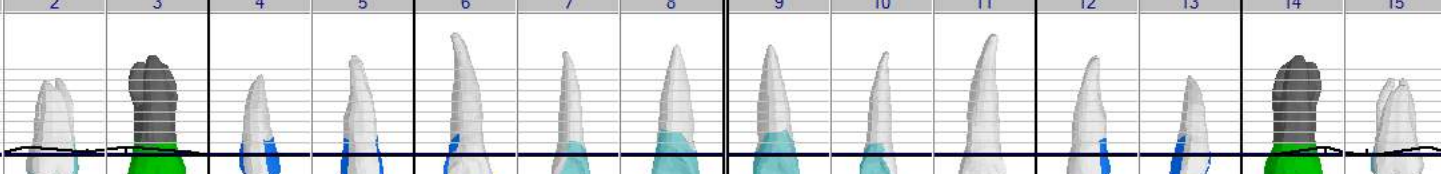
Liebenberg, W. (2005, November). Return to the Resin-Modified Glass-Ionomer Sandwich Technique.

Clinical Benefits



- Reduced post-operative sensitivity
- Pulpal protection from irritation
- Fluoride release over time
- Helps in prevention of demineralization
- Rapid placement and curing of a single bulk layer
- Aesthetics

1 Month Evaluation – 3/23/17

Maxillary																	
DX		AC	AC	MC	SC	SC	MC	AC	AC	AC	SC	SC	SC	SC	MC		
KT	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	
FURCA		2	2												2	2	
PLAQUE		0 0 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	1 0 0		
BLEED		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		
CAL		4 4 6	4 6 3	3 2 2	1 2 1	1 2 2	2 2 4	4 2 5	6 6 6	5 5 5	3 2 3	2 3 3	3 2 3	3 2 5	4 3 4		
GM-CEJ		1 3 3	1 3 0	-1 0 -2	-2 0 -2	-2 0 -2	-2 0 1	1 0 2	3 3 3	2 3 2	0 -1 0	-1 1 0	0 0 0	0 0 2	1 0 1		
POCKET		3 1 3	3 3 3	4 2 4	3 2 3	3 2 4	4 2 3	3 2 3	3 3 3	3 2 3	3 3 3	3 2 3	3 2 3	3 2 3	3 3 3		
Facial	M															M	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lingual	M															M	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
POCKET		5 3 6	3 2 3	3 3 3	5 3 4	3 3 3	4 2 3	3 2 3	3 2 3	4 2 5	6 2 4	3 2 3	3 2 3	3 3 3	3 3 3		
GM-CEJ		0 2 3	3 7 -1	-1 1 -1	-1 1 -1	-1 -1 -1	0 1 0	0 1 0	1 0 0	0 0 0	-1 0 0	0 1 -1	-1 1 -1	0 2 0	1 0 0		
CAL		5 5 9	6 9 2	2 4 2	4 4 3	2 2 2	4 3 3	3 3 3	4 2 3	4 2 5	5 2 4	3 3 2	2 3 2	3 5 3	4 3 3		
BLEED		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		
PLAQUE		0 0 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	1 0 0		
FURCA		2	1	2	1									0	2	0	2
MOBIL		0	0	0	0	0	0	0	0	0	0	1	0	0	0		
PROGNS		2	2	1	2	1	1	2	2	2	2	1	1	2	2		

1 Month Evaluation – 3/23/17

Mandibular															
PROGNS			4	4	1	1	4	4	4	4	1		4		4
MOBIL			3	0	0	0	1	2	2	1	1		3		2
FURCA			0												0
PLAQUE			0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0		0 0 1
BLEED			0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0		0 0 0
CAL			3 3 3	3 3 3	3 2 2	3 5 2	1 6 5	5 7 5	5 7 4	4 6 3	3 4 3		3 6 6		4 4 3
GM-CEJ			0 0 0	0 0 0	0 0 -1	-1 3 -1	-1 3 2	2 5 2	2 5 1	1 4 0	0 2 0		0 3 3		1 1 0
POCKET			3 3 3	3 3 3	3 2 3	4 2 3	2 3 3	3 2 3	3 2 3	3 2 3	3 2 3		3 3 3		3 3 3
Lingual															
	M	M													
	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18
Facial															
	M	M													
POCKET			6 3 3	3 3 3	3 3 3	3 2 4	4 2 3	2 3 3	4 3 3	3 2 4	3 2 3		3 3 2		3 7 3
GM-CEJ			0 0 0	0 0 0	0 0 -2	-2 0 3	4 6 5	4 6 5	5 4 4	6 5 4	0 5 0		0 3 3		3 3 3
CAL			6 3 3	3 3 3	3 3 1	1 2 7	8 8 8	6 9 8	9 7 7	9 7 8	3 7 3		3 6 5		6 10 6
BLEED			0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0		0 0 0
PLAQUE			0 0 0	0 0 0	0 0 0	0 0 0	1 0 1	1 0 1	1 0 1	1 0 1	0 1 0		0 0 0		1 1 1
FURCA			0												2
KT	1 1 1	1 1 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1
DX			SC	MC	MC	SC	SC	SC	SC	SC	SC		SC		SC

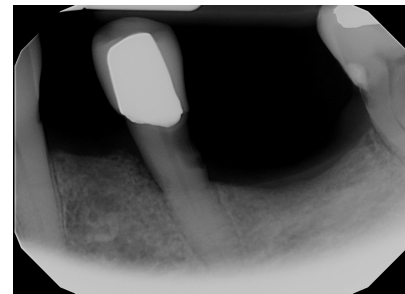
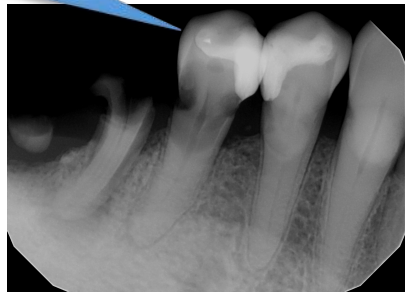
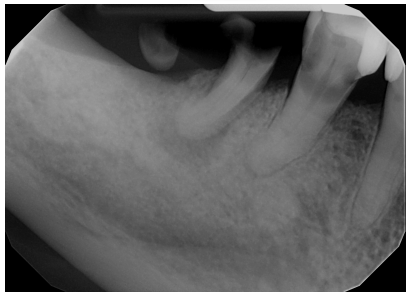
1 Month Evaluation – 3/23/17

DX		AC	AC	MC	SC	SC	MC	AC	AC	AC	SC	SC	SC	SC	MC	
KT	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1
FURCA		2	2											2	2	
PLAQUE		0 0 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	1 0 0	
BLEED		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
CAL		4 4 6	4 6 3	3 2 2	1 2 1	1 2 2	2 2 4	4 2 5	6 6 6	5 5 5	3 2 3	2 3 3	3 2 3	3 2 5	4 3 4	
GM-CEJ		1 3 3	1 3 0	-1 0 -2	-2 0 -2	-2 0 -2	-2 0 1	1 0 2	3 3 3	2 3 2	0 -1 0	-1 1 0	0 0 0	0 0 2	1 0 1	
POCKET		3 1 3	3 3 3	4 2 4	3 2 3	3 2 4	4 2 3	3 2 3	3 3 3	3 2 3	3 3 3	3 2 3	3 2 3	3 2 3	3 3 3	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
POCKET		5 3 6	3 2 3	3 3 3	5 3 4	3 3 3	4 2 3	3 2 3	3 2 3	4 2 5	6 2 4	3 2 3	3 2 3	3 3 3	3 3 3	
GM-CEJ		0 2 3	3 7 -1	-1 1 -1	-1 1 -1	-1 -1 -1	0 1 0	0 1 0	1 0 0	0 0 0	-1 0 0	0 1 -1	-1 1 -1	0 2 0	1 0 0	
CAL		5 5 9	6 9 2	2 4 2	4 4 3	2 2 2	4 3 3	3 3 3	4 2 3	4 2 5	5 2 4	3 3 2	2 3 2	3 5 3	4 3 3	
BLEED		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
PLAQUE		0 0 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	1 0 0	
FURCA		2 1	2 1											0 2	0 2	
MOBIL		0	0	0	0	0	0	0	0	0	0	1	0	0	0	
PROGNS		2	2	1	2	1	1	2	2	2	2	1	1	2	2	
PROGNS			4	4	1	1	4	4	4	4	1		4		4	
MOBIL			3	0	0	0	1	2	2	1	1		3		2	
FURCA			0												0	
PLAQUE			0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0		0 0 1	
BLEED			0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0		0 0 0	
CAL			3 3 3	3 3 3	3 2 2	3 5 2	1 6 5	5 7 5	5 7 4	4 6 3	3 4 3		3 6 6		4 4 3	
GM-CEJ			0 0 0	0 0 0	0 0 -1	-1 3 -1	-1 3 2	2 5 2	2 5 1	1 4 0	0 2 0		0 3 3		1 1 0	
POCKET			3 3 3	3 3 3	3 2 3	4 2 3	2 3 3	3 2 3	3 2 3	3 2 3	3 2 3		3 3 3		3 3 3	
	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
POCKET			6 3 3	3 3 3	3 3 3	3 2 4	4 2 3	2 3 3	4 3 3	3 2 4	3 2 3		3 3 2		3 7 3	
GM-CEJ			0 0 0	0 0 0	0 0 -2	-2 0 3	4 6 5	4 6 5	5 4 4	6 5 4	0 5 0		0 3 3		3 3 3	
CAL			6 3 3	3 3 3	3 3 1	1 2 7	8 8 8	6 9 8	9 7 7	9 7 8	3 7 3		3 6 5		6 10 6	
BLEED			0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		0 0 0		0 0 0	
PLAQUE			0 0 0	0 0 0	0 0 0	0 0 0	1 0 1	1 0 1	1 0 1	1 0 1	0 1 0		0 0 0		1 1 1	
FURCA			0												2	
KT	1 1 1	1 1 1	1 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 1	1 1 1
DX			SC	MC	MC	SC	SC	SC	SC	SC	SC		SC		SC	

1 Month Evaluation – 3/23/17

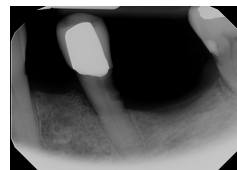
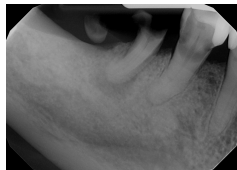
03/23/17	N. Leong	Note	Y. Rajendr	Last Modified: 03/23/17
S:				
-CC: Pt presents for 1 month evaluation without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP - 1/24/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx: 1986, Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 108/73, P = 65				
-Findings: As charted on odontogram				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for 1 month evaluation without any pain or symptoms				
PERIO				
-Supervised by Dr. Rajendran				
-Dx: Generalized severe chronic periodontitis				
-Etiology: Primary = Plaque, deep pockets				
-Px: Favorable = #4,6,7,8,9, 12,13 Questionable = #2,3,5,10,11,14,15,27 Unfavorable = #24, Hopeless = 18,29,30				
-Restoratively Hopeless = 18,20,23,25,26,29,30				
-Rec Tx: 4 month perio maintenance, OHI				
-Touch up prophy completed with hand scalers and cavitron				
-Pt's Progress: Pt will return 4/6/17 at 8:30 AM for Phase 1 extractions of #18,20,28,29,30				
P:				
-NV: Pt will return 4/6/17 at 8:30 AM for Phase 1 extractions of #18,20,28,29,30				
-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch				
-#22 will be restored first, if non restorable, then consider Lower CDPhase 2 will start with restoring #22 (determines lower RPD vs CD), followed by #13 RCT, then other Phase 2 Tx's, Followed by PFM #13, 14, EXT of lower teeth except #22 and #27 coordinated with stayplate delivery, 6-8wks healing then starting lower RPD process.				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				

Phase 1 EXTs – 4/6/17

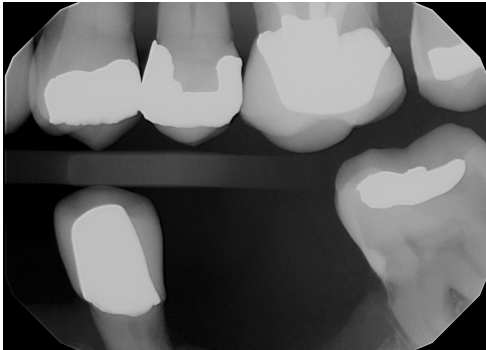


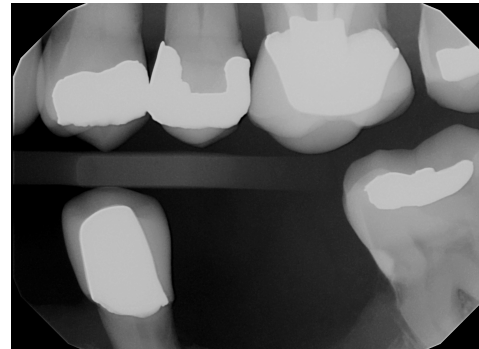
Phase 1 EXTs – 4/6/17

04/06/17	N. Leong	Note	J. Giblin	Last Modified: 04/06/17
S: -CC: Pt presents for extraction of #18,20,28,29,30 without any pain or symptoms. -HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP = 1/24/17, FMX = 12/14/16 -Symptoms: None -Med Hx: HIV+ Dx 1986, Stroke in 2009 -Surg Hx: None -Soc Hx: Smokes marijuana 1x/day -Allergies: NKDAs O: -Vitals: BP = 110/70, P = 63 -Findings: As charted on odontogram -Results: CRA = High, due to active caries and high DMFT -Medications: Atorvastatin, Descovy, Viracept A: -Summary of Pt: 68 yr old presents WN WD NAD for for extraction of #18,20,28,29,30 without any pain or symptoms -RBAs rediscussed with patient regarding extractions and sequencing/progression of remaining treatment. -Patient elects to move forward with all treatment and informed consent signed regarding extractions of #18,20,28,29,30. -Post-Op instructions given to patient prior to starting and all questions answered. -2% Lidocaine with 1:100k epi used for IA/Lingual/Long Buccal blocks on right side and left side using 1/2,1/4,1/4 carpule for each side. 4% Septocaine w/1:100k epi used for local infiltration on teeth #18,20,28,29,30 using a total of 1/4 carpule. After patient reported profound anesthesia, periosteal, elevators, followed by #150 forceps used to extract #18 and #20, which were delivered whole. Granulation tissue removed followed by saline irrigation, compression of buccal and lingual bone. #30,29 were elevated out and then periosteal, elevator, and #150 forceps used to extract #28 which was delivered whole. Granulation tissue was removed, irrigation with saline, and compression of lingual bone. -No sharp bony spicules were observed. -Patient tolerated procedure well. Hemostasis achieved. -Post-Op instructions repeated to patient and patient accepts. -10 minutes after completion of extractions Vitals: BP = 139/78, P = 56. Patient reports feeling well. -Pt's Progress: Pt will return 4/10/17 at 8:30 AM for #13 RCT in Endo Bay. P: -NV: Pt will return Pt will return 4/10/17 at 8:30 AM for #13 RCT in Endo Bay -Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch -#13 RCT, Followed by PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery. -After 6-8wks healing then starting lower RPD process (likely with new provider). -Medications: None -RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates -Medications: None -Pt's Goal: To regain oral health and replace edentulous spaces.				



#13 Sedative Fill – 4/10/17

04/10/17	A. Matsumo	Note	A. Matsumo	Last Modified: 04/10/17	
	COMPETENCY EXAM, ENDO, RCT, TOOTH #13, ST. #S1740.				
04/10/17	H. Brody	Note	E. Wong(EN	Last Modified: 04/10/17	
	Assisted Narita with removing amalgam MOD for endodontic treatment				
04/10/17	N. Leong	Note	E. Wong(EN	Last Modified: 04/10/17	
	#13 RCT CE, assisted by D2 Hanna Brody				
S:					
-CC: Pt presents for extraction of #13 RCT without any pain or symptoms.					
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP = 1/24/17, FMX = 12/14/16					
-Symptoms: None					
-Med Hx: HIV+ Dx 1986, Stroke in 2009					
-Surg Hx: None					
-Soc Hx: Smokes marijuana 1x/day					
-Allergies: NKDAs					
O:					
-Vitals: BP = 113/76, P = 75					
-Findings: As charted on odontogram					
-Results: CRA = High, due to active caries and high DMFT					
-Medications: Atorvastatin, Descovy, Viracept					
A:					
-Summary of Pt: 68 yr old presents WN WD NAD for for #13 RCT without any pain or symptoms					
-RBAs rediscussed with patient regarding RCT, B/U, Crown.					
#13: Existing MOD amalgam with open margin and recurrent decay. Restorability confirmed with Dr. Giblin, P/P = +/-, Cold = -, radiographic periapical lesion, Dx = Pulp Necrosis with asymptomatic apical periodontitis					
#12 (control tooth): Existing DO amalgam, P/P = +/-, Cold = +, 5 seconds. Dx: Normal Pulp and normal apex.					



-Patient elects to move forward with all treatment and informed consent signed regarding RCT of #13

-2% Lidocaine with 1:100k epi used for MSA block on left side using 1/3 carpule. 4% Septocaine w/1:100k epi used for local infiltration and interpapillary on teeth #13, #14. Rubber dam isolation achieved clamping #14 and extending to #12. Existing MOD amalgam and preparation completed with #330D bur on highspeed and caries removal completed with #8 round bur on slowspeed. Tofflemire matrix and lingual wedges placed, Fuji IX shade A2 placed according to manufacturer's instructions. Contacts checked with floss, and no opposing tooth, patient is happy with bite.

-Pt's Progress: Pt will return 4/17/17 at 8:30 AM for #13 RCT access and cleaning and shaping in Endo Bay.

P:

-NV: Pt will return Pt will return 4/17/17 at 8:30 AM for #13 RCT access and cleaning and shaping in Endo Bay.

-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch

-#13 RCT. Followed by PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery.

-After 6-8wks healing then starting lower RPD process (likely with new provider).

-Medications: None

-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates

-Medications: None

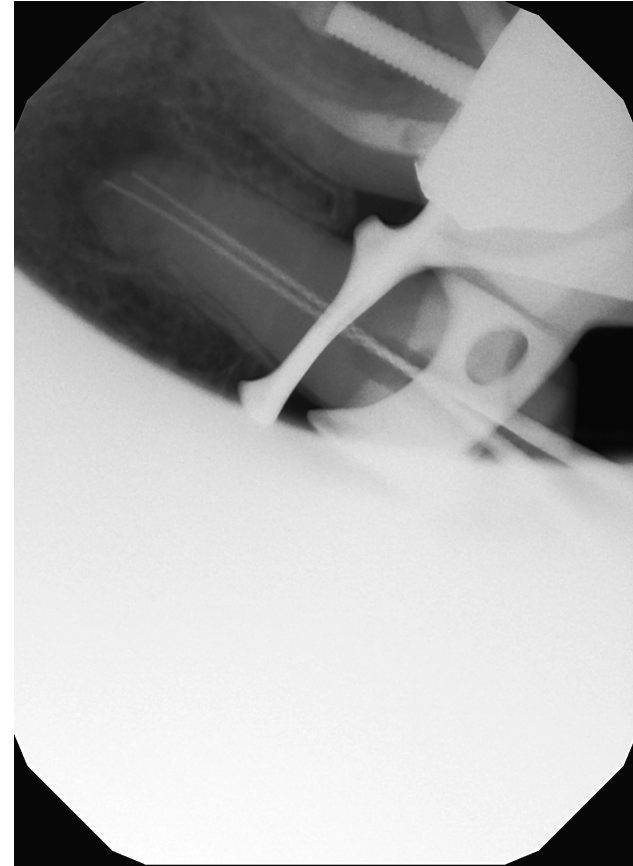
-Pt's Goal: To regain oral health and replace edentulous spaces.

#13 RCT – 4/17/17

Cleaning and Shaping



Working Length



MAF

#13 RCT 4/17/17



04/17/17 N. Leong Note E. Wong(EN Last Modified: 04/17/17

#13 RCT CE

S:

- CC: Pt presents for #13 RCT without any pain or symptoms.
- HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP - 1/24/17, FMX = 12/14/16
- Symptoms: None
- Med Hx: HIV+ Dx 1986, Stroke in 2009
- Surg Hx: None
- Soc Hx: Smokes marijuana 1x/day
- Allergies: NKDAs

O:

- Vitals: BP = 104/65, P = 70
- Findings: As charted on odontogram
- Results: CRA = High, due to active caries and high DMFT
- Medications: Atorvastatin, Descovy, Viracept

A:

- Summary of Pt: 68 yr old presents WN WD NAD for for #13 RCT without any pain or symptoms
- RBAs discussed at 4/10/17 appointment with patient regarding RCT, B/U, Crown.

#13: Existing MOD Fuji IX placed 4/10/17 after caries removal. Dx established at that appointment: normal pulp with asymptomatic apical periodontitis.

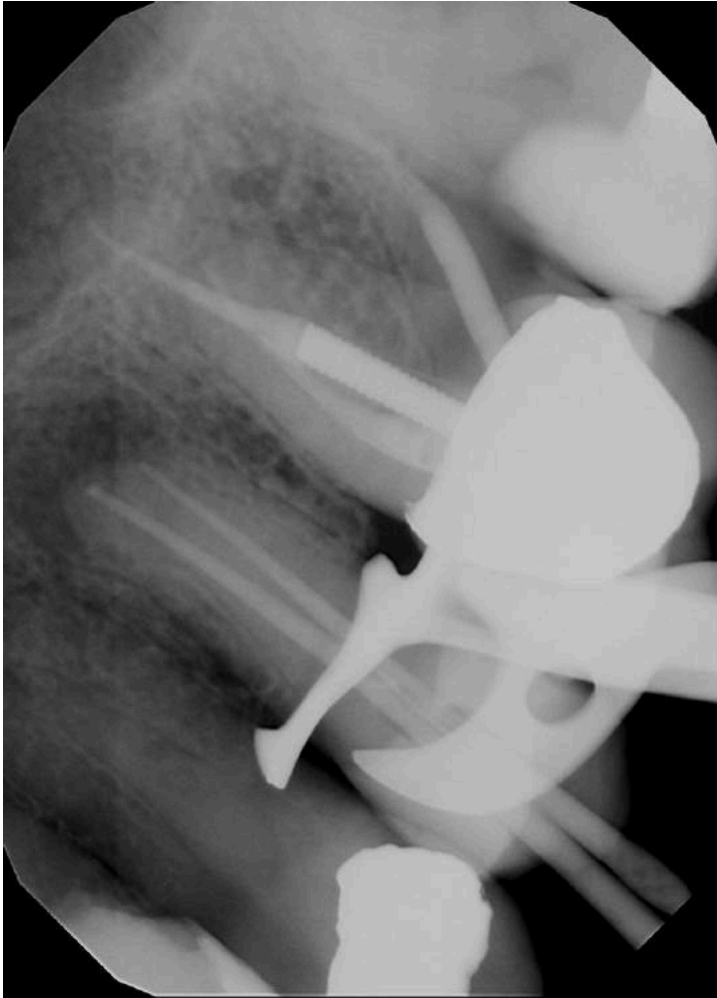
-2% Lidocaine with 1:100k epi used for MSA block on left side using 1/3 carpule. 4% Septocaine w/1:100k epi used for local infiltration and interpapillary on teeth #13. Rubber dam isolation achieved clamping #13. Access completed with #2 round bur on highspeed handpiece at ~8mm chamber depth. Access shaped with EndoZ bur on highspeed. WL verified radiographically: Buccal = 20.5. and Lingual = 21mm Cleaning and shaping with .06 taper handfiles completed followed by crowning down with rotary files (all with irrigation of NaOCl and verification of patency with 06 size file). MAF is size 25 for both canals that need to be radiographically verified next appointment.

-Pt's Progress: Pt will return 4/19/17 at 8:30 AM for #13 RCT re-access, MAF verification, and obturation on 2nd floor.

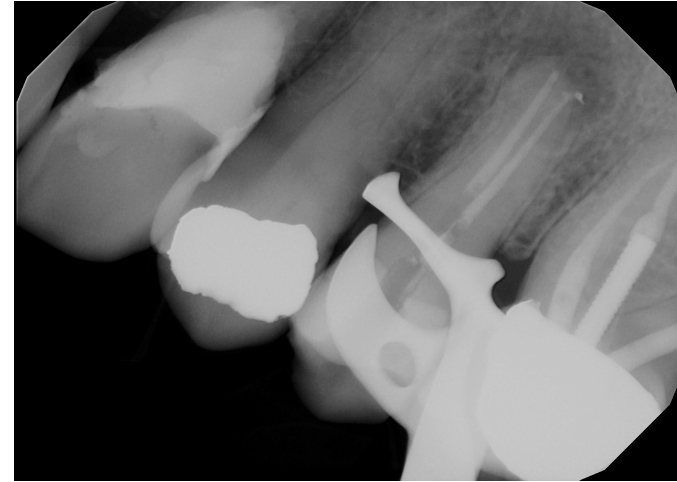
P:

- NV: Pt will return 4/19/17 at 8:30 AM for #13 RCT re-access, MAF verification, and obturation on 2nd floor.
- Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch
- #13 RCT, Followed by PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery.
- After 6-8wks healing then starting lower RPD process (likely with new provider).
- Medications: None
- RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates
- Medications: None
- Pt's Goal: To regain oral health and replace edentulous spaces.

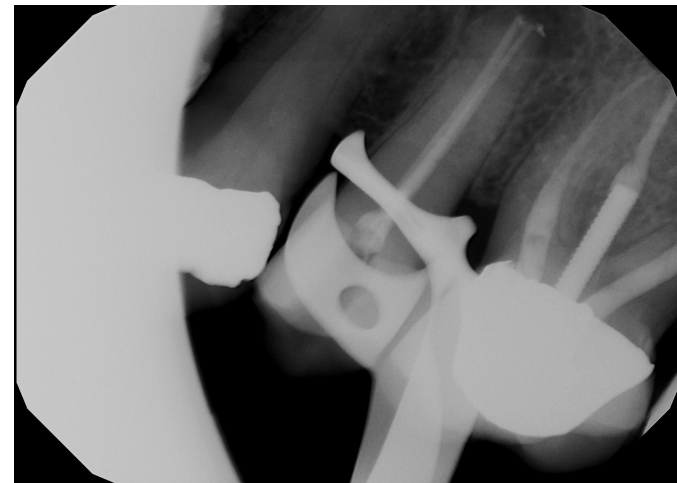
#13 RCT Obturation - 4/19/17



Cone Fit



Down
Pack



Back
Fill

#13 RCT Final Film



#13 RCT – 4/19/17



04/19/17 X. Zhang Note E. Wong(EN Last Modified: 04/19/17

Assisted Narta on her endo RCT CE on tooth #13

04/19/17 N. Leong Note E. Wong(EN Last Modified: 04/19/17

#13 RCT CE

S:

-CC: Pt presents for #13 RCT MAF verification, coneit, and obturation without any pain or symptoms.

-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP - 1/24/17, FMX = 12/14/16

-Symptoms: None

-Med Hx: HIV+ Dx 1986, Stroke in 2009

-Surg Hx: None

-Soc Hx: Smokes marijuana 1x/day

-Allergies: NKDAs

O:

-Vitals: BP = 121/86, P = 71

-Findings: As charted on odontogram

-Results: CRA = High, due to active caries and high DMFT

-Medications: Atorvastatin, Descovy, Viracept

A:

-Summary of Pt: 68 yr old presents WN WD NAD for for #13 RCT MAF verification, coneit, and obturation without any pain or symptoms

-RBAs discussed at 4/10/17 appointment with patient regarding RCT, B/U, Crown.

#13: Existing MOD Fuji IX placed 4/10/17 after caries removal. Dx established at that appointment: normal pulp with asymptomatic apical periodontitis.

-4% Septocaine w/1:100k epi used for local infiltration and interapillary on teeth #13. Rubber dam isolation achieved clamping #13. Re-access completed with #2 round bur on highspeed handpiece at ~8mm chamber depth. Access shaped with EndoZ bur on highspeed for straightline access. WL verified radiographically and with apex locator: Buccal = 20.5 and Lingual = 18.2mm Cleaning and shaping with .06 taper rotaries to working length completed (all with irrigation of NaOCl and verification of pat with 06 size file). MAF is size 25 for both canals that have beenb radiographically. Coneit completed, verified radiographically, then cemented. Cones were seared off at the office then downpacked 7mm away from the apex and condensed with smallest plugger. Downpack verified radiographically. Excess gutta percha was removed from walls and backfill completed in 1-2mm increments and condensed with smallest plugger. Backfill was verified radiographically. FujiIX placed as temporary filling and pa has no opposing tooth and interproximals checked. Temporary filling was verified radiographically.

-Pt's Progress: Pt will return 4/19/17 at 1:30 PM for #13 and #14 PFM crown preparations.

P:

-NV: Pt will return 4/19/17 at 1:30 PM for #13 and #14 PFM crown preparations.

-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch

-PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery.

-After 6-8wks healing then starting lower RPD process (likely with new provider).

-Medications: None

-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates

-Medications: None

-Pt's Goal: To regain oral health and replace edentulous spaces.

#14 PFM & Laser Gingivectomy

4/19/17



#14 PFM - 4/19/17

04/19/17	N. Leong	Note	D. Coluzzi	Last Modified: 04/19/17
S: -CC: Pt presents for #14 PFM crown without any pain or symptoms. -HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP = 1/24/17, FMX = 12/14/16 -Symptoms: None -Med Hx: HIV+ Dx 1986, Stroke in 2009 -Surg Hx: None -Soc Hx: Smokes marijuana 1x/day -Allergies: NKDAs O: -Vitals: BP = 111/73, P = 75 -Findings: #14 existing PFM distal open margin and recurrent decay. -Results: CRA = High, due to active caries and high DMFT -Medications: Atorvastatin, Descovy, Viracept				
A: -Summary of Pt: 68 yr old presents WN WD NAD for for #14 PFM without any pain or symptoms -RBAs discussed at 4/10/17 appointment with patient regarding RCT, B/U, Crown. #13 and #14 PFM consent form signed after RBAs rediscussed -Clearbite matrix fabricated for teeth #13 and #14 on triple tray. -4% Septocaine w/1:100k epi used for local infiltration and interapillary on teeth #14. Isovac isolation with medium mouthpiece used while sectioning existing #14 PFM with 6878 bur on highspeed handpiece. Crown and bridge remover used to remove PFM. Caries observed on DL cervical aspect of tooth and was removed during preparation and completely removed with large spoon and #6 roundbur on slowspeed handpiece. - Preparation for PFM was completed with 856-016 on highspeed. Due to caries being subgingival, gingivectomy was indicated. RBAs were discussed and patient consented to laser gingivectomy which was performed using 1.0W with Picasso Laser, removing distal interapillary gingiva about 1.5mm and festooning contours. Preoperative pictures taken. B/U using Fuji IX was used to block out the undercut on DL cervical aspect after cavity conditioner used. DL margins were redefined and blended with 856-016 on highspeed handpiece. Temporary using Pro-temp on previously fabricated clearbite matrix was made and bonded with Pro-Temp. Excess cement was removed with floss and Pt reports comfortable bite (no opposing tooth). -Pt's Progress: Pt will return 4/20/17 at 8:30 PM for #13 crown preparation and #14 final impression. P: -NV: Pt will return 4/20/17 at 8:30 PM for #13 crown preparation and #14 final impression. -Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch -PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery. -After 6-8wks healing then starting lower RPD process (likely with new provider). -Medications: None -RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates -Medications: None -Pt's Goal: To regain oral health and replace edentulous spaces.				

#13 PFM – 4/20/17

04/20/17	N. Leong	Note	J. Giblin	Last Modified: 04/20/17
S:				
-CC: Pt presents for #13 PFM crown without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP - 1/24/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx 1986, Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 119/70, P = 67				
-Findings: #14 existing PFM distal open margin and recurrent decay.				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for for #13 PFM without any pain or symptoms				
-RBAs discussed at 4/10/17 appointment with patient regarding RCT, B/U, Crown.				
-Design of PFM crown with all round metal margin and shade C1 confirmed with patient and patient accepts.				
-Diagnostic cast taken with alginate on medium tray.				
#13 and #14 PFM consent form signed after RBAs rediscussed on 4/19/17				
-Clearbite matrix fabricated for teeth #13 and #14 on triple tray on 4/19/17.				
-4% Septocaine w/1:100k epi used for local infiltration and interpapillary on teeth #13. Preparation for PFM was completed with 856-016 on highspeed. #14 Temporary crown was removed for better access and evaluation. #14 lingual wall was tapered more for draw. #13 DL margin needs to be blended in next appointment. Temporary using Pro-temp on previously fabricated clearbite matrix was made and bonded with Pro-Temp. Excess cement was removed with floss and Pt reports comfortable bite (no opposing tooth).				
-Pt's Progress: Pt will return 4/27/17 at 8:30 PM for #13 crown refinement and #13 and #14 final impression.				
P:				
-NV: Pt will return 4/27/17 at 8:30 PM for #13 crown refinement and #13 and #14 final impression.				
-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch				
-PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery.				
-After 6-8wks healing then starting lower RPD process (likely with new provider).				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				

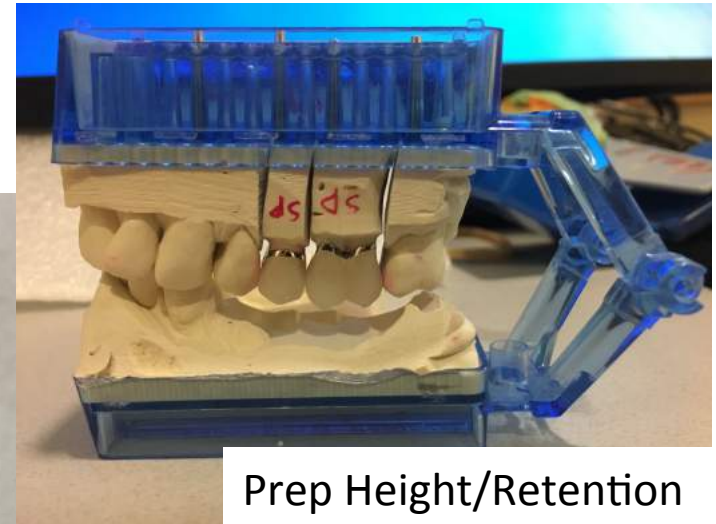
#13 PFM Refinement – 4/27/17

Date	Author	Note	Reviewer	Last Modified
04/27/17	N. Leong		J. Giblin	04/27/17
S:				
-CC: Pt presents for #13 PFM crown refinement and final impressions of #13 and #14 without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP - 1/24/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx 1986, Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 127/75, P = 68				
-Findings: #13 RCT treated tooth and needs full coverage crown. #14 existing PFM distal open margin and recurrent decay.				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for for #13 PFM preparation refinement at DL and #13 and #14 PFM final impressions without any pain or symptoms				
-RBAs discussed at 4/10/17 appointment with patient regarding RCT, B/U, Crown.				
-Design of PFM crown with all round metal margin and shade C1 confirmed with patient and patient accepts.				
-Diagnostic cast taken with alginate on medium tray.				
#13 and #14 PFM consent form signed after RBAs rediscussed on 4/19/17				
-4% Septocaine w/1:100k epi used for local infiltration and interpapillary on teeth #13 and #14. Temporary crowns removed. Preparation for #13 PFM was completed with 856-016 on highspeed. #13 DL margin blended. #2 cord soaked in GingiAid packed around #14 and #1 and #00 cords packed for #13. Final impression taken on triple tray. Temporary using Pro-temp on previously fabricated clearbite matrix was made and bonded with Pro-Temp. Excess cement was removed with floss and Pt reports comfortable bit opposing tooth).				
-Bite registration taken with blue moose and lower impressions taken on medium tray with alginate				
-Pt's Progress: Pt will return 5/18/17 at 8:30 PM for #13 and #14 PFM delivery and to begin lower stayplate process with Prosth.				
P:				
-NV: Pt will return 5/18/17 at 8:30 PM for #13 and #14 PFM delivery and to begin lower stayplate process with Prosth.				
-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch				
-PFM #13, 14, EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery.				
-After 6-8wks healing then starting lower RPD process (likely with new provider).				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				

Final Impression (as returned by lab)



Laboratory Delivery – 5/12/17



Prep Height/Retention



Even Draw

Crown Margins



Buccal



Lingual

Crown Delivery – 5/18/17



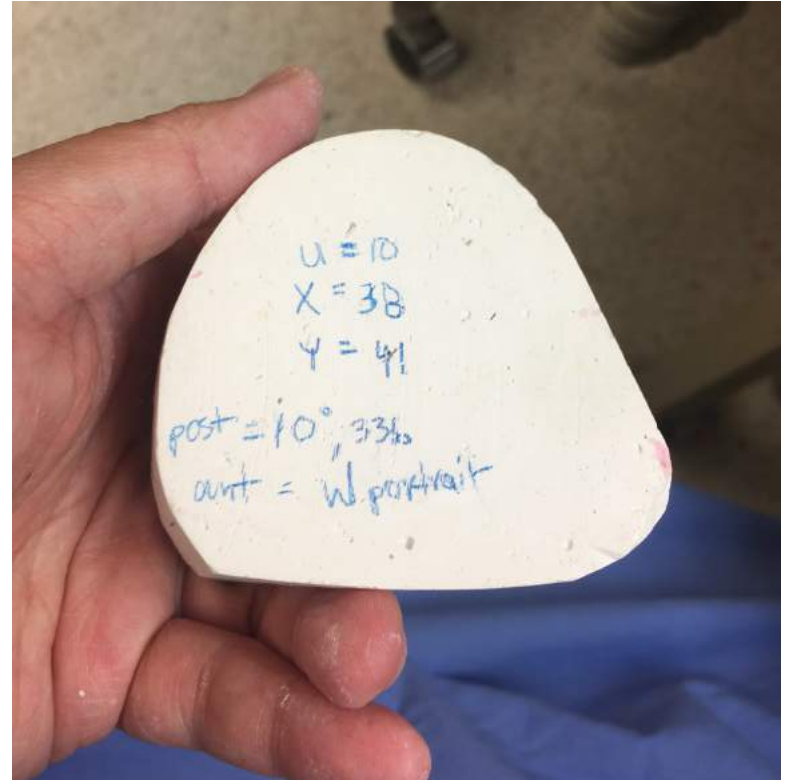
Crown Delivery – 5/18/17

05/18/17	N. Leong	Note	J. Giblin	Last Modified: 05/18/17
S:				
-CC: Pt presents for #13 PFM and #14 PFM delivery and Lower Interim Partial impressions, centric measurement, and facebow measurements without any pain or symptoms.				
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP = 1/24/17, FMX = 12/14/16				
-Symptoms: None				
-Med Hx: HIV+ Dx 1986, Stroke in 2009				
-Surg Hx: None				
-Soc Hx: Smokes marijuana 1x/day				
-Allergies: NKDAs				
O:				
-Vitals: BP = 118/77, P = 63				
-Findings: #13 RCT treated tooth and needs full coverage crown. #14 existing PFM distal open margin and recurrent decay.				
-Results: CRA = High, due to active caries and high DMFT				
-Medications: Atorvastatin, Descovy, Viracept				
A:				
-Summary of Pt: 68 yr old presents WN WD NAD for for #13 PFM and #14 PFM delivery and Lower Interim Partial impressions, centric measurement, and facebow measurement without any pain or symptoms				
-RBAs discussed at 4/10/17 appointment with patient regarding RCT, B/U, Crown.				
-Design of PFM crown with all round metal margin and shade C1 confirmed with patient and patient accepted at previous appointment Patient prefers lighter shade.				
#13 and #14 PFM consent form signed after RBAs rediscussed on 4/19/17				
-4% Septocaine w/1:100k epi used for local infiltration and interpapillary on teeth #13 and #14. Temporary crowns removed. Purified #13 and #14 and excess Temb Bond removed. #13 and #14 margins and seating checked with fit checker. Contacts checked w floss. PA radiograph with open contacts verified seating of #13 and #14 PFM, which were then cemented with Ketac simultaneously and held in place manually until set. Excess cement was removed with floss and Pt reports comfortable bite (no opposing tooth).				
-Cast taken with alginate on medium metal tray for maxillary after delivery of #13 and #14 PFM crowns.				
-Centric taken using Blue Moose on record base and wax rims previously fabricated.				
-Facebow measurements re-taken.				
-Teeth ordered: Lower Posteriors 1x8, shade C1, mold 336 Portrait IPN 10 degrees, Anterior teeth shade C1 will be chosen by lab. Teeth are expected to arrive 5/23/17, at which time case will be submitted to Liberty Lab for setting, wax/festoon, and processing of Lower Interim Denture with WW clasps on #22 and #27. Due date for interim denture will be 6/6/17.				
-Pt's Progress: Pt will return likely 6/8/17 AM for EXT of #23-26 and delivery of interim denture, with extraction and interim delivery follow up on 6/12/17 AM.				
P:				
-NV: Pt will return 5/18/17 at 8:30 PM for #13 and #14 PFM delivery and to begin lower stayplate process with Prosth.				
-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch				
-EXT of remaining lower teeth (#23-26) except #22 and #27 coordinated with stayplate delivery.				
-After 6-8wks healing then starting lower RPD process (likely with new provider).				
-Medications: None				
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates				
-Medications: None				
-Pt's Goal: To regain oral health and replace edentulous spaces.				

Pre-Appointment Lab Work For Stayplate



Mandibular Cast - ready for record base and wax rim fabrication



Teeth Ordered:

Posteriors: Shade C1, Mold 336

*Anteriors: Shade C1 selected by Lab

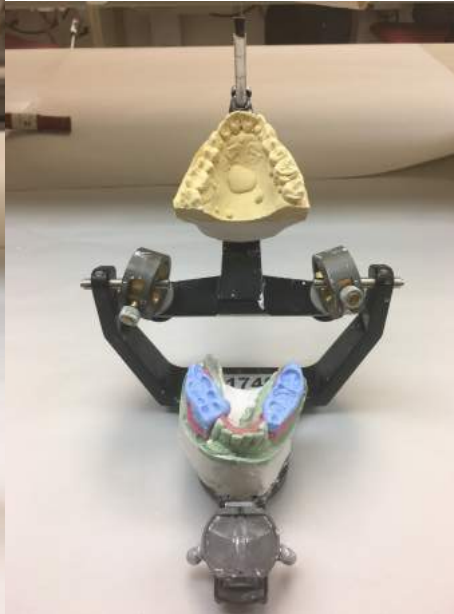
Maxillary Impression – 5/18/17



Maxillary Cast – impression taken after delivery and mounted on articulator with facebow.

Mounted In Centric – 5/18/17

Sent to Lab for Fab



Immediate Denture/Stayplate

- Academy of Prosthodontics'
Definition: “Prosthesis designed to enhance esthetics, stabilization and/or function for limited period of time, after which it is replaced by definitive prosthesis.”
- Above criteria are addressed as a part of our patient’s chief concern proceeding extractions. However, the patient must be informed of the advantages and disadvantages.



Advantages

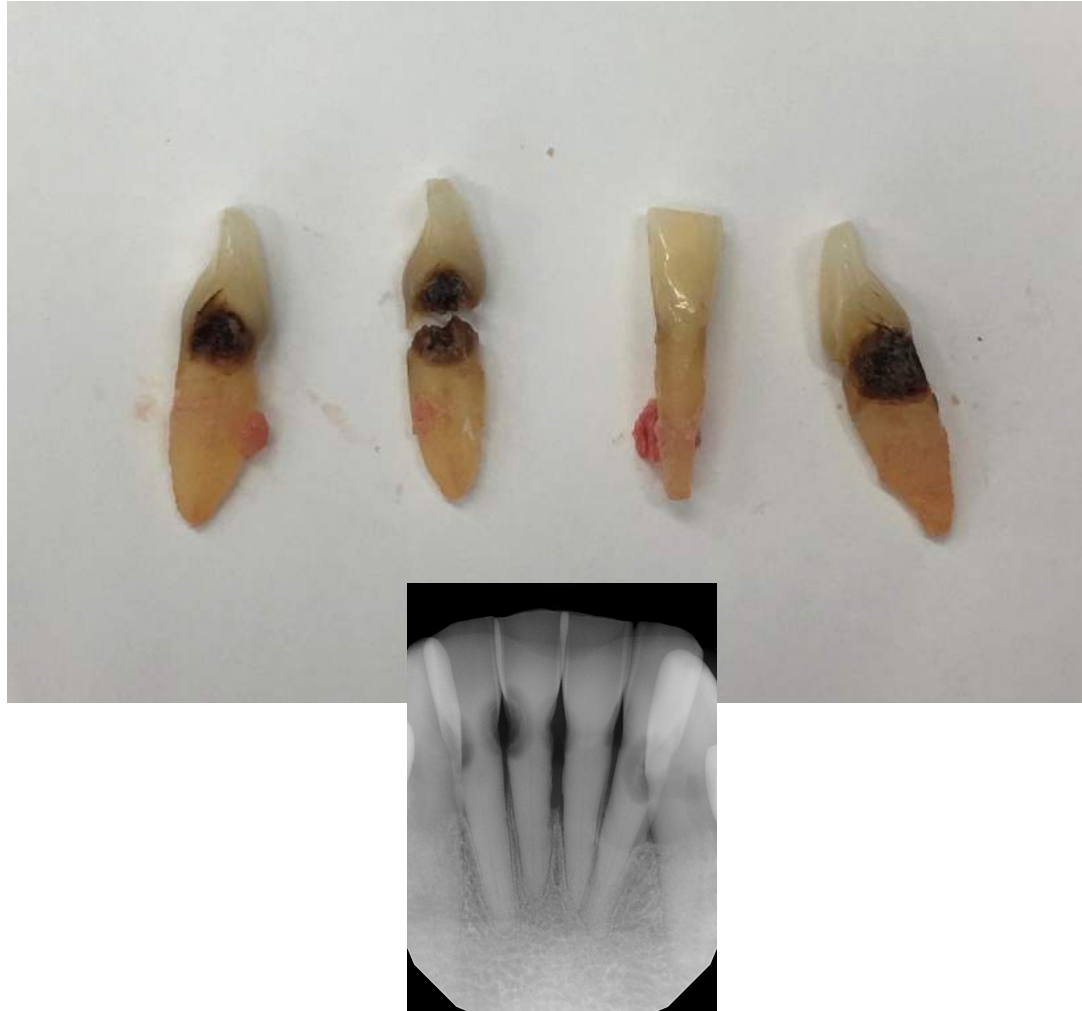
- Maintenance of patient's appearance (CC), Muscle tone, Vertical dimension of occlusion, and face height
- Avoid invasion of the patient's tongue in the edentulous space.
- Potential for reduced post-op pain due to protection of extraction sites.
-
- Potentially prevents residual ridge resorption
- Easier to duplicate the horizontal and vertical positions of anterior teeth.
- Easier adaptation to permanent prosthesis.
- Reduced speech and mastication problems/complications.

Bottom line: Marked reduction in interruptions of the patient's daily lifestyle after extraction(s)

Disadvantages

- Presence of teeth makes impressions and jaw relation, such as potential anterior undercut, incorrect CR and/or VDO, more difficult.
- Inability to know the actual appearance of the prosthesis after delivery.
- More demanding procedure needing more appointment/ chair time
- Impaired speech and mastication.

Phase 2 EXTs – 6/8/17



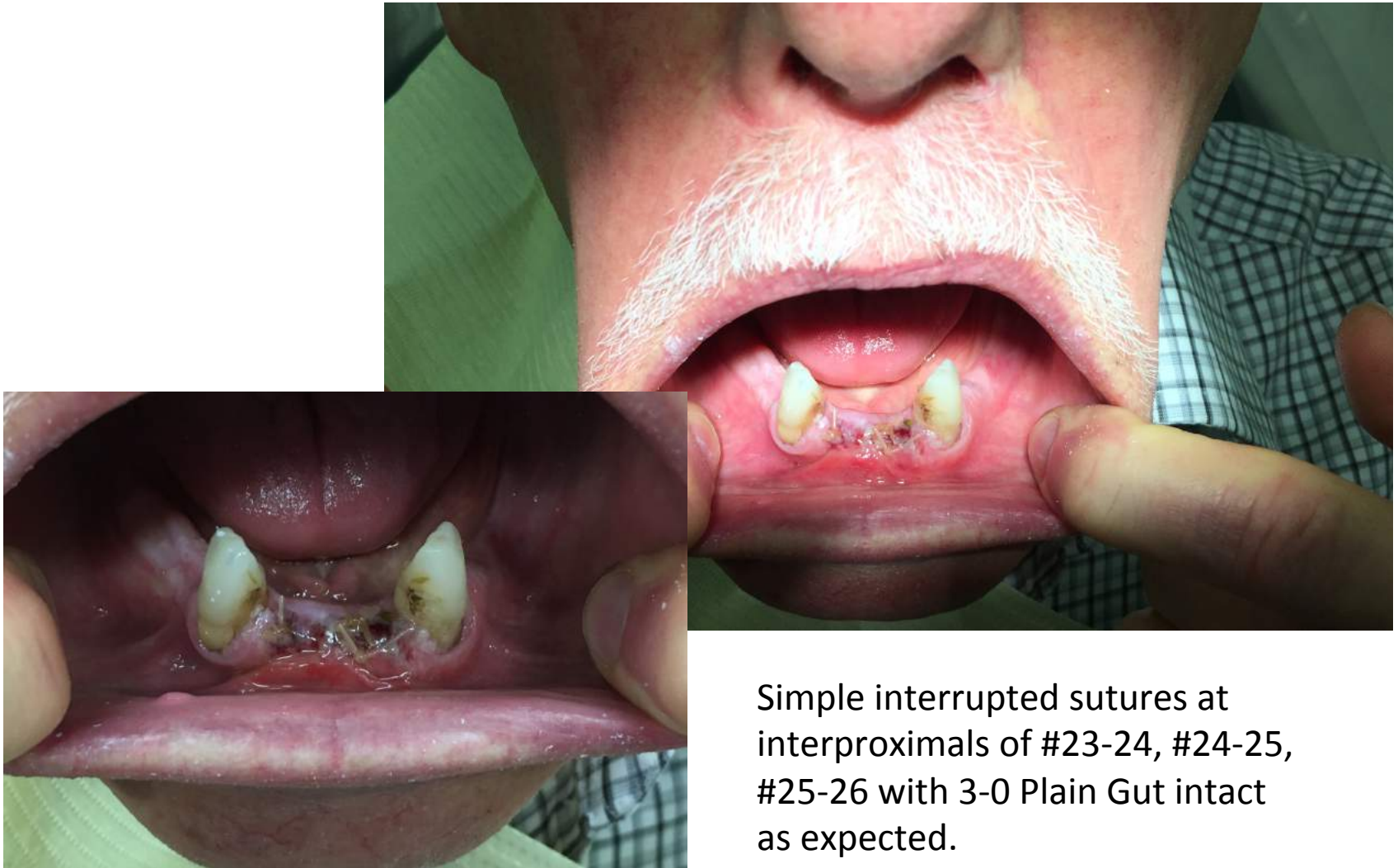
Immediate Interim Mandibular Partial



Phase 2 EXTs & Immediate Interim Mandibular Partial Denture Delivery – 6/8/17

06/08/17	N. Leong	Note	J. Giblin	Last Modified: 06/08/17
S: -CC: Pt presents for Phase 2 extraction of #23,24,25,26 and immediate delivery of interim denture without any pain or symptoms. -HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP - 1/24/17, FMX = 12/14/16 -Symptoms: None -Med Hx: HIV+ Dx 1986, Stroke in 2009 -Surg Hx: None -Soc Hx: Smokes marijuana 1x/day -Allergies: NKDAe O: -Vitals: BP = 116/79, P = 75 -Findings: As charted on odontogram -Results: CRA = High, due to active caries and high DMFT -Medications: Atorvastatin, Descovy, Viracept A: -Summary of Pt: 68 yr old presents WN WD NAD for Phase 2 extraction of #23,24,25,26 and immediate delivery of interim denture without any pain or symptoms -RBAs discussed with patient regarding extractions and immediate delivery of interim lower denture. -Patient elects to move forward with all treatment and informed consent signed regarding extractions of #23,24,25,26 and interim partial denture. -Post-Op instructions given to patient prior to starting and all questions answered. -4% Septocaine w/1:100k epi used for local infiltration on teeth #23,24,25,26 using a total of 1 cartridge for local infiltration. After patient reported profound anesthesia, periosteal elevators, followed by use of Ash forceps to extract #23,24,25,26 which were all delivered whole (#25 crown fractured, but enough root surface to extract remaining root). Granulation tissue removed followed by saline irrigation, compression of facial and lingual bone. -Bony spicules between #25-26 was removed with bone file. -Patient tolerated procedure well. Hemostasis achieved. -Post-Op instructions repeated to patient and patient accepts. -Simple interrupted sutures were placed interproximally between #23-24, 24-25, 25-26 with 3.0 Plain Gut Sutures -Patient reports feeling well and POIG reiterated and answered all patient's questions. -Pt's Progress: Pt will return 6/9/17 at 8:30 AM for Follow Up on immediate delivery of interim with Dr. Plesh in Prosth Bay. P: -NV: Pt will return Pt will return 6/9/17 at 8:30 AM for Follow Up on immediate delivery of interim with Dr. Plesh in Prosth Bay. -Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch -After 6-8wks healing then starting lower RPD process (likely with new provider). -Medications: None prescribed. Told patient to take 600mg Ibuprofen every 6 hours if needed for pain. -RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates -Pt's Goal: To regain oral health and replace edentulous spaces.				
06/08/17	N. Leong	Note	O. Plesh	Last Modified: 06/08/17
Refer to Tx Note. Completing Interim Denture Codes				

Status: Post Op 24hrs – 6/9/17



Simple interrupted sutures at interproximals of #23-24, #24-25, #25-26 with 3-0 Plain Gut intact as expected.

Status: Post Op 24hrs – 6/9/17

Refer to 1x Note: Completing Interim Denture Codes			
06/09/17	N. Leong	Note	O. Plesh Last Modified: 06/09/17
S:			
-CC: Pt presents for Post Op status Day 1 after Phase 2 extraction of #23,24,25,26 and immediate delivery of interim denture without any pain but reports feeling some pressure on LL.			
-HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP = 1/24/17, FMX = 12/14/16			
-Symptoms: None			
-Med Hx: HIV+ Dx 1986, Stroke in 2009			
-Surg Hx: None			
-Soc Hx: Smokes marijuana 1x/day			
-Allergies: NKDAs			
O:			
-Vitals: BP = 119/75, P = 76			
-Findings: As charted on odontogram			
-Results: CRA = High, due to active caries and high DMFT			
-Medications: Atorvastatin, Descovy, Viracept			
A:			
-Summary of Pt: 69 yr old presents WN WD NAD status 1 day Post Op Phase 2 extraction of #23,24,25,26 and immediate delivery of interim denture without any pain reporting pressure on LL lingual area.			
-RBAs rediscussed with patient regarding extractions and immediate delivery of interim lower denture.			
-Post-Op instructions reiterated to patient prior to starting and all questions answered.			
-PIP paste used to locate LL lingual area of pressure. Adjusted with denture adjustment bur on slowspeed handpiece. Pt then reports feeling pressure in simalar area of LR and repeated process of PIP paste and adjustment. Bite was checked with horse shaped occlusal paper and adjusted as needed especially on LR side when Pt reports feeling pressure when biting down very very hard. Pt reports denture and bite feeling comfortable and left happy.			
-Post-Op instructions repeated to patient again, all questions answered, and stressed salt water rinses to help mucosa heal.			
-Simple interrupted sutures interproximally between #23-24, 24-25, 25-26 with 3.0 Plain Gut Sutures still intact as expected.			
-Pt's Progress: Pt will return 6/12/17 at 8:30 AM for status 4 day post op extractions and follow up on immediate delivery of interim.			
P:			
-NV: Pt will return 6/12/17 at 8:30 AM for status 4 day post op extractions and follow up on immediate delivery of interim.			
-Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch			
-After 6-8wks healing then starting lower RPD process (likely with new provider).			
-Medications: None prescribed. Told patient to take 600mg Ibuprofen every 6 hours if needed for pain.			
-RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates			
-Pt's Goal: To regain oral health and replace edentulous spaces.			

Status: Post Op 4 Days – 6/12/17

Date	Prov./User	Code	Tx Note	Appr. User	Description
					-Post-Op instructions reiterated to patient prior to starting and all questions answered. -PIP paste used to locate LL lingual area of pressure. Adjusted with denture adjustment bur on slow speed handpiece. Pt then reports feeling pressure in similar area of LR and repeated process of PIP paste and adjustment. Bite was checked with horse shaped occlusal paper and adjusted as needed especially on LR side when Pt reports feeling pressure when biting down very hard. Pt reports denture and bite feeling comfortable and left happy. -Post-Op instructions repeated to patient again, all questions answered, and stressed salt water rinses to help mucosa heal. -Simple interrupted sutures interproximally between #23-24, 24-25, 25-26 with 3.0 Plain Gut Sutures still intact as expected. -Pt's Progress: Pt will return 6/12/17 at 8:30 AM for status 4 day post op extractions and follow up on immediate delivery of interim. P: -NV: Pt will return 6/12/17 at 8:30 AM for status 4 day post op extractions and follow up on immediate delivery of interim. -Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch -After 6-8wks healing then starting lower RPD process (likely with new provider). -Medications: None prescribed. Told patient to take 600mg Ibuprofen every 6 hours if needed for pain. -RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates -Pt's Goal: To regain oral health and replace edentulous spaces.
06/12/17	N. Leong	Note	J. Giblin		Last Modified: 06/12/17 S: -CC: Pt presents for follow up on Phase 2 extractions as well as immediate/interim lower partial denture without any symptoms or pain but reporting slight roughness on denture on the lingual surfaces where it was previously adjusted due to minor tor -HPI: Most recent Exam = 2/2/17, UR SRP and Limited dentition SRP = 2/22/17, UL SRP = 1/24/17, FMX = 12/14/16 -Symptoms: None -Med Hx: HIV+ Dx 1986, Stroke in 2009 -Surg Hx: None -Soc Hx: Smokes marijuana 1x/day -Allergies: NKDAs O: -Vitals: BP = 118/81, P = 62 -Findings: As charted on odontogram -Results: CRA = High, due to active caries and high DMFT -Medications: Atorvastatin, Descovy, Viracept A: -Summary of Pt: 69 yr old presents WN WD NAD status 4 days Post Op Phase 2 extraction of #23,24,25,26 and immediate delivery of interim denture without any pain reporting reporting slight roughness on denture on the lingual surfaces where it was previously adjusted due to minor tor. -RBAs rediscussed with patient regarding healing of extraction site, immediate delivery of interim lower denture, and possibility for future metal framework permanent RPD after minimum of 2 months healing with survey crowns. All questions answered. -Roughness of lingual LR and LL surfaces were polished with fabuluster on lab wheel. Pt reports denture and bite feeling comfortable and left happy. -Simple interrupted sutures interproximally between #23-24, 24-25, 25-26 with 3.0 Plain Gut Sutures still intact as expected. -Intraoral photos taken -Pt's Progress: Pt will return to new provider in July for POE and follow up on immediate interim lower partial denture. P: -NV: Pt will return to new provider in July for POE and follow up on immediate interim lower partial denture. -Further Tx Plan: Remaining teeth will be #22 and #27 for lower arch, consider survey crowns and RCT as caries restored for #22 and #27 were deep. -After 6-8wks healing then starting lower RPD process (likely with new provider). -Medications: None prescribed. -RBAs discussed regarding caries progression, periodontal disease, crown to root ratio, RCT, fillings, crowns, extractions, RPD, and immediates -Pt's Goal: To regain oral health and replace edentulous spaces.

Post Tx Extraoral Pictures - 6/12/17



“At Rest”



“Smile Naturally”



“Singing With Joy”

Post Tx Intraoral Photos – 6/12/17



Front



Maxillary Arch



Mandibular Arch



Right Side



Left Side



Patient Satisfaction Survey – 6/12/17

PATIENT SATISFACTION SURVEY

QUESTION

Make an X in the box that best describes your opinion

Poor Fair Good Excellent

1. My overall impression of UCSF is: ☐ ☐ ☐ ☒

2. I will tell my friends that dental care here is: ☐ ☐ ☐ ☒

3. I rate my oral health BEFORE treatment as: ☒ ☐ ☐ ☐

4. I rate my oral health AFTER treatment as: ☐ ☐ ☐ ☒

5. Are you satisfied with your dental school experience? ☐ ☐ ☐ ☒

6. I would recommend UCSF School of Dentistry to my friends and family: ☒ ☐

YES **NO**

Please rate these on their quality of care:

7. My student dentist: ☐ ☐ ☐ ☐ ☒

8. The faculty dentist: ☐ ☐ ☐ ☐ ☒

9. Were the clinic administrative coordinators professional and courteous? ☐ ☐ ☐ ☐ ☒

10. Was the reception staff professional and courteous? ☐ ☐ ☐ ☐ ☒

Please indicate how you were treated at UCSF:

Strongly Strongly

11. My student was professional: ☐ ☐ ☐ ☐ ☒

12. My student listened carefully: ☐ ☐ ☐ ☐ ☒

13. My student used words I understood: ☐ ☐ ☐ ☐ ☒

14. My student's speech was clear and easy to understand: ☐ ☐ ☐ ☐ ☒

15. My student treated me with kindness and respect: ☐ ☐ ☐ ☐ ☒

16. My student listened when I was in pain and did something about it: ☐ ☐ ☐ ☐ ☒

17. Were the dental procedures and your treatment plan explained appropriately and to your satisfaction? ☐ ☐ ☐ ☐ ☒

Please rate our services and facilities

Make an X in the box that best describes your opinion

Strongly Strongly

18. Did you receive a copy of your treatment plan? ☐ ☐ ☐ ☐ ☒

19. Were the dental procedures performed to your satisfaction? ☐ ☐ ☐ ☐ ☒

20. I was given clear directions to the clinic: ☐ ☐ ☐ ☐ ☒

21. The reception staff was helpful in responding to my questions: ☐ ☐ ☐ ☐ ☒

22. I was given accurate and complete information about appointments: ☐ ☐ ☐ ☐ ☒

23. I did not have problems when scheduling appointments: ☐ ☐ ☐ ☐ ☒

24. I did not have problems when contacting my student dentist or hygienist: ☐ ☐ ☐ ☐ ☒

25. The waiting area was clean and comfortable: ☐ ☐ ☐ ☐ ☒

26. The telephone system was easy to use: ☐ ☐ ☐ ☐ ☒

27. The staff was professional and courteous on the phone: ☐ ☐ ☐ ☐ ☒

28. I received a phone call to remind me of my appointment: ☐ ☐ ☐ ☐ ☒

29. I was able to make appointments in a timely manner: ☐ ☐ ☐ ☐ ☒

30. I was seen on time for my appointment: ☐ ☐ ☐ ☐ ☒

Please give us your overall rating of the following areas:

NA* Poor Fair Good Excellent

31. Financial service staff: ☐ ☐ ☐ ☐ ☒

32. Waiting rooms: ☐ ☐ ☐ ☐ ☒

33. Clinic facilities: ☐ ☐ ☐ ☐ ☒

34. Restrooms: ☐ ☐ ☐ ☐ ☒

THANK YOU FOR YOUR TIME

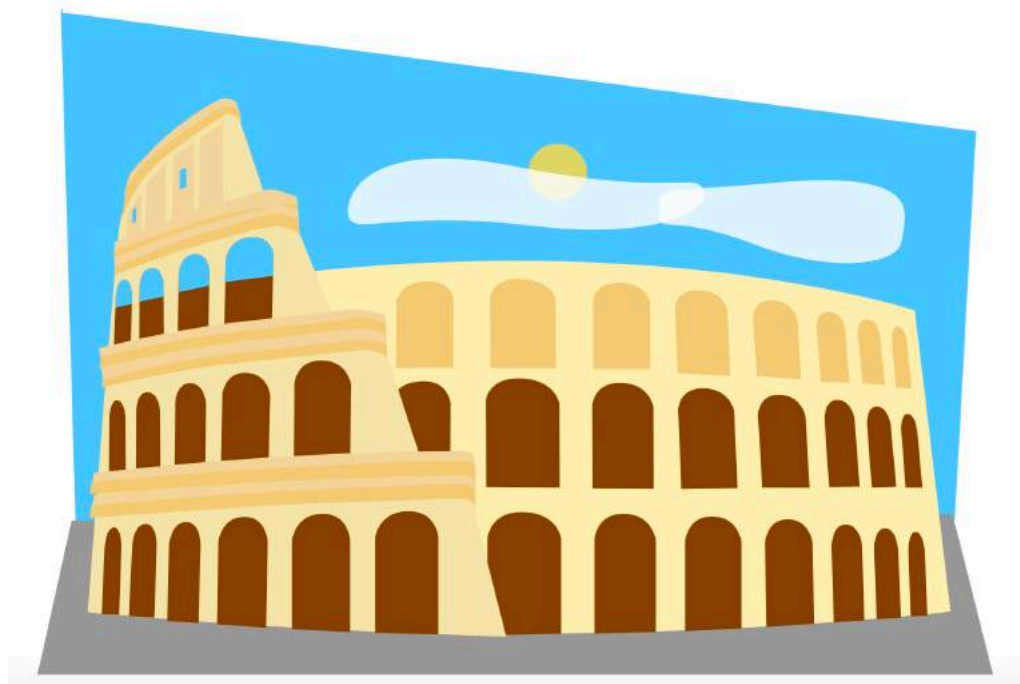
*NA means Not Applicable

Any additional comments?

Please use the space below to give us any other comments you believe would help us improve our services.

I wish Maria Long a long and happy career.

Date of Survey *12 June 2017*



Questions & Answers

1. Given the clinical findings, what are some of the risks, benefits, and alternatives to the best interest of this patient?

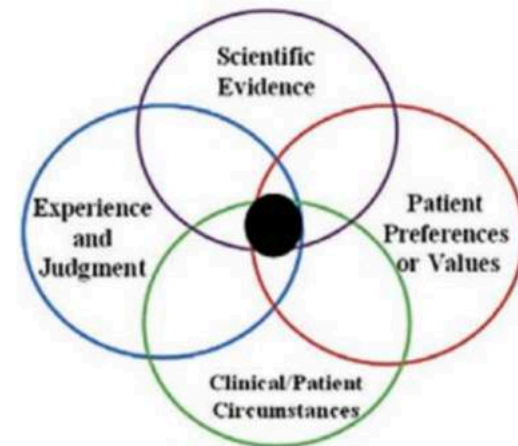
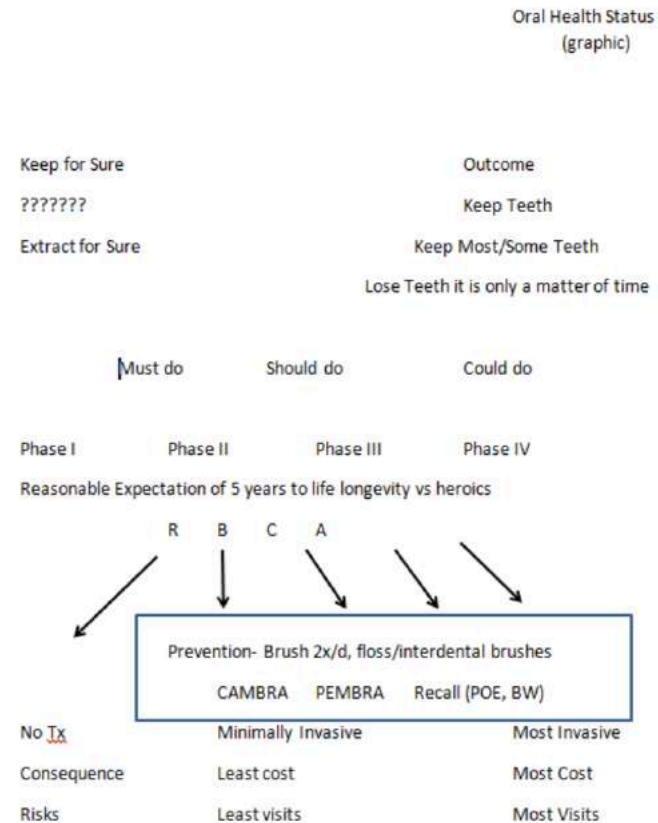


Figure 1. EBDM Process
©2001 Forrest, NCDHR



	OPTIONS	PROS	CONS	COST	TIMELINE
SCALING & ROOT PLANING	do nothing	no cost	perio disease will get worse, lose teeth	no cost	no time
	scaling/root planing	control perio disease, save teeth	\$\$, bacteremia (bacteria in the blood), infection, time	\$\$	requires several appts
	referral to PG perio	specialists, can do surgery to clean better	\$\$\$, surgery	\$\$\$	requires several appts
FILLINGS	do nothing	no cost, no time	can lead to infection that can spread throughout the body	no cost	no time
	amalgam	long lasting, durable, better seal over time	not aesthetic, contains mercury, stains tooth, need to take away more tooth for retention, maybe temperature sensitive	less \$	1 appt
	composite	aesthetic, bonds (sticks to tooth) so less tooth removed	less durable, does not last as long (5-7yrs), technique sensitive (can be leaks if not completely dry)	more \$	1 appt
CROWNS	do nothing	no cost, no time	infection can spread to rest of body, portion of tooth can fracture off and fall into airway	no cost	no time
	large filling	less \$\$, less time	tooth can fracture more easily, technique sensitive, irritation of nerve -> sensitivity	less \$\$	1 appt
	gold crown	very durable, does not wear away tooth as much, less tooth removed	not aesthetic, can irritate nerve	more \$\$	2 appts + lab time
	Porcelain Fused to Metal crown	better aesthetics, strongest	porcelain can chip off, more tooth removed, not very translucent (to hide underlying metal), can wear away opposing teeth	more \$\$	2 appts + lab time
	all-porcelain/ceramic crown	best aesthetics, durable	more tooth removed, prone to fracture, can wear away opposing teeth	more \$\$	2 appts + lab time
MISSING TOOTH SPACES	do nothing	no cost, no time	does not fix empty space, bone resorbs (shrinks away), teeth drift to fill gap - changes your bite	no cost	no time
	removable partial denture	fills the gap, least \$\$ option	multiple teeth affected, visible wires, food trap, altered taste, poor chewing function	least \$\$ option	5-6 appts, weeks to months
	bridge (fixed partial denture)	fills the gap, fixed with no surgery	high \$\$ option, need to prepare adjacent teeth (even if there's nothing wrong with them), adjacent teeth must be in good condition or bridge will fail, hard to floss/keep clean	high \$\$ option	2 appts + lab time
	implant	fills the gap, fixed, easy to clean, involves only 1 tooth	high \$\$ option, involves surgery, no ligament to feel if biting on something hard	high \$\$ option	multiple appts, 6-9 months
ROOT CANAL THERAPY	do nothing	no cost, no time	pain, can lead to infection which can spread throughout the body	no cost	no time
	root canal	removes pain, keep the tooth	can be painful, high \$\$, time	high \$\$	1-2 appts
	extract	removes pain, less time, less \$\$	lose tooth, takes time to heal	less \$\$	1 appt, but need time to heal

2. When is crown lengthening needed?

If needed, what interventions are there other than surgical procedure?

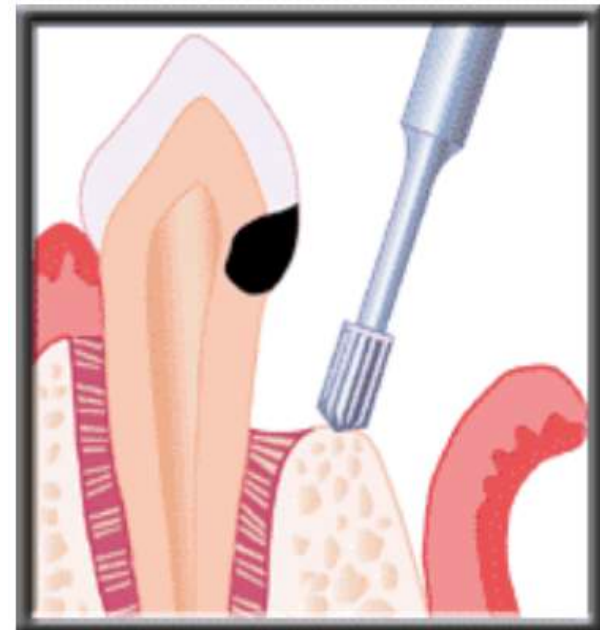
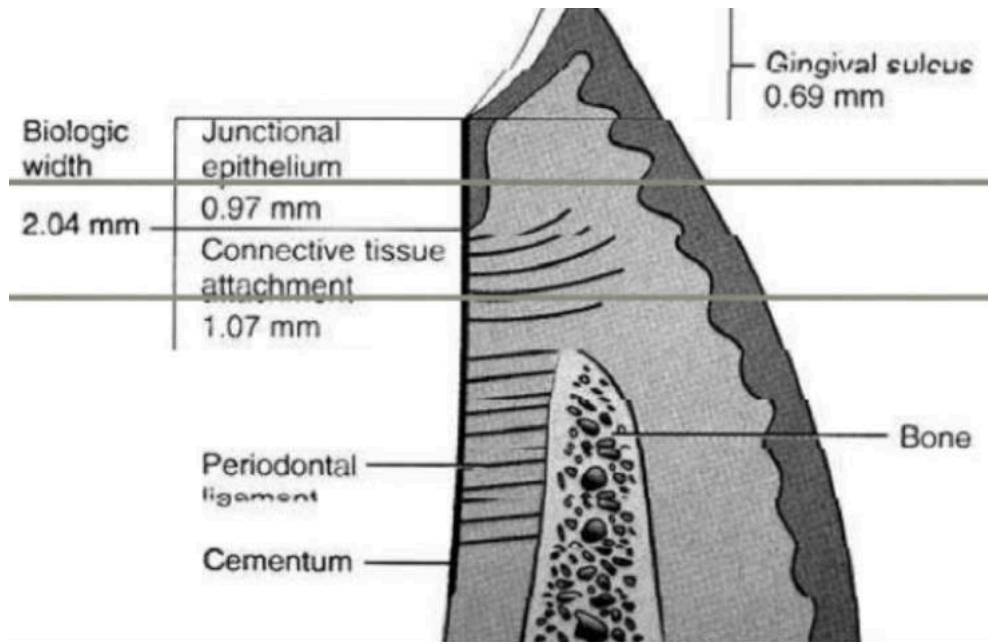
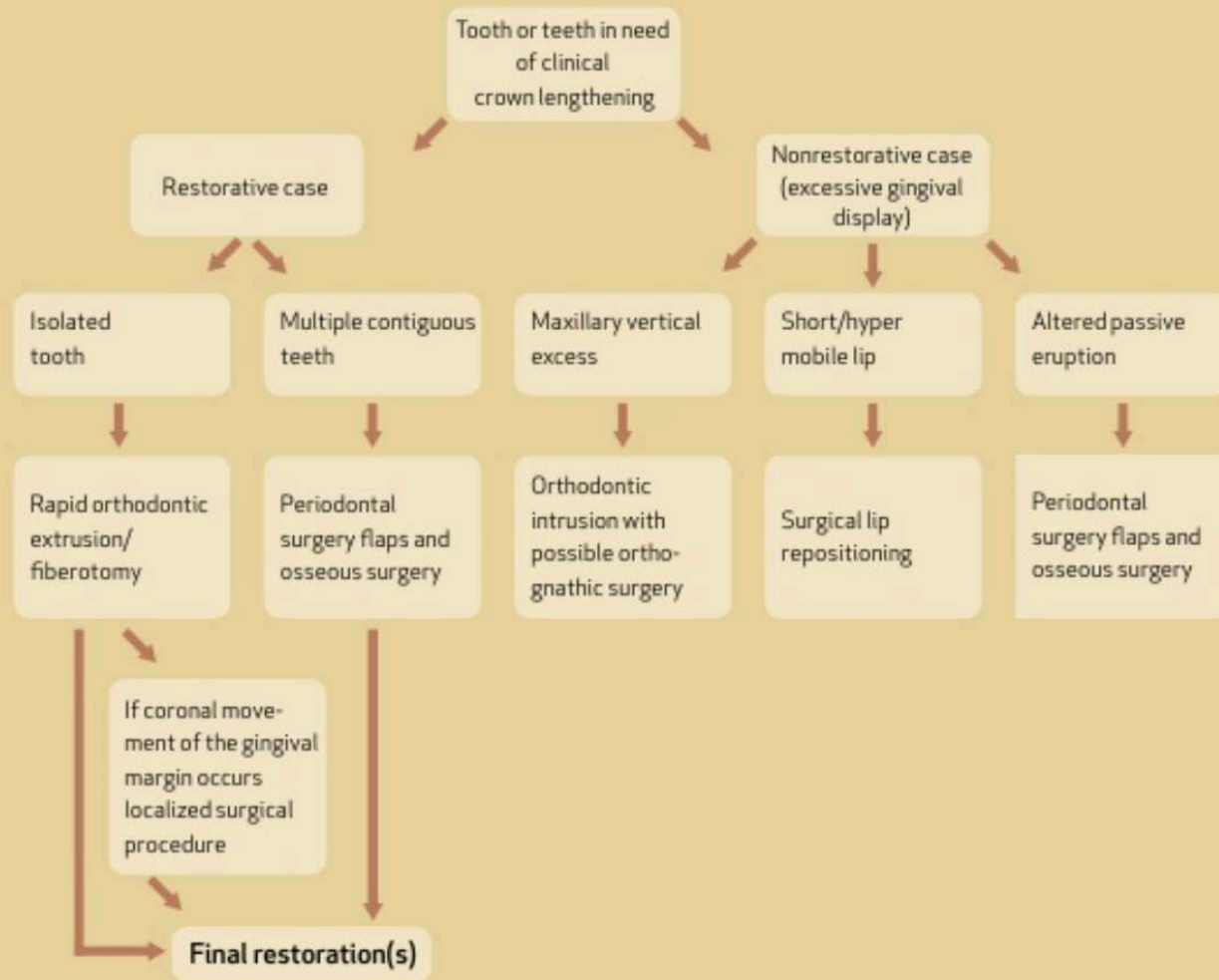


TABLE 2

Treatment decision tree for a tooth or teeth requiring clinical crown lengthening in the esthetic zone.



- Ortho (isolated tooth) vs. Perio surgical procedure (multiple teeth)



- Laser!

3. What are the options for treating deep carious lesions?

- Indirect pulp cap
- Step-wise excavation
- Direct Pulp cap
-etc.

Affected vs. Infected Dentin

The Controversy

INFECTED VS AFFECTED DENTIN

Infected dentin	Affected dentin
▪ Highly demineralized ▪ Unremineralizable ▪ Superficial layer ▪ Lacking sensation ▪ Stained by 0.5% fuschin or i.e. 1.0% acid red solution ▪ Ultrastructure- intertubular dentin greatly demineralized, with irregular scattered crystals. Presence of deteriorated collagen fibers that have only distinct cross bands and no interbands. ▪ Should be excavated	▪ Intermediately demineralized ▪ Remineralizable ▪ Deeper layer ▪ Sensitive ▪ Does not stain ▪ Ultrasructure: intertubular dentin Partially demineralized, but apatitie crystals bound like fringes to the Sound collagen fibers with distinct Cross bands and interbands. ▪ Should be left remineralize.

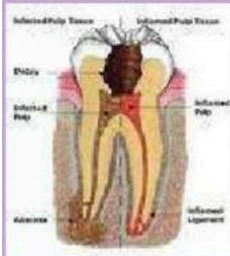


Fig. 1. Lesión cariosa en la que se observa una capa superficial de dentina afectada y una más profunda de dentina infectada por caries.

Leave Infected Dentin Behind?...

Abstract

[Go to:](#) 

Background

The classical approach to treatment of deep carious lesions approaching the pulp mandates removing all infected and affected dentin. Several studies call this approach into question.

Types of Studies Reviewed

A search of five electronic databases using selected key words to identify studies relating to partial versus complete removal of carious lesions yielded 1,059 reports, of which the authors judged 23 to be relevant. Three articles reported the results of randomized controlled trials.

Results

The results of three randomized controlled trials, one of which followed up patients for 10 years, provide strong evidence for the advisability of leaving behind infected dentin, the removal of which would put the pulp at risk of exposure. Several additional studies have demonstrated that cariogenic bacteria, once isolated from their source of nutrition by a restoration of sufficient integrity, either die or remain dormant and thus pose no risk to the health of the dentition.

Keywords: Deep caries, deep carious lesions, partial caries removal, indirect pulp capping, pulpal exposure, stepwise excavation, alternative restorative treatment

Complete or ultraconservative removal of decayed tissue in unfilled teeth.

[Ricketts DN¹](#), [Kidd EA](#), [Innes N](#), [Clarkson J](#).

[Cochrane Database Syst Rev. 2013]

Abstract

BACKGROUND: The treatment of deep dental decay has traditionally involved removal of all the soft demineralised dentine before a filling is placed. However this has been challenged in three groups of studies which involve sealing soft caries into the tooth. The three main groups either remove no caries and seal the decay into the tooth, remove minimal (ultraconservative) caries at the entrance to a cavity and seal the remaining caries in, or remove caries in stages over two visits some months apart to allow the pulp time to lay down reparative dentine (the stepwise excavation technique).

OBJECTIVES: To test the null hypothesis of no difference in the incidence of damage or disease of the nerve of the tooth (pulp), progression of decay and longevity of restorations irrespective of whether the removal of decay had been minimal (ultraconservative) or complete.

SEARCH STRATEGY: The Cochrane Oral Health Group Trials Register, Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, PubMed and EMBASE databases were searched. The reference lists in relevant papers were checked.

SELECTION CRITERIA: Randomised controlled trials and controlled clinical trials comparing minimal (ultraconservative) caries removal with complete caries removal in unrestored permanent and deciduous teeth.

DATA COLLECTION AND ANALYSIS: Outcome measures recorded were exposure of the nerve of the tooth (pulp) during caries removal, patient experience of symptoms of pulpal inflammation or necrosis, progression of caries under the filling, time until the filling was lost or replaced. Due to the heterogeneity of the included studies the overall estimate of effect was calculated using a random-effects model.

MAIN RESULTS: Four studies met the inclusion criteria; two stepwise excavation studies and two ultraconservative caries removal studies. Partial caries removal in symptomless, primary or permanent teeth reduces the risk of pulp exposure. We found no detriment to the patient in terms of pulpal symptoms in this procedure and no reported premature loss or deterioration of the restoration.

AUTHORS' CONCLUSIONS: The results of this systematic review reject the null hypothesis of no difference in the incidence of damage or disease of the nerve of the tooth (pulp) irrespective of whether the removal of decay had been minimal (ultraconservative) or complete and accepts the null hypothesis of no difference in the progression of decay and longevity of restorations. However, the number of included studies is small and differ considerably. Partial caries removal is therefore preferable to complete caries removal in the deep lesion, in order to reduce the risk of carious exposure. However, there is insufficient evidence to know whether it is necessary to re-enter and excavate further but studies that have not re-entered do not report adverse consequences.

Comment in

Partial caries removal in symptomless teeth reduces the risk of pulp exposure. [Evid Based Dent. 2006]
Complete caries removal may not be indicated in symptomless deep lesions. [J Evid Based Dent Pract. 2006]
Critical appraisal: approaches to caries removal: what the clinical evidence says. [J Esthet Restor Dent. 2013]

Treatment Outlook: Prognosis

- Definition: a prediction of the course, duration and outcome of a disease based on the pathogenesis of the disease and the presence of risk factors.
- Determination: after the diagnosis is made but before a treatment plan is established
- Types: excellent, good, fair, poor/questionable
- Overall versus individual tooth prognosis
 - Overall: influencing factors include patient age, current disease severity, systemic factors, social history (i.e. smoking), local factors (plaque, calculus, etc.), patient compliance and prosthetic possibilities.
 - Individual: determined after the overall prognosis and is affected by it.

Factors influencing prognosis:

Overall Clinical Factors	Systemic/ Environmental Factors	Local Factors	Prosthetic/ Restorative Factors
▪ Patient age ▪ Disease severity ▪ Plaque control ▪ Patient compliance	▶ Smoking ▶ Systemic disease/condition ▶ Genetic factors ▶ Stress	- Plaque/calculus - Subgingival restorations - Anatomic factors: ▶ Short, tapered roots ▶ Cervical enamel projections ▶ Enamel pearls ▶ Bifurcation ridges ▶ Root concavities ▶ Developmental grooves ▶ Root proximity ▶ Furcation involvement - Tooth mobility	▶ Abutment selection ▶ Caries ▶ Nonvital teeth ▶ Root resorption

Treatment Outlook:

Alternative Treatment Option

Outcomes of root canal treatment & restoration versus single tooth implant

- 196 post-endodontically treated teeth compared with 196 matched, single-tooth implants (both provided in the same setting).
 - Results yielded that both groups had 94 percent survival rates.
 - Even with similar survival rates, the implant group experienced a much greater incidence of post-operative complications (e.g., prosthetic repairs, etc.).
- Conclusion: “The decision to treat a compromised tooth endodontically or replace it with an implant must be based on factors other than treatment outcome.”

Christensen GJ. Implant therapy versus endodontic therapy. J Am Dent Assoc 2006;137(10):1440-3.

Doyle S, Hoidges J, Pesun I, Law A, Bowles W. Retrospective cross sectional comparison of initial non-surgical endodontic treatment and single-tooth implants. J Endod 2006;31.

Iqbal M, Kim S. For Teeth Requiring Endodontic Treatment, What Are the Difference in Outcome of Restored Endodontically Treated Teeth Compared to Implant-Supported Restorations? International J Oral Maxillofac Implants 22(Suppl):96-119, 2007.

Select List of Local & Systemic Factors to Consider in Treatment Planning

Factor	Example
Location of tooth	• The "esthetic zone," especially in the anterior maxillary region, often represents a challenge for implants (9) • Implant survival may be lower in the posterior maxilla compared to mandible (12) • Proximity to anatomical structures (sinus, nerve canals, etc.)
Quality of bone	• Poor bone quality reduces survival of dental implants (13) • Implants tend to have greater survival in host bone compared to graft bone (14) • Osteoporosis is associated with reduced implant survival, particularly in post-menopausal females without estrogen replacement (15)
Periodontal status and tissue type	• May require both periodontal and endodontic treatment to save the tooth (16), or the tooth may have hopeless periodontal condition • Periodontally hopeless teeth may require extraction • Poor hygiene is associated with reduced survival of implants (17) • Evidence of vertical or certain horizontal root fractures may require extraction of the tooth
Restorability	• Endodontic therapy may be required for retention of restoration • May require consideration of extraction if tooth cannot be restored (16)
Systemic factors	• Smoking reduces survival of implants (18) and possibly endodontically treated teeth (19) • Saving a tooth by endodontic treatment may be indicated in certain patients taking bisphosphonates (20) to reduce the risk of bisphosphonate-associated osteonecrosis of the jaw • Diabetes may reduce survival of implants (21) and reduce periradicular healing in endodontically treated teeth (5, 22) • Hypertension is associated with reduced survival of endodontically treated teeth in the American Indian population (5)

Open Discussion



Questions & Answers