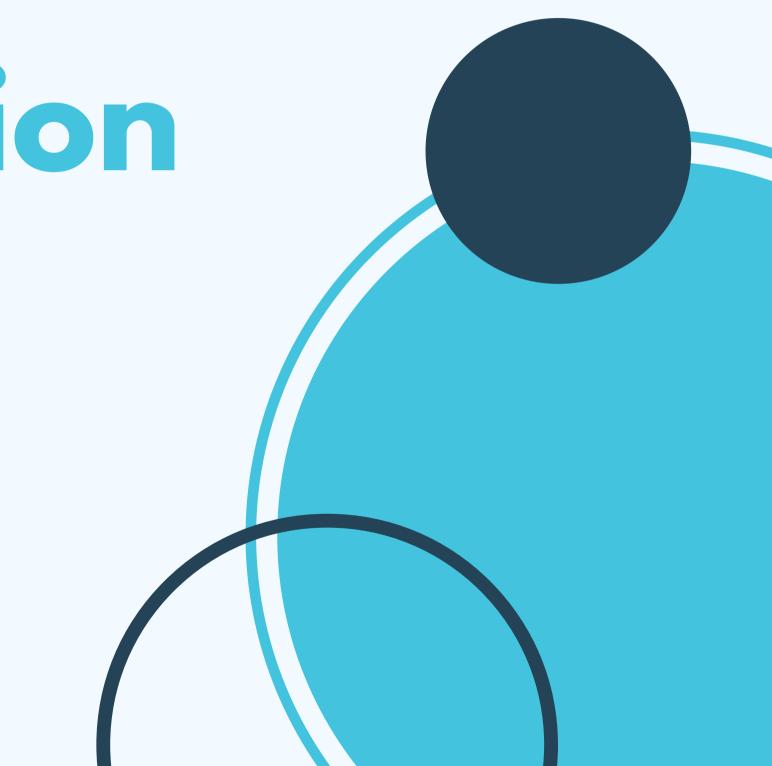
OKU EXCELLENCE DAY - REMOVABLE PROSTHODONTICS

# Oral Rehabilitation Using Complete Dentures

Mike Villavecer, DDS 2020



# THE PATIENT

- 58 years old
- From Stockton, CA
- Works as a janitor for UoP main campus
- Wife passed away 10 years ago
- CC: "I have some loose teeth"

# HEALTH HISTORY

## MEDICAL CONDITIONS

Patient reported no medical conditions, but presented consistently with elevated blood pressure. Patient was advised to consult his primary care physician about controlling his blood pressure.

# **HABITS**

Patient denies any habits that may affect treatment

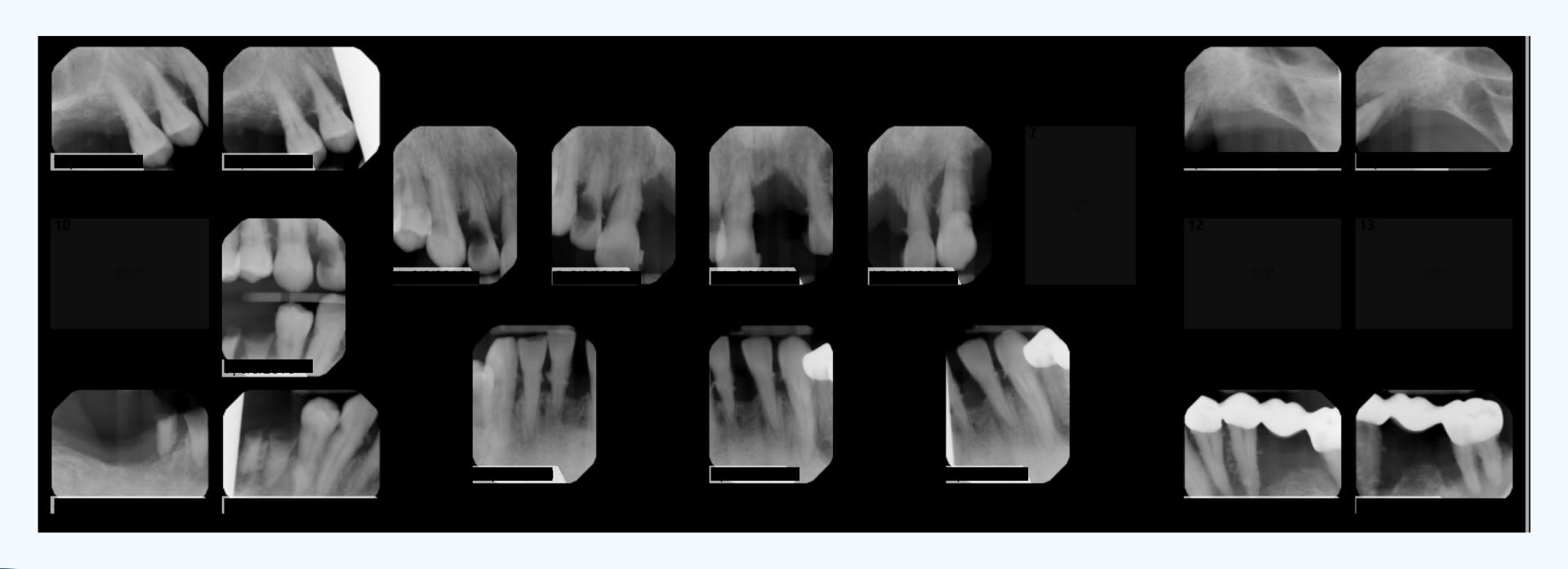
# **MEDICATIONS**

Multivitamin 1x/day

# **DENTAL HISTORY**

Patient had not visited the dentist in >10 years

# **RADIOGRAPHS**



# CLINICAL PHOTOS









# PERIODONTAL CHARTING (MAXILLARY)

									Let	<u> </u>						
PD				3 3 5	8 3 8	6 3 5	3 4 5	8 3 5		3 3 6	7 3 3					
Bleed				B B B	В В В	В В В	В В В	в в в		в в в	в в в					
FreeGM				-3 -1 0	0 0 0	0 0 0	1 1 3	2 0 -3		0 0 2	1 -3 -3					
Attach				6 4 5	8 3 8	6 3 5	2 3 2	6 3 8		3 3 4	6 6 6					
Furcation																
MG Inv																
Calc																
Mobil				0	2	0	1	3		1	0					
Facial	M	M	M			N.	i.i.		Σ	i i	\.	M	M	M	M	M
				X	A	X										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lingual	1 M	2 M	3 M	4	5	6	7		9 M	10	11	12 M	13 M	14 M	15 M	16 M
	1 M					i i	×			X						
PD	1 M			6 3 3	6 3 9	6 2 4	5 2 5	5 3 3		3 2 3	6 6 3					
PD Bleed	1 M			6 3 3 B B B	6 3 9 B B B	6 2 4 B B B	5 2 5 B B B	5 3 3 B B B		3 2 3 B B B	6 6 3 B B B					
PD Bleed FreeGM	1 M			6 3 3 B B B -5 -3 0	6 3 9 B B B O O O	6 2 4 B B B 0 0 0	5 2 5 B B B 0 0 3	5 3 3 B B B O -2 -3		3 2 3 B B B -1 0 0	6 6 3 B B B 1 -3 -6					
PD Bleed FreeGM Attach	1 M			6 3 3 B B B	6 3 9 B B B	6 2 4 B B B	5 2 5 B B B	5 3 3 B B B		3 2 3 B B B	6 6 3 B B B					
PD Bleed FreeGM Attach Furcation	1 M			6 3 3 B B B -5 -3 0	6 3 9 B B B O O O	6 2 4 B B B 0 0 0	5 2 5 B B B 0 0 3	5 3 3 B B B O -2 -3		3 2 3 B B B -1 0 0	6 6 3 B B B 1 -3 -6					
PD Bleed FreeGM Attach Furcation MG Inv	1 M			6 3 3 B B B -5 -3 0	6 3 9 B B B O O O	6 2 4 B B B 0 0 0	5 2 5 B B B 0 0 3	5 3 3 B B B O -2 -3		3 2 3 B B B -1 0 0	6 6 3 B B B 1 -3 -6					
PD Bleed FreeGM Attach Furcation	1 M			6 3 3 B B B -5 -3 0	6 3 9 B B B O O O	6 2 4 B B B 0 0 0	5 2 5 B B B 0 0 3	5 3 3 B B B O -2 -3		3 2 3 B B B -1 0 0	6 6 3 B B B 1 -3 -6					

# PERIODONTAL CHARTING (MANDIBULAR)

Diag Diag	
3	
Calc	
MG Inv	
Furcation	3
Attach 3 2 3 3 3 3 3 3 2 8 3 2 3 3 4 5 3 2 3 2 2 4 6 3 9 3	9 9
FreeGM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0 0 1 -1 -1	2 -3 -6 -6
Bleed B B B B B B B B B B B B B B B B B B	B B B
PD 3 2 3 3 3 3 3 3 2 8 3 2 3 3 2 3 3 2 3 3 3 5 6 3 9 3 12 1	5 6 3 6
Lingual Lingual	
	M M
32 31 30 29 28 27 26 25 24 23 22 21 20	19 18 17
Facial Table 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
M M M M	M M
Mobil 3 2 1 2 2 3 3 3	3
Calc	
MG Inv	
Furcation	3
Attach 2 1 2 3 3 2 7 2 7 2 3 2 2 3 4 4 3 2 3 3 8 4 2 5 9	9
	0 -3 -3 -6
FreeGM 0 0 0 0 0 0 0 0 1 0 1 1 0 1 1 0 1 1 0 1 0 -6 (	
FreeGM         0 0 0 0 0 0 0 0 0 0 1 0 1 1 0 1         1 0 1 1 0 1 1 0 1 0 6 0           Bleed         B B B B B B B B B B B B B B B B B B B	

# CLINICAL EXAM

## CARIES RISK ASSESMENT

- Disease Indicators
  - Visible cavitations / radiolucencies
- Risk Factors
  - High acidogenic bacterial load (ATP meter = 4145)
  - Visible heavy plaque
  - Frequent snacks
  - Exposed roots
- Protective Factors
  - Adequate saliva flow (pH > 7)

**HIGH CARIES RISK** 

## PERIODONTAL STATUS

- Generalized severe chronic periodontitis
- Stage IV, Grade B
- Plaque index: 2.7
- Heavy calculus
- Deep pockets (>6 mm)
- Generalized mobility

**PROGNOSIS: HOPELESS** 

#### HARD TISSUE EXAM

- #7 D3 lesion
- PFM bridge #18-21
  - Class III mobility
- #29, 30 retained roots
- #1, 2, 3, 9, 12, 13, 14, 15, 16, 17, 19, 24, 30, 31, 32 missing

# TREATMENT PLAN

Cost = \$5,000 (Patient qualifies for University overdenture program)

#### **URGENT**

EXT #7, 18, 20, 21, 29, 30

# DISEASE CONTROL

EXT remaining posterior teeth (#4, 5, 28)

#### RESTORATIVE

EXT remaining anterior teeth (#6, 8, 10, 11, 22, 23, 25, 26, 27)

Immediate upper and lower dentures

Implants #22, 27

#### MAINTENANCE

Complete upper and lower dentures

Implant overdenture

Replace attachments after 1 week

6 month recall

# **ALTERNATIVE TREATMENT PLAN**

Cost = \$3,700

#### **URGENT**

EXT #7, 18, 20, 21, 29, 30

# DISEASE CONTROL

EXT remaining posterior teeth (#4, 5, 28)

#### RESTORATIVE

EXT remaining anterior teeth (#6, 8, 10, 11, 22, 23, 25, 26, 27)

Immediate upper and lower dentures

#### MAINTENANCE

Complete upper and lower dentures

1 week recall intervals

Denture adjustment PRN













# CONVENTIONAL COMPLETE DENTURE VS. IMPLANT RETAINED OVERDENTURE

# A SYSTEMATIC REVIEW



Improved Masticatory Function



Improved Ability to Speak



Improved Quality of Life

Bottom Line: Patients who receive implant-retained overdentures seem to have better oral health-related quality of life than those who receive complete conventional dentures.

Kutkut A, Bertoli E, Frazer R, Pinto-sinai G, Fuentealba hidalgo R, Studts J. A systematic review of studies comparing conventional complete denture and implant retained overdenture. J Prosthodont Res. 2018;62(1):1-9.

# QUALITY OF LIFE OF IMPLANT-SUPPORTED OVERDENTURES

# A SYSTEMATIC REVIEW

#### **RESULTS**

A significant difference in Oral Health Related Quality of Life (OHRQoL) between implant supported overdentures and conventional complete dentures.

#### CONCLUSIONS

Patients benefit more from implant supported overdentures with 2 implants than conventional complete dentures. More long term studies with randomized control trials and sufficient sample sizes need to be done to investigate long term performance.



# REFERENCES

Kutkut A, Bertoli E, Frazer R, Pinto-sinai G, Fuentealba hidalgo R, Studts J. A systematic review of studies comparing conventional complete denture and implant retained overdenture. J Prosthodont Res. 2018;62(1):1–9.

Srinivasan M, Makarov NA, Herrmann FR, Müller F. Implant survival in 1- versus 2-implant mandibular overdentures: a systematic review and meta-analysis. Clin Oral Implants Res. 2016;27(1):63-72.

Zhang L, Lyu C, Shang Z, Niu A, Liang X. Quality of Life of Implant-Supported Overdenture and Conventional Complete Denture in Restoring the Edentulous Mandible: A Systematic Review. Implant Dent. 2017;26(6):945–950.