Periodontal Staging & Grading - Why'd they change it again?!

Gwen Essex, RDH, MS, EdD

Professor & Associate Dean of Academic Affairs
College of Dental Medicine
California Northstate University

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The latest diagnostic guidelines from the American Academy of Periodontology have been available since 2017. Many of us continue to fall back on older classification systems and yet there may be some value in the new system if we could just get our head around it! This course is focused on demystifying staging and grading of periodontal disease.

Learning Objectives:
At the conclusion of this course participants will be able to:
- explain the significance of staging and grading in periodontal classification.
- relate prior classifications to the new system for continuity.
- explain to a patient the meaning of a periodontal diagnosis that utilizes staging and grading and its relevant to treatment.

AAP Periodontal Classification Systems

Year	1977	1986	1989	1999	2017
Disease categories	2	4	5	8	4 + 3 grades related to progression
Major Pertinent Updates		Better defined juvenile & differentiated diseases within adult	Includes population, severity, extent of disease	Adds clinical parameters and etiology to 1989 inclusions	Adopts medical language, includes implants & includes both individualized risk factors, and progression

So, what is meant by "adopts medical language"? Grading of disease severity is common in medicine and assists patients in understanding where they are in the continuum of disease. Further, including the staging that is based on individual risk factors that relate to expected progression gives a far more personalized prognosis than possible prior. It can be said that the 2017 update brings the context within which the patient exists into the equation.

Ultimately what we want to determine and share with the patient is information about the severity of the disease and the expected rate of progression.

Staging is similar to how periodontitis was described and assessed in prior classification systems. It's the grading that is new and allows for individual variables to be included when determining likely progression.

Staging and Grading Periodontitis

The 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions resulted in a new classification of periodontitis characterized by a multidimensional staging and grading system. The charts below provide an overview. Please visit **perio.org/2017wwdc** for the complete suite of reviews, case definition papers, and consensus reports.

PERIODONTITIS: STAGING

Staging intends to classify the severity and extent of a patient's disease based on the measurable amount of destroyed and/or damaged tissue as a result of periodontitis and to assess the specific factors that may attribute to the complexity of long-term case management.

Initial stage should be determined using clinical attachment loss (CAL). If CAL is not available, radiographic bone loss (RBL) should be used. Tooth loss due to periodontitis may modify stage definition. One or more complexity factors may shift the stage to a higher level. See **perio.org/2017wwdc** for additional information.

	Periodontitis	Stage I	Stage II	Stage III	Stage IV
Severity	**Interdental CAL** *(at site of greatest loss)*	1 – 2 mm	3 – 4 mm	≥5 mm	≥5 mm
	RBL	Coronal third (<15%)	Coronal third (15% - 33%)	Extending to middle third of root and beyond	Extending to middle third of root and beyond
	Tooth loss *(due to periodontitis)*	No tooth loss		≤4 teeth	≥5 teeth
Complexity	**Local**	• Max. probing depth ≤4 mm • Mostly horizontal bone loss	• Max. probing depth ≤5 mm • Mostly horizontal bone loss	In addition to Stage II complexity: • Probing depths ≥6 mm • Vertical bone loss ≥3 mm • Furcation involvement Class II or III • Moderate ridge defects	In addition to Stage III complexity: • Need for complex rehabilitation due to: – Masticatory dysfunction – Secondary occlusal trauma (tooth mobility degree ≥2) – Severe ridge defects – Bite collapse, drifting, flaring – < 20 remaining teeth (10 opposing pairs)
Extent and distribution	**Add to stage as descriptor**	For each stage, describe extent as: • Localized (<30% of teeth involved); • Generalized; or • Molar/incisor pattern			

PERIODONTITIS: GRADING

Grading aims to indicate the rate of periodontitis progression, responsiveness to standard therapy, and potential impact on systemic health.

Clinicians should initially assume grade B disease and seek specific evidence to shift to grade A or C.
See **perio.org/2017wwdc** for additional information.

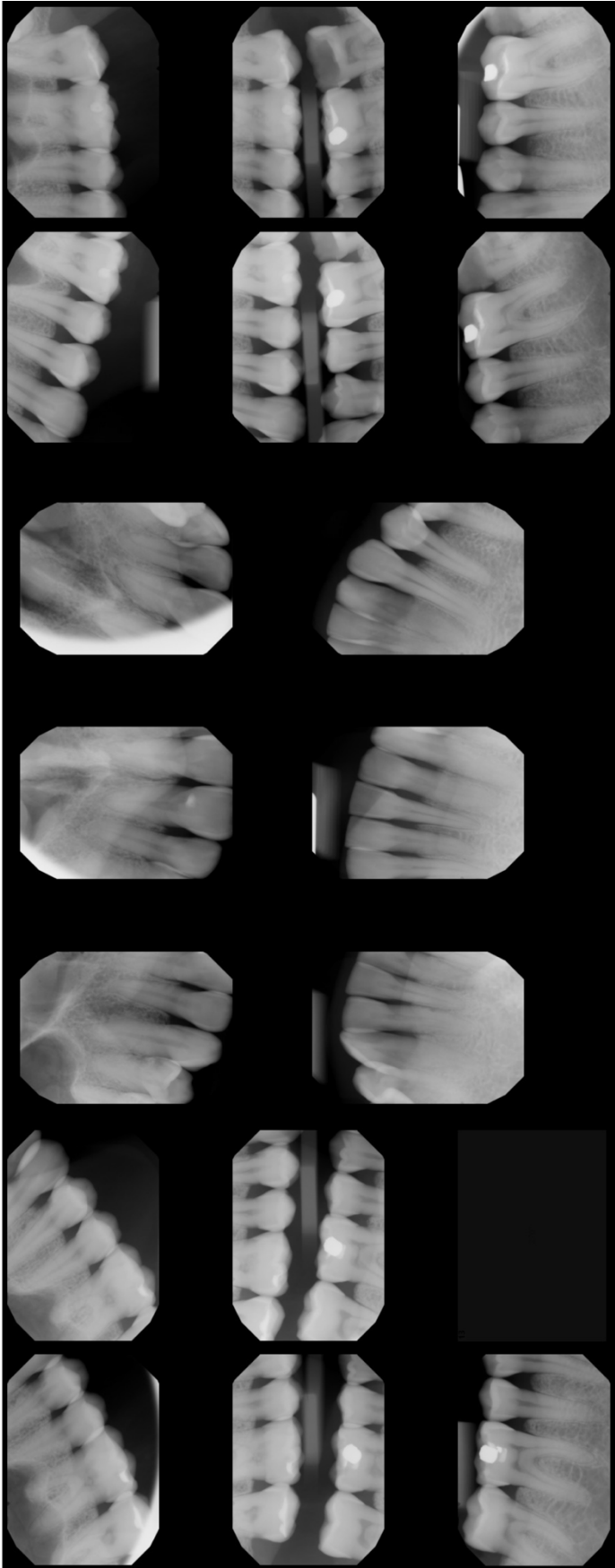|	Progression		Grade A: Slow rate	Grade B: Moderate rate	Grade C: Rapid rate
Primary criteria *Whenever available, direct evidence should be used.*	Direct evidence of progression	Radiographic bone loss or CAL	No loss over 5 years	<2 mm over 5 years	≥2 mm over 5 years
	Indirect evidence of progression	% bone loss / age	<0.25	0.25 to 1.0	>1.0
		Case phenotype	Heavy biofilm deposits with low levels of destruction	Destruction commensurate with biofilm deposits	Destruction exceeds expectations given biofilm deposits; specific clinical patterns suggestive of periods of rapid progression and/or early onset disease
Grade modifiers	Risk factors	Smoking	Non-smoker	<10 cigarettes/day	≥10 cigarettes/day
		Diabetes	Normoglycemic/no diagnosis of diabetes	HbA1c <7.0% in patients with diabetes	HbA1c ≥7.0% in patients with diabetes

The 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions was co-presented by the American Academy of Periodontology (AAP) and the European Federation of Periodontology (EFP).

Patient A

50 yo Female

- No systemic disease
- No medications
- No tobacco
- No tooth loss to periodontal disease

Maxillary — Facial

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
P Depth		4 4 4	4 3 4	4 4 4	3 3 5	4 3 4	4 3 4	4 3 4	4 4 4	4 2 4	4 2 4	4 2 4	3 2 3	4 3 4	4 4 4	0 0 0	P Depth
GM CEJ		0 0 0	1 2 1	1 3 1	0 1 0	2 2 2	0 0 0	0 0 0	0 0 0	0 0 0	2 2 2	0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	GM CEJ
Attach		4 4 4	5 5 5	5 7 5	3 4 5	6 5 6	4 3 4	4 3 4	4 4 4	4 2 4	6 4 6	4 3 4	3 3 3	4 3 4	4 4 4	0 0 0	Attach
Calculus		N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	Calculus
Plaque		P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	Plaque
Suppuratn		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	Suppuratn
Bleed		N N B	N B N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	Bleed
Furcation		0	0											0	0	0	Furcation
Tooth	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

Maxillary — Palatal

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
P Depth		4 3 4	4 4 4	4 3 4	4 3 4	4 3 4	4 3 4	4 3 4	3 2 3	4 3 4	4 3 4	4 3 4	4 3 4	4 3 4	4 4 4	0 0 0	P Depth
GM CEJ		0 0 0	0 0 0	0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 1 0	0 1 0	0 0 0	GM CEJ
Attach		4 3 4	4 4 4	4 4 4	4 4 4	4 3 4	4 3 4	4 3 4	3 2 3	4 3 4	4 3 4	4 3 4	4 4 4	4 4 4	4 5 4	0 0 0	Attach
Calculus		N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	Calculus
Plaque		P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	Plaque
Bleed		N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N B	N N N	B N N	N N N	Bleed
Mobility		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Mobility
Furcation		0 0	0 0											0 0	0 0	0 0	Furcation

Mandibular — Lingual

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	
Furcation	0	0												0	0		Furcation
Mobility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		Mobility
Bleed	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		Bleed
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		Plaque
Calculus	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		Calculus
Attach	6 5 5	4 3 4	4 4 5	5 4 5	1 2 1	4 6 4	4 6 4	4 4 4	4 3 4	4 3 4	4 3 4	3 4 3	4 4 4	3 4 3	4 4 4		Attach
GM CEJ	2 2 2	1 1 1	1 1 1	1 1 1	0 0 0	1 2 1	1 4 1	1 2 1	1 1 1	1 1 1	1 1 1	1 1 1	1 1 1	0 0 0	0 0 0		GM CEJ
P Depth	4 3 3	3 2 3	4 3 4	4 3 4	1 2 1	3 4 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 2 3	3 4 3	4 4 4		P Depth
Tooth	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	

Mandibular — Facial

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	
Furcation														0	0		Furcation
Bleed	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		Bleed
Suppuratn	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		Suppuratn
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		Plaque
Calculus	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		Calculus
Attach	5 4 5	5 3 5	3 4 3	3 4 3	5 2 5	4 4 4	3 3 3	2 5 2	4 3 4	2 6 2	4 4 4	3 4 3	4 3 4	4 3 4	4 3 4		Attach
GM CEJ	1 1 1	2 2 2	1 3 1	1 3 1	1 1 1	1 3 1	1 2 1	1 3 1	0 1 0	1 4 1	1 2 1	0 2 0	0 0 0	0 0 0	0 0 0		GM CEJ
P Depth	4 3 4	3 1 3	2 1 2	2 1 2	4 1 4	3 1 3	2 1 2	1 2 1	4 2 4	1 2 1	3 2 3	3 2 3	4 3 4	4 3 4	4 3 4		P Depth

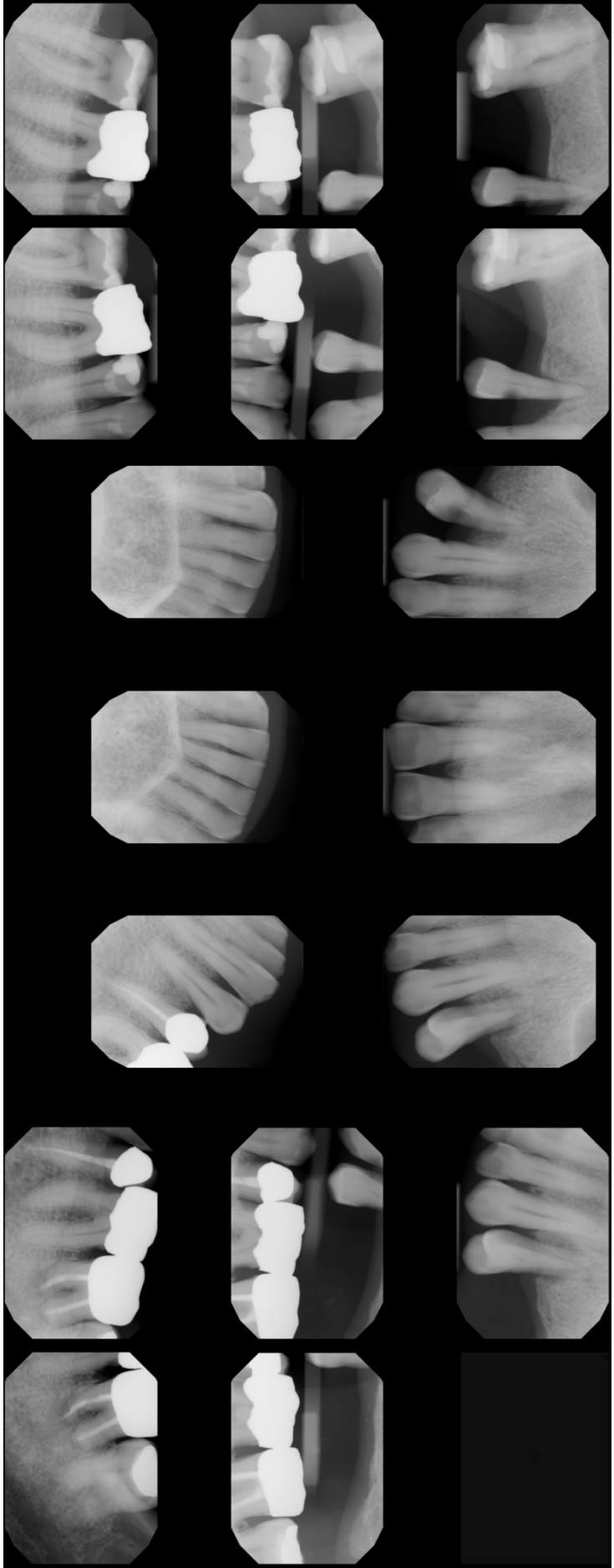# Patient B

60 yo male
- No systemic disease
- No medications

- No tobacco
- Five teeth lost due to periodontal disease

Maxillary (Teeth 1–16)

Facial

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth		2 3 2		3 3 4		3 3 3	3 2 3	2 2 3	3 2 3	2 1 3	3 2 2	5 2 3				
GM CEJ																
Attach		2 3 2		3 3 4		3 3 3	3 2 3	2 2 3	3 2 3	2 1 3	3 2 2	5 2 3				
Calculus		N N N		N N N		N N N	N N N	N N N	N N N	N N N	N N N	N N N				
Plaque		P P P		P P P		P P P	P P P	P P P	P P P	P P P	P P P	P P P				
Suppuratn		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				
Bleed		N N N		N N B		N N N	N N N	N N N	N N N	N N N	N N N	N N N				
Furcation		0														

Palatal

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth		2 2 3		5 9 9		3 2 3	3 2 3	2 2 5	3 2 2	2 1 2	2 1 2	7 8 7				
GM CEJ																
Attach		2 2 3		5 9 9		3 2 3	3 2 3	2 2 5	3 2 2	2 1 2	2 1 2	7 8 7				
Calculus		N N N		N N N		N N N	N N N	N N N	N N N	N N N	N N N	N N N				
Plaque		P P P		P P P		P P P	P P P	P P P	P P P	P P P	P P P	P P P				
Bleed		N N N		B N N		N N N	N N N	N N N	N N N	B N N	N N N	N N N				
Mobility		0		2		0	0	0	0	0	0	2				
Furcation	0	0														

Mandibular (Teeth 32–17)

Lingual

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation		0	0											0	0	0
Mobility		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bleed	N N N	N N N	N N N	N N N	N N N	N N B	N N N	N N N	N N N	N N N	N N N	N N N	B N N	N N N	B B B	N N N
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P
Calculus	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N
Attach	4 3 3	5 3 5	5 2 3	3 2 3	4 3 5	6 2 2	2 1 1	2 1 1	3 3 3	3 2 2	4 2 1	3 2 2	3 2 4	4 4 4	4 2 3	
GM CEJ																
P Depth	4 3 3	5 3 5	5 2 3	3 2 3	4 3 5	6 2 2	2 1 1	2 1 1	3 3 3	3 2 2	4 2 1	3 2 2	3 2 4	4 4 4	4 2 3	

Facial

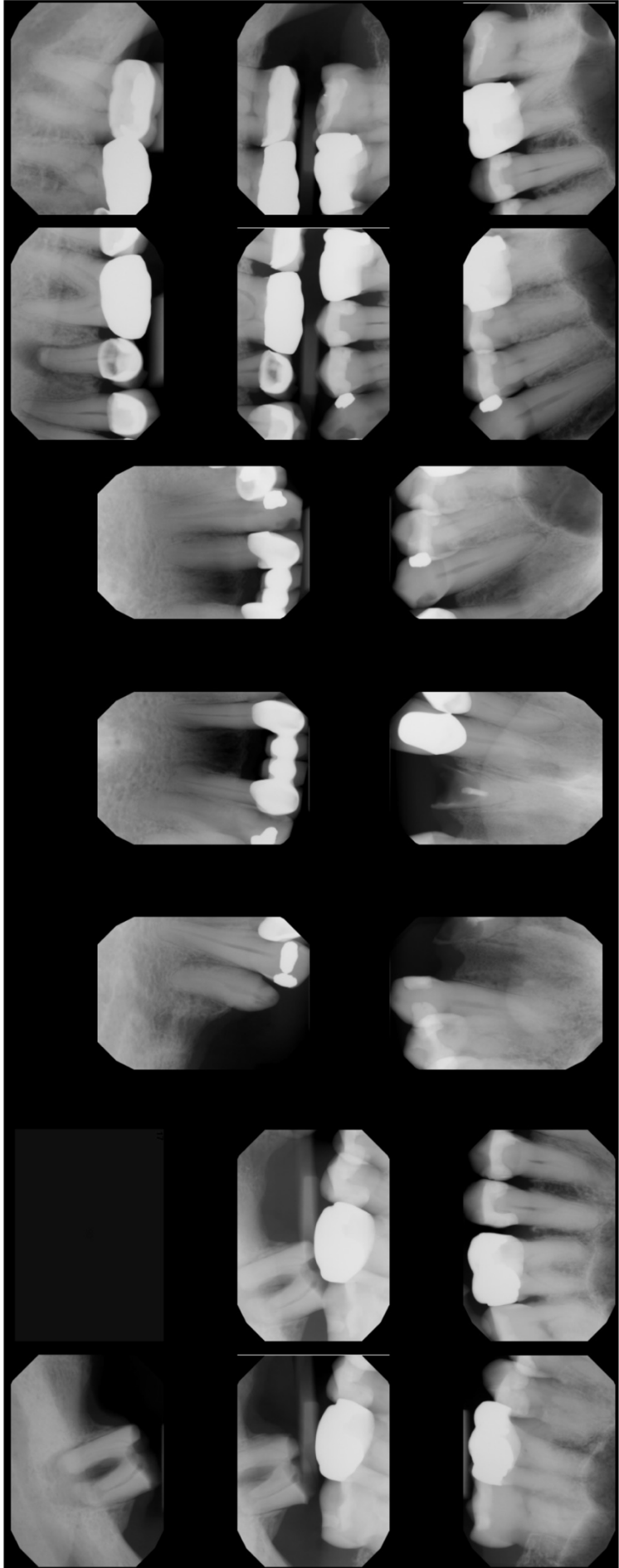|	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation		0	0											0	0	0
Bleed	N N N	N N N	N N N	N N N	N N N	N N N	N B N	N N N	N N B	N N N	N N N	N N N	N N N	N B N	N N N	
Suppuratn	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	
Calculus	N N N	N N N	N N N	N N N	N N N	N N N	C C C	C C C	C C C	C C C	N N N	N N N	N N N	N N N	N N N	
Attach	4 2 3	3 1 3	5 3 3	4 2 3	4 2 3	6 2 3	3 2 3	2 1 3	4 2 3	3 1 4	3 2 2	2 1 3	4 3 6	3 3 4	4 5 4	
GM CEJ																
P Depth	4 2 3	3 1 3	5 3 3	4 2 3	4 2 3	6 2 3	3 2 3	2 1 3	4 2 3	3 1 4	3 2 2	2 1 3	4 3 6	3 3 4	4 5 4	

Patient C

79 yo female
- Type II diabetes
  - A1c – 6.8

- Medications
  - Atorvastatin
  - Glipizide

- No tobacco
- Four teeth lost due to periodontal disease

Maxillary (Teeth 1–16)

Facial

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth		3 2 3	3 2 3	4 1 3	4 1 5	4 1 3	5 1 4	3 1 4			3 2 3	4 2 5	4 2 6	5 2 5	4 2 4	
GM CEJ		3 3 3	0 4 0	0 2 0	0 2 0	0 3 0	0 1 0	0 0 0			0 2 0	0 0 0	0 2 0	0 0 0	0 1 0	
Attach		6 5 6	3 6 3	4 3 3	4 3 5	4 4 3	5 2 4	3 1 4			3 4 3	4 2 5	4 4 6	5 2 5	4 3 4	
Calculus		N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		N N N	N N N	N N N	N N N	N N N	
Plaque		P N P	P N P	P N P	P N P	P N P	P N P	N N N	N N N		N N N	P N P	P N P	P N P	P N P	
Suppuratn		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	
Bleed		N N N	N N N	N N N	N N B	N N N	B N N	B N B			N N N	B N N	N N N	N N B	N N N	
Furcation		0	0											0	0	

Lingual

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth		3 2 3	3 2 3	4 2 3	4 2 4	4 2 2	4 2 3	3 2 3			2 2 3	3 2 4	3 1 4	3 2 5	5 3 4	
GM CEJ		0 0 0	0 2 0	0 0 0	0 2 0	0 0 0	0 0 0	0 0 0			0 0 0	0 0 0	0 0 0	0 2 0	0 0 0	
Attach		3 2 3	3 4 3	4 2 3	4 4 4	4 2 2	4 2 3	3 2 3			2 2 3	3 2 4	3 1 4	3 4 5	5 3 4	
Calculus		N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		N N N	N N N	N N N	N N N	N N N	
Plaque		P N P	P N P	P N P	P N P	P N P	P N P	P N N	N N N		P N P	P N P	P N P	P N P	P N P	
Bleed		N N N	N N N	N N B	B N N	N N N	N N N	B B N							B B B	
Mobility		0	0	0	0	0	0	0	0		0	0	0	0	0	
Furcation		0	0 0											0	0 0	

Mandibular (Teeth 32–17)

Lingual

Measure	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation		0	0													
Mobility		0	0	0	0	0	0			0	0	0				
Bleed		N N N	N N B	B N B	N N N	N N N	N N N			N N N	N N N	N N N				
Plaque		P N P	P N P	P N P	P N P	P N P	P N P			P N P	P N P	P N P				
Calculus		N N N	N N N	N N N	N N N	N N N	N N N			N N N	N N N	N N N				
Attach		4 2 4	4 2 4	4 2 4	4 2 3	3 2 3	3 2 3			3 1 3	3 2 3	3 2 2				
GM CEJ		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				
P Depth		4 2 4	4 2 4	4 2 4	4 2 3	3 2 3	3 2 3			3 1 3	3 2 3	3 2 2				

Facial

Measure	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation															0	
Bleed		N N B	B N B	B N B	B N N	N N N	N N N			N N N	N N N	N N N				
Suppuratn		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		P N P	P N P	P N P	P N P	P N P	P N P			P N P	P N P	P N P				
Calculus		N N N	N N N	N N N	N N N	N N N	N N N			N N N	N N N	N N N				
Attach		3 2 4	4 2 5	4 2 5	5 2 3	3 2 6	3 3 3			4 3 4	4 2 2	2 1 2				
GM CEJ		0 0 0	0 0 0	0 0 0	0 0 0	0 1 2	0 1 0			1 1 1	1 1 0	0 0 0				
P Depth		3 2 4	4 2 5	4 2 5	5 2 3	3 1 4	3 2 3			3 2 3	3 1 2	2 1 2				

Patient D
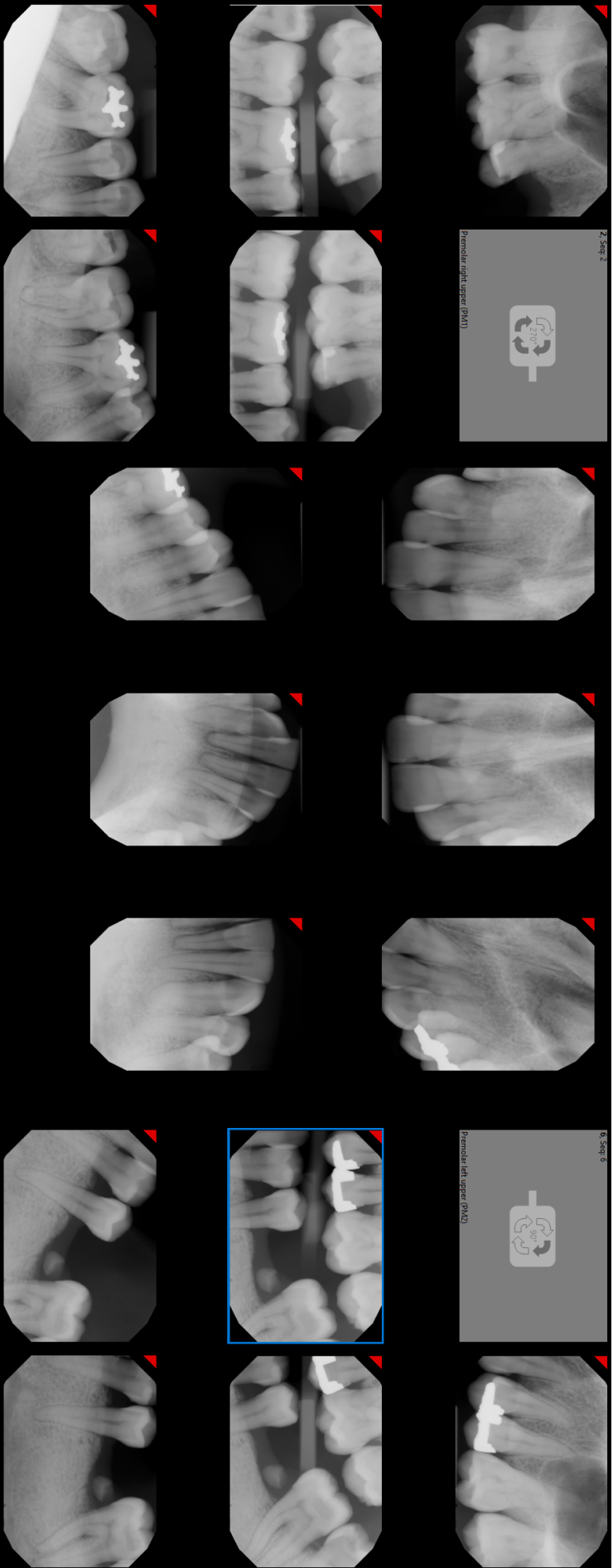
40 yo female
- Hypertension
- Medications
  - Amlodipine

- Tobacco use – ½ pack/day
  - 25 years
- No tooth loss due to periodontal disease

Maxillary – Facial

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth		4 2 3	4 1 3	3 1 2		1 1 3	3 1 4	4 1 2	3 1 2	3 1 3	4 1 5	3 1 6	3 1 5	4 2 5	6 5 5	
GM CEJ		0 1 0	0 1 0	0 0 0		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 1 0	0 1 0	0 1 0	0 1 0	
Attach		4 3 3	4 2 3	3 1 2		1 1 3	3 1 4	4 1 2	3 1 2	3 1 3	4 2 5	3 2 6	3 2 5	4 3 5	6 6 5	
Calculus		N N N	N N N	N N N		N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	
Plaque		P P P	P P P	P P P		P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	
Suppuratn		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	
Bleed		N N N	N N B	N N N		N N B	B N B	B N B	N N N	B N N	N N N	N N B	N N B	N N B	B B B	
Furcation		0	0											0	0	

Maxillary – Lingual

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth		3 1 4	4 1 4	3 1 2		2 2 3	3 1 3	4 1 3	3 1 2	3 1 3	4 1 3	3 1 4	4 2 3	3 1 5	3 2 4	
GM CEJ		0 0 0	0 0 0	0 0 0		0 0 0	0 1 0	0 1 0	0 0 0	0 0 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	
Attach		3 1 4	4 1 4	3 1 2		2 2 3	3 1 3	4 2 3	3 1 2	3 1 3	4 2 3	3 1 4	4 2 3	3 1 5	3 2 4	
Calculus		N N N	N N N	N N N		N N N	N N N	C C C	C C C	N N N	N N N	N N N	N N N	N N N	N N N	
Plaque		P P P	P P P	P P P		P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	
Bleed		B B B	B B B	B N N		N N N	B B B	B N B	B N B	B B B	B N N	N N N	N N N	N N B	N N N	
Mobility		0	0	0		0	0	1	1	0	0	0	0	0	0	
Furcation		0 0	0 0											0 0	0 0	

Mandibular – Facial

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation	0	0	0	0	0	0									0	0
Mobility	0	0	0	0	0	0	1	3	2	1	0	0	1		2	0
Bleed	N N N	N N B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B		B B B	B B B
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		P P P	P P P
Calculus	C C C	N N N	N N N	N N N	N N N	N N N	N N N	C C C	C C C	N N N	N N N	N N N	N N N		N N N	N N N
Attach	4 3 5	3 3 4	4 2 5	6 4 3	3 3 3	3 3 3	4 5 3	4 5 5	5 6 4	3 4 4	4 3 5	3 3 4	5 3 4		3 4 5	4 4 5
GM CEJ	0 1 1	0 1 1	0 0 0	0 1 0	0 1 0	0 1 0	1 2 1	1 2 1	1 3 1	1 2 1	1 1 1	0 1 0	0 1 2		1 1 1	1 1 1
P Depth	4 2 4	3 2 3	4 2 5	6 3 3	3 2 3	3 2 3	3 3 2	3 3 4	4 3 3	2 2 3	3 2 4	3 2 4	5 2 2		2 3 4	3 3 4

Mandibular – Lingual

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation															0	0
Bleed	B N B	N N B	B B B	B B B	B B B	B N B	B B B	B B B	N N N	B B B	N N N	B B B	B N B		N N B	N N B
Suppuratn	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
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		P P P	P P P
Calculus	C C C	N N N	N N N	N N N	N N N	N N N	C C C	C C C	C C C	C C C	N N N	N N N	N N N		N N N	N N N
Attach	5 3 4	4 3 4	4 2 3	4 2 3	3 3 4	4 2 4	3 4 3	8 4 6	5 5 3	3 2 5	4 2 3	3 4 5	5 3 4		3 3 4	3 3 5
GM CEJ	0 0 0	0 1 0	0 0 0	0 0 0	0 1 0	0 0 0	0 1 0	1 3 1	0 3 0	0 1 0	0 1 0	0 2 1	1 2 2		0 1 0	0 0 0
P Depth	5 3 4	4 2 4	4 2 3	4 2 3	3 2 4	4 2 4	3 3 3	7 1 5	5 2 3	3 1 5	4 1 3	3 2 4	4 1 2		3 2 4	3 3 5

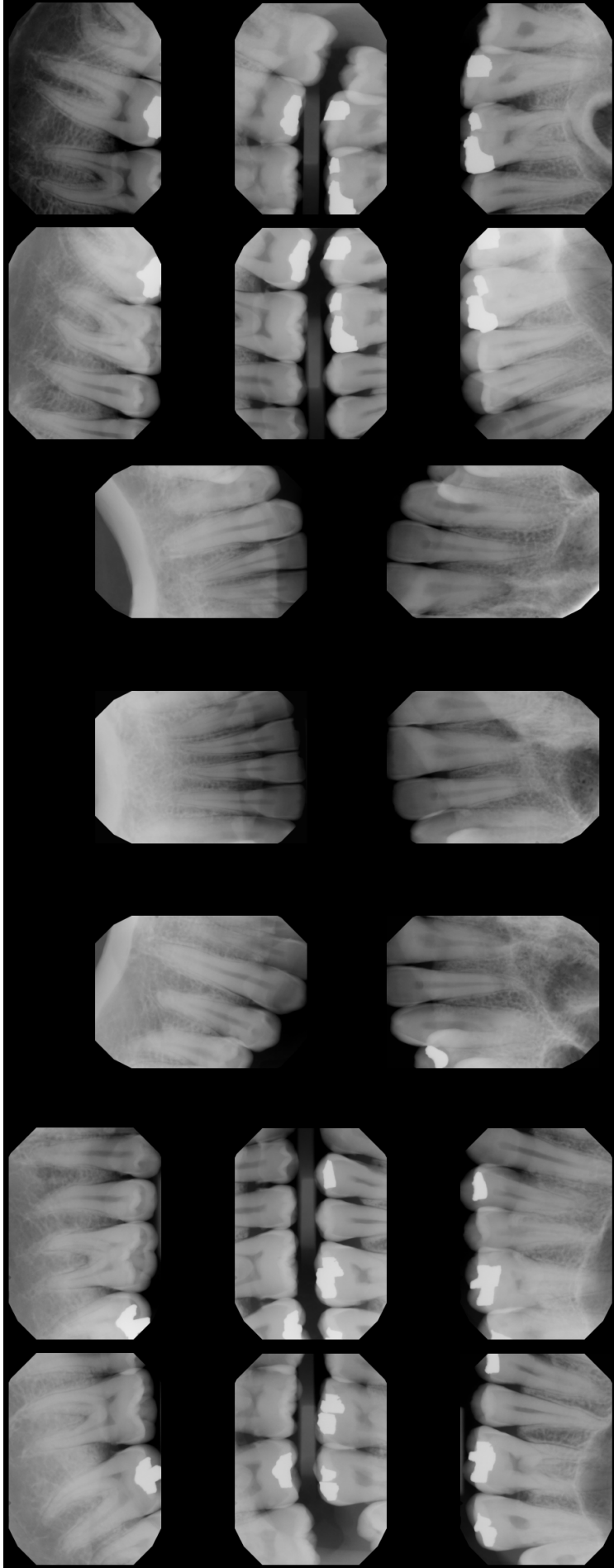Premolar right upper (PM1)

270°

Premolar left upper (PM2)

90°

Patient E

24 yo male
- No systemic disease
- No medications

- Tobacco use – 3 – 5/day
  - Five years
- No tooth loss due to periodontal disease

Maxillary — Facial

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth	5 5 7	6 5 9	8 4 6	5 3 4	4 3 6	5 3 3	3 2 4	3 2 3	2 2 3	4 3 5	4 3 6	8 3 5	5 2 4	5 4 7	7 3 4	
GM CEJ	-3 -3 -3	-3 -3 -3	-3 -4 -3	-3 -3 -4	-4 -3 -3	-3 -3 -3	-3 -2 -4	-3 -2 -3	-2 -2 -3	-3 -3 -3	-3 -3 -3	-3 -3 -3	-3 -2 -3	-3 -4 -3	-3 -3 -4	
Attach	2 2 4	3 2 6	5 0 3	2 0 0	0 0 3	2 0 0	0 0 0	0 0 0	0 0 0	1 0 2	1 0 3	5 0 2	2 0 1	2 0 4	4 0 0	
Calculus	C C C	C C C	C C C	C C C	C C C	N N N	N N N	N N N	N N N	N N N	N N N	C C C	C C C	C C C	C C C	
Plaque	P P P	P P P	P P P	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	P P P	P P P	
Suppuratn	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	
Bleed	B B B	B B B	B B B	B B B	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	B B B	B B B	
Furcation	0	0	0											0	0	

Maxillary — Palatal

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth	5 5 8	6 3 9	8 3 6	6 2 4	3 3 6	6 3 3	3 3 4	3 3 3	3 3 4	4 3 4	4 3 5	8 3 4	4 3 5	4 2 8	7 3 4	
GM CEJ	-3 -3 -3	-3 -3 -3	-3 -3 -3	-3 -2 -3	-3 -3 -3	-3 -3 -3	-3 -3 -3	-3 -3 -3	-3 -3 -4	-4 -3 -4	-4 -3 -4	-4 -3 -4	-3 -3 -3	-3 -2 -3	-3 -3 -4	
Attach	2 2 5	3 0 6	5 0 3	3 0 1	0 0 3	3 0 0	0 0 1	0 0 0	0 0 0	0 0 0	0 0 1	4 0 0	1 0 2	1 0 5	4 0 0	
Calculus	C C C	C C C	C C C	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	C C C	C C C	C C C	C C C	
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	N N N	N N N	N N N	P P P	P P P	P P P	P P P	P P P	
Bleed	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	
Mobility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Furcation	0 0	0 0	0 0											0 0	0 0	

Mandibular — Lingual

Measure	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation	0	0	0											1	0	0
Mobility	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Bleed	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P
Calculus	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C
Attach	3 0 4	3 0 3	3 0 1	1 0 0	0 0 0	0 0 0	2 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 2	2 0 2	0 0 4	2 0 3	2 3 3
GM CEJ	-3 -4 -3	-3 -3 -3	-3 -3 -4	-4 -3 -4	-4 -3 -3	-3 -3 -3	-3 -3 -4	-3 -3 -4	-4 -2 -3	-4 -3 -4	-3 -2 -3	-3 -3 -3	-3 -3 -3	-4 -4 -3	-3 -3 -3	-3 -3 -3
P Depth	6 4 7	6 3 6	6 3 5	5 3 4	4 3 3	3 3 3	5 3 4	3 3 4	4 2 3	4 3 4	3 2 3	3 2 5	5 3 5	4 4 7	5 3 6	5 6 6

Mandibular — Facial

Measure	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation	0	0	0											0	0	0
Bleed	B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B	B B	B B B	B B B	B B B	B B B	B B B	B B B	B B B
Suppuratn	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 0 0
Plaque	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P
Calculus	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C	C C C
Attach	3 2 2	3 -1 3	3 0 0	0 0 0	0 0 2	2 0 3	3 0 0	1 0 1	0 0 2	2 0 2	0 0 0	0 0 2	1 0 1	2 0 4	4 0 3	3 2 2
GM CEJ	-3 -3 -3	-3 -4 -3	-3 -2 -3	-3 -2 -3	-4 -2 -3	-3 -4 -3	-3 -3 -4	-3 -2 -3	-4 -3 -3	-3 -3 -3	-3 -3 -4	-3 -2 -3	-3 -2 -3	-3 -3 -3	-3 -3 -3	-3 -3 -3
P Depth	6 5 5	6 3 6	6 2 3	3 2 3	4 2 5	5 4 6	6 3 4	4 2 4	4 3 5	5 3 5	3 3 4	3 2 5	4 2 4	5 3 7	7 3 6	6 5 5

Patient F

58 yo female
- Type II diabetes
  - latest A1c – 7.1
- Hypertension
- High cholesterol

- Medications
  - Glipizide
  - Bupropion
  - Lisinopril

- No tooth loss due to periodontal disease
- No tobacco use

Maxillary (Teeth 1–16) — Facial

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth				3 1 3	3 1 3	2 1 3	3 1 2	2 1 2	2 1 3	2 2 3	3 2 1	3 2 3	4 1 5	5 2 3		
GM CEJ				0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	0 -1 -3	-2 1 -3	0 1 0	0 2 0	0 1 0	2 2 2		
Attach				3 2 3	3 2 3	2 1 3	3 1 2	2 1 2	2 0 0	0 3 0	3 3 1	3 4 3	4 2 5	7 4 5		
Calculus				N N N	N N N	N N N	N N N	N N N	N N N	N N N	C C C	N N N	N N N	N N N		
Plaque				P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		
Suppuratn				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		
Bleed				N N N	N N N	N N B	N N N	N N N	B N N	N N N	N N N	N N B	B B B	B N N		
Furcation														0		

Maxillary (Teeth 1–16) — Lingual

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P Depth				3 1 2	2 1 3	1 1 3	2 1 1	1 1 2	2 1 2	3 1 2	2 1 2	3 1 3	3 2 4	3 1 3		
GM CEJ				0 0 0	0 0 0	0 0 0	0 0 0	0 0 -1	-1 0 0	-1 -1 -1	0 0 0	0 0 0	0 0 0	2 2 2		
Attach				3 1 2	2 1 3	1 1 3	2 1 1	1 1 1	1 1 2	2 0 1	2 1 2	3 1 3	3 2 4	5 3 5		
Calculus				N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N		
Plaque				P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		
Bleed				N N B	N N N	N N B	N N N	N N N	N N N	N N N	N N N	B B B	B N B	N N N		
Mobility				0	0	0	0	0	0	0	0	0	0	0		
Furcation																

Mandibular (Teeth 32–17) — Lingual

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation																
Mobility		0	0	0	0	0	0	0	0	0	0	0	0		0	
Bleed		N N N	N N N	N N N	N N N	N N N	B B B	N N N	N N N	N N N	N N N	N N N	N N N		N N N	
Plaque		P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		P P P	
Calculus		N N N	N N N	N N N	N N N	C C C	C C C	C C C	C C C	C C C	N N N	N N N	N N N		N N N	
Attach		4 3 4	4 3 4	5 3 3	4 3 3	3 1 3	4 2 2	3 3 2	2 3 2	1 2 2	3 2 3	3 2 3	3 1 3		4 4 4	
GM CEJ		0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 2 0	0 2 0	0 1 0	0 0 0	0 0 0	0 0 0		0 0 0	
P Depth		4 3 4	4 3 4	5 3 3	4 3 3	3 1 3	4 1 2	3 1 2	2 1 2	1 1 2	3 2 3	3 2 3	3 1 3		4 4 4	

Mandibular (Teeth 32–17) — Facial

	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
Furcation		0	0												0	
Bleed		N N N	N N N	N N N	N N N	N N N	B N N	N N N	N N N	N N N	N N N	N N N	N N N		N N N	
Suppuratn		B B B	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		B B B	
Plaque		P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P	P P P		P P P	
Calculus		N N N	N N N	N N N	N N N	N N N	N N N	N N N								
Attach		7 5 8	4 2 4	3 2 2	2 1 2	3 2 3	6 5 2	2 1 2	2 1 2	2 1 2	2 1 3	3 1 3	2 2 3		4 4 4	
GM CEJ		3 3 3	0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0					1			
P Depth		4 2 5	4 1 4	3 1 2	2 1 2	3 2 3	6 5 2	2 1 2	2 1 2	2 1 2	2 1 3	3 1 3	2 1 3		4 4 4	