



Comprehensive Clinical Presentation on Oral Rehabilitation

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PATIENT OVERVIEW



49 year old male

CC: "I want to replace my missing teeth, fix the teeth I have if they are saveable, and improve my smile"

MedHx: HTN, spinal surgery 03/10/22 due to spread of gonorrheal infection

Meds: Lisinopril + Hydrochlorothiazide

BP: 164/100 mmHg **Pulse:** 91 bpm

SH: Got laid off due to health complications, and is now focusing on improving his health. Denti-Cal patient.

ROS

- Stage 2 Hypertension
 - Compliance with medications
 - Hydrochlorothiazide
 - Orthostatic hypotension
- Gonorrhea
 - After obtaining medical consultation, the infection has been controlled and removed with surgical and pharmaceutical intervention.
- Spinal surgery
 - Chair positioning
 - Patient reports full ROM



Social Determinants of Health



Health Care Access and Quality

“Strategies to increase insurance coverage rates are critical for making sure more people get important health care services, like preventive care and treatment for chronic illnesses.” ¹

- **DENTI-CAL**

PHOTOGRAPHS

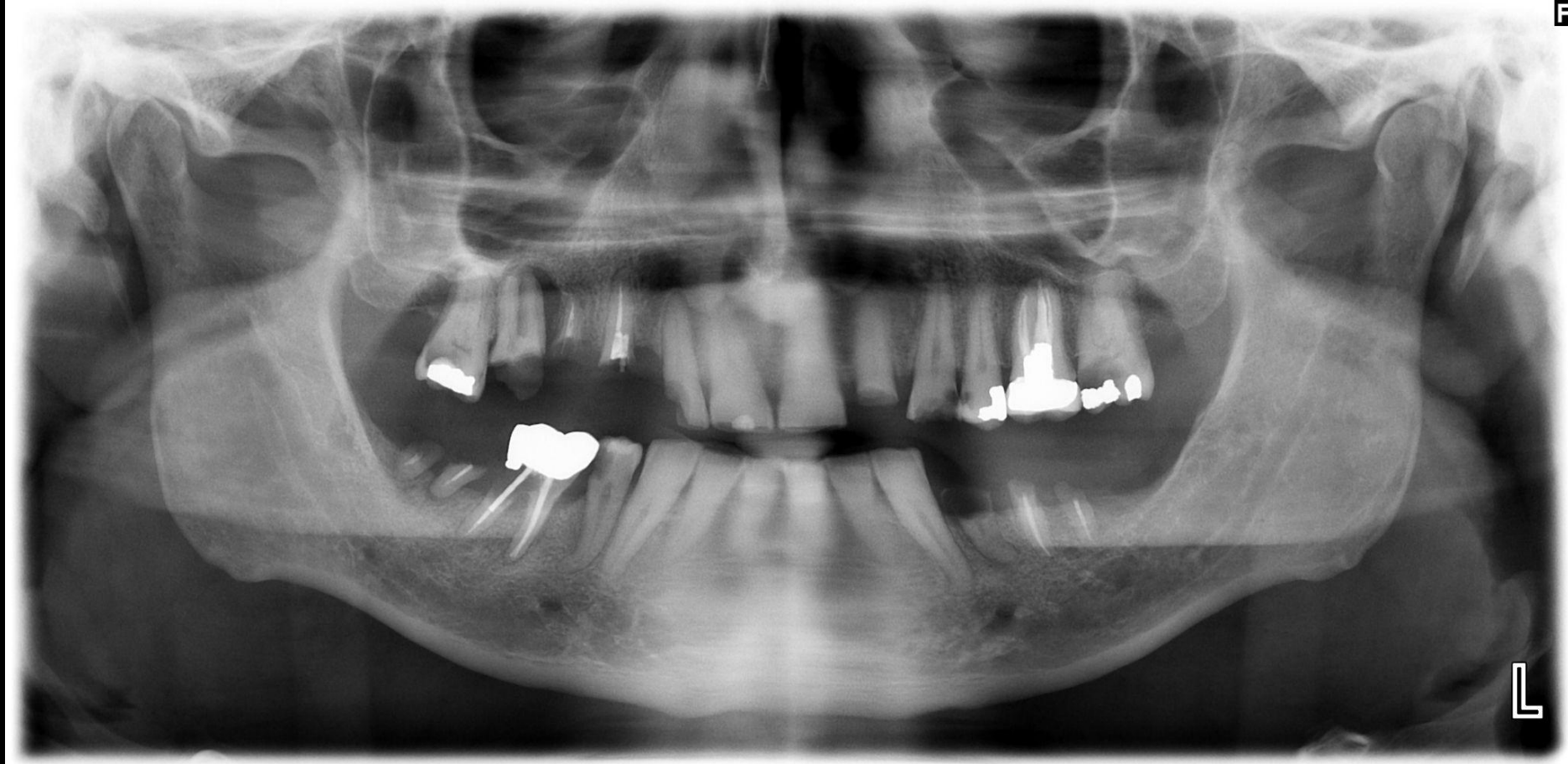


Image 1: Dry patches and pigmentation on mandibular labia. Referred patient to follow up with dermatologist.

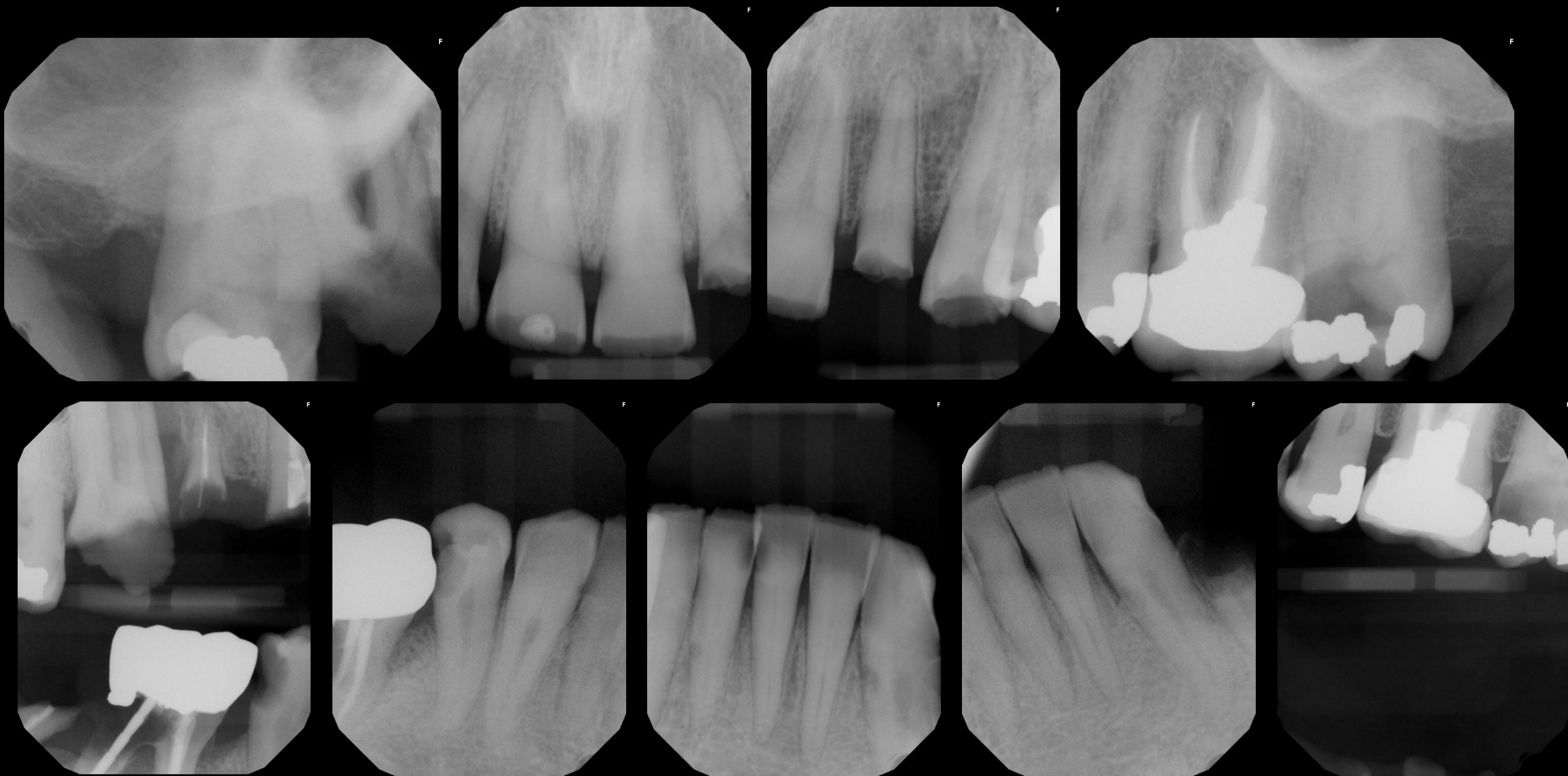


Image 2: Irregular shaped melanotic lesion on left arm. Referred patient to follow up with dermatologist.

RADIOGRAPHS



RADIOGRAPHS



PERIODONTAL CHARTING

	4 3 3					2 2 3	2 2 3	3 2 3	2 1 3	3 2 3		3 2 3	3 2 3	3 2 4		PD
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																Furcation
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																Diag
																Calc
																MG Inv
																Furcation
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		-4 -2 -1		0 0 1	1 0 1	1 -1 1	1 -2 0	1 -1 1	1 -1 1	1 -1 -1						FreeGM
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		4 3 4		4 3 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3						PD
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																Calc
																MG Inv
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		B		B	B	B	B	B	B	B						Bleed
		2 3 4		3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3						PD

PERIODONTAL FINDINGS

Assessment



- Plaque Index: 2.8 poor
- Moderate bone loss
- Anterior occlusion

Diagnosis



- Generalized Chronic Moderate to Severe Periodontitis
- Stage I Grade B

HARD TISSUE CHARTING

- 1: missing
- 2: O amalgam recurrent decay, L composite, MB caries
- 3: gross decay, non restorable
- 4: retained RCT root tip
- 5: missing
- 6: retained RCT root tip
- 7: DILF decay
- 8: I composite, attrition
- 9: attrition, D-E1 lesions
- 10: decayed and fractured to gumline
- 11: decayed to pulp
- 12: missing
- 13: DO amalgam, M-D2 lesion
- 14: RCT, PFM, MD open margins w/ recurrent decay
- 15: OL amalgam, M decay to pulp
- 16: missing
- 17: missing
- 18: missing
- 19: retained RCT root tip
- 20: missing
- 21: decayed to gumline
- 22: attrition
- 23: attrition, D-D2, M-D1
- 24: attrition, D-D1, M-D2
- 25: attrition, M-D2, NCCL at F
- 26: attrition
- 27: attrition
- 28: DO decayed to pulp
- 29: missing
- 30: RCT, gold crown, recurrent gross decay
- 31: retained RCT root tips
- 32: missing





ENDO TESTING

Tooth	Cold test	Percussion	Palpation	EPT (microAmps)	Diagnosis
2	No response	++ moderate	WNL	No response 80	Pulpal necrosis SAP
7	No response	WNL	WNL	31	Reversible pulpitis NAP
11	++ moderate, lingered 10 s	WNL	WNL	45	SIP SAP
15	++ moderate, delayed 5 s	++ moderate	WNL	26	SIP SAP
28	No response	+ slight	WNL	No response 80	Pulpal necrosis SAP

HARD TISSUE FINDINGS

CRA

ATP Reading: 4569 (high)
Saliva pH: 5.5-6.9
Watery saliva
Xerostomia (self reported)
Extreme Caries Risk

DIAGNOSIS

- Active caries
- #28 pulpal necrosis, SAP

PROGNOSIS

- Hopeless for #3, 30, and root tips
- Poor for #15
- Guarded for #2, 7, 10, 11
- Good for #13, 14, 23, 24, 25, 28



MULTIDISCIPLINARY CONSULTATIONS

Periodontics: Dr. Partha

- #3, 30, and root tips have hopeless prognosis, guarded for #10, and good to fair for rest of dentition if the recommended prophy treatment is rendered.

Oral Pathology: Dr. Ferriera

- **Mandibular labia:** diagnosis of **actinic cheilitis** or keratosis. Referred to dermatologist for biopsy and recommended the use of SPF chapstick.

- **Left arm melanotic lesion:** diagnosis of melanocytic nevus, differential diagnosis of melanoma. Referred to dermatologist for biopsy.

- Patient reported back that the dermatologist took 3-4 inch excisional biopsies on left arm and scalp with results of **pre-malignant melanoma**.



MULTIDISCIPLINARY CONSULTATIONS

Removable Prosthodontics: Drs. Eliason and Hoover

- Discussion about upper RPD, full removable denture, or all on 4 implant denture.
- Relating to patient's chief concern to restore function, improve smile, and considering his finances and fears losing his front teeth, a **full upper immediate denture** was recommended.
- To restore lower arch, **removable partial denture** was recommended.

Endodontics: Dr. Nehme

- Since upper arch teeth will be extracted, focus is on saving lower arch dentition.
- Due to #28 have a root dilaceration, RCT was referred to an endodontic resident.

Oral Surgery: Drs. Farhood and Nix

- Phase 1: right side, upper and lower posterior extractions.
- Phase 2: left side, upper and lower posterior extractions.
- Phase 3: upper anterior extractions + delivery of immediate.



01: ACCEPTED TREATMENT PLAN



URGENT

- #28 RCT (Dr. Nash)



DISEASE CONTROL

- Prophy
- High fl. Tp
- Ctx2 boost spray
- Ext #2, 3, 4, 6, 30, 31
- Ext #13, 14, 15, 19, 21
- #23 MLDC, #24 MLDC, #25 MLc



RECONSTRUCTIVE

- #28 post + zirconia survey crown
- Ext #7, 8, 9, 10, 11
- Maxillary immediate denture
- Mandibular RPD



MAINTENANCE

- 6 month exam recalls
- CTx3 rinse

02: ALTERNATIVE TREATMENT PLAN



“URGENT”

- Ext + BG upper arch and #19, 21, 28, 30, 31



DISEASE CONTROL

- Prophy
- High fl. Tp
- Ctx2 boost spray
- #23 MLDC, #24 MLDC, #25 MLc



RECONSTRUCTIVE

- All on X implant upper denture
- #18, 21 implants
- #18, 19, 21 zirconia implant bridge
- #28, 31 implants
- #28, 30, 31 zirconia implant bridge



MAINTENANCE

- CTx3 rinse
- 6 month recalls

01

Accepted Tx Plan



~\$6,000 cost

Denti-Cal has coverage for entire treatment plan. Patient hasn't had any out of pocket cost (yet).



02

Alternative Tx Plan



~\$25,000 cost

Denti-Cal has no coverage of the reconstructive phase. Patient finances could not afford him this plan.

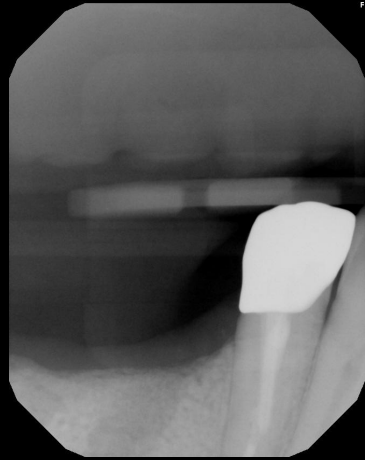
Still a viable option after patient saves up if fixed prosthesis is desired.

TREATMENT	RISKS	BENEFITS	ANALYSIS
#28 RCT + post as RPD abutment tooth	Vital abutment teeth had a better survival rate (4 year follow up) than RCT treated teeth ² .	Keeping of structurally sound pre molar as abutment tooth and utilizing a mesial rest + B clasp is better than anterior teeth alone.	Keeping as many teeth was of patient's interest. With the RPD lingual plate design, we can make #27 an abutment tooth should #28 fail down the road.
Direct restorative	Bonding failure, sensitivity, recurrent decay, etc.	Disease removed, strengthened tooth structure, less sensitivity, repairable.	The benefits of removing disease and placing composite outweighs the risks.
Immediate denture (maxillary)	Imperfect fit due to immediacy, many adjustments, decreased food taste ³ .	Having front teeth for as long as possible, ability to chew and improved quality of life ⁴ , controlled post op bleeding.	Patient wanted to always have front teeth. Regain ability to chew benefit outweighed the weakened taste risk.

Research: Post and Core

- Main function of post: retain core in a tooth with a lot of coronal tooth structure loss ⁵.
- A good post should be 2/3ds the length of the canal and preserve an endodontic seal (3-5 mm apically) ⁶.
- Adequate Ferrule: minimum of 2 mm circumferentially ⁶.
- If ferrule is present, there is no significant difference in post materials with regards to fracture ^{6,7}.
- Glass fiber and metal cast posts had similar clinical performances in a RCT study over 9 years, with a follow up rate of 95.3% ⁵.
- Premolars often require posts ⁷.
 - Take a lot of lateral force
 - Bulky but minimal structure (vs. molars and anteriors)

RADIOGRAPHS



PHOTOGRAPHS



24-hour post operative appointment.



6 weeks post operative appointment.

PHOTOGRAPHS



PHOTOGRAPHS



6 MONTH RECALL EXAM

Perio: #24 F recession with 1-2 mm remaining attached gingiva, approaching mucogingival involvement → needs peridontal intervention for gingival graft #24

HTE:

#24 F cervical decay → #24 F composite

#25 I chipped into dentin → #25 I composite

REMP: Soft reline, other adjustments



Acknowledgements

This clinical case was only possible with the guidance from the following astounding faculty and resident. Thank you all for being a part of the rehabilitation of our very grateful and ecstatic patient. Our patient has vocalized how happy he is with his new beautiful and healthier smile. Him and I both feel emotional over the success of the services we were able to render for the betterment of his oral and overall health. Thank you again.

Special thanks to:

Periodontics: Dr. Partha

Removable Prosthodontics: Drs. Eliason, Hoover, LaBarre, Curtis, Tran, Frick, and Barnby

Oral Pathology: Dr. Ferreira

Restorative: Drs. Reid, Weber, Karimian, Edwards, and Kogan

Oral Surgery: Drs. Farhood and Nix

Endodontics: Dr. Nehme and resident Dr. Nash

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