David Palombo, Eduardo Montero, Fernando Luengo, Mariano Sanz
Universidad Complutense de Madrid

Premio Giorgio Vogel

Combined restorative-mucogingival approach for the treatment of RT2/RT3 gingival recessions in a stage III grade C periodontitis patient

Juan Carlos

Personal Data

name	Juan Carlos
age	58
occupation	social worker
marital status	single
smokings status	non smoker

Chief Complaint

"When I clean my teeth my gums bleed and my upper teeth hurt.
Also, I feel spontaneous pain in my upper left molar and I can't chew properly"

Dental History

last visit	2 years ago
dental treatments	fillings, extractions
extractions	2.6, 2.8, 4.7

Oral hygiene Habits

toothbrush	manual
technique	horizontal
interdental devices	none
frequency	twice a day

Medical History

no current disease nor medications

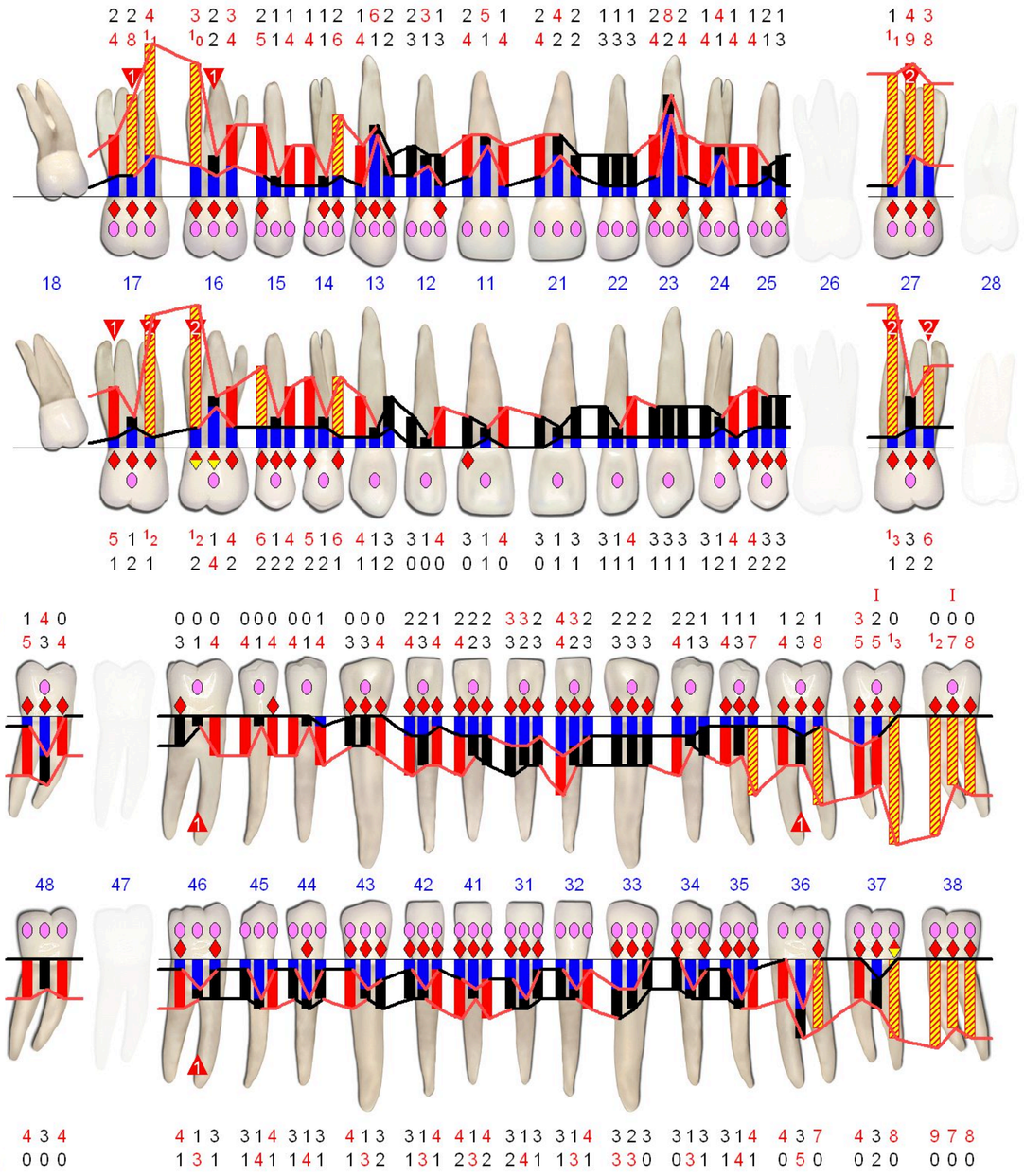
ASA Type 1

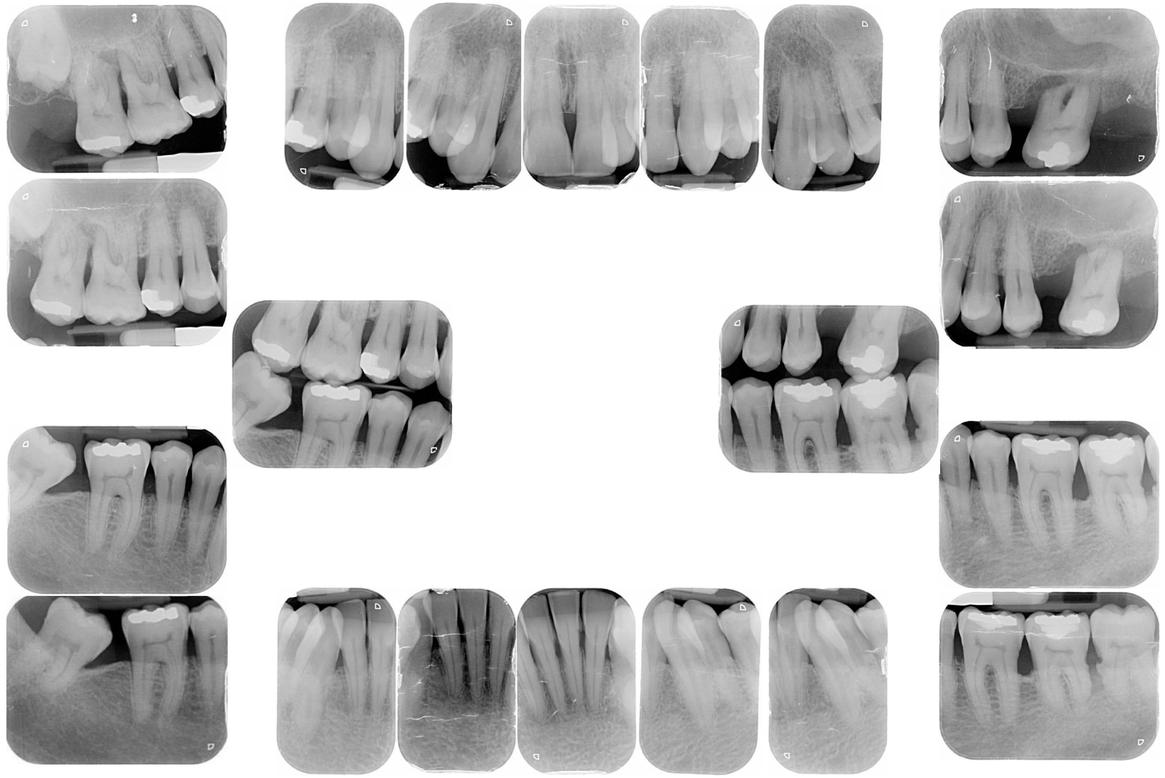
BASELINE - GENERAL VIEW

BASELINE - GENERAL VIEW

BASELINE - GENERAL VIEW

BASELINE - GENERAL VIEW





2017 WORLD WORKSHOP

WILEY Journal of Clinical Periodontology

Periodontitis: Consensus report of workgroup 2 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions

Panos N. Papapanou[1] | Mariano Sanz[2] | Nurcan Buduneli[3] | Thomas Dietrich[4] | Magda Feres[5] | Daniel H. Fine[6] | Thomas F. Flemmig[7] | Raul Garcia[8] | William V. Giannobile[9] | Filippo Graziani[10] | Henry Greenwell[11] | David Herrera[2] | Richard T. Kao[12] | Moritz Kebschull[1,13] | Denis F. Kinane[14] | Keith L. Kirkwood[15] | Thomas Kocher[16] | Kenneth S. Kornman[9] | Purnima S. Kumar[17] | Bruno G. Loos[18] | Eli Machtei[19] | Huanxin Meng[20] | Andrea Mombelli[21] | Ian Needleman[22] | Steven Offenbacher[23] | Gregory J. Seymour[24] | Ricardo Teles[14] | Maurizio S. Tonetti[7]

STAGE III

Stage III
≥5 mm
Extending to middle or apical third of the root
Tooth loss due to periodontitis of ≤4 teeth
In addition to stage II complexity: Probing depth ≥6 mm Vertical bone loss ≥3 mm Furcation involvement Class II or III Moderate ridge defect

GRADE C

Grade C: Rapid rate of progression
≥2 mm over 5 years
>1.0
Destruction exceeds expectation given biofilm deposits; specific clinical patterns suggestive of periods of rapid progression and/or early onset disease (e.g., molar/incisor pattern; lack of expected response to standard bacterial control therapies)
Smoker ≥10 cigarettes/day
HbA1c ≥7.0% in patients with diabetes
>3 mg/L

GENERALISED

PERIODONTAL TREATMENT: SEQUENCE

STEP I | **STEP II** | STEP III | SPC | INTERDISCIPLINARY TREATMENT

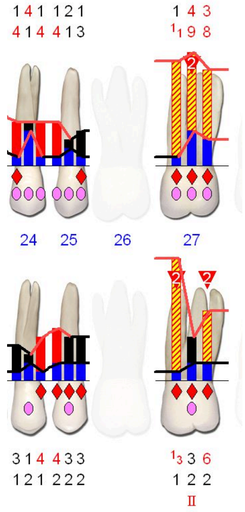
SUPRAGINGIVAL
DENTAL
BIOFILM CONTRON

MOTIVATION & OHI

PROFESSIONAL PLAQUE
REMOVAL
RISK FACTOR CONTROL

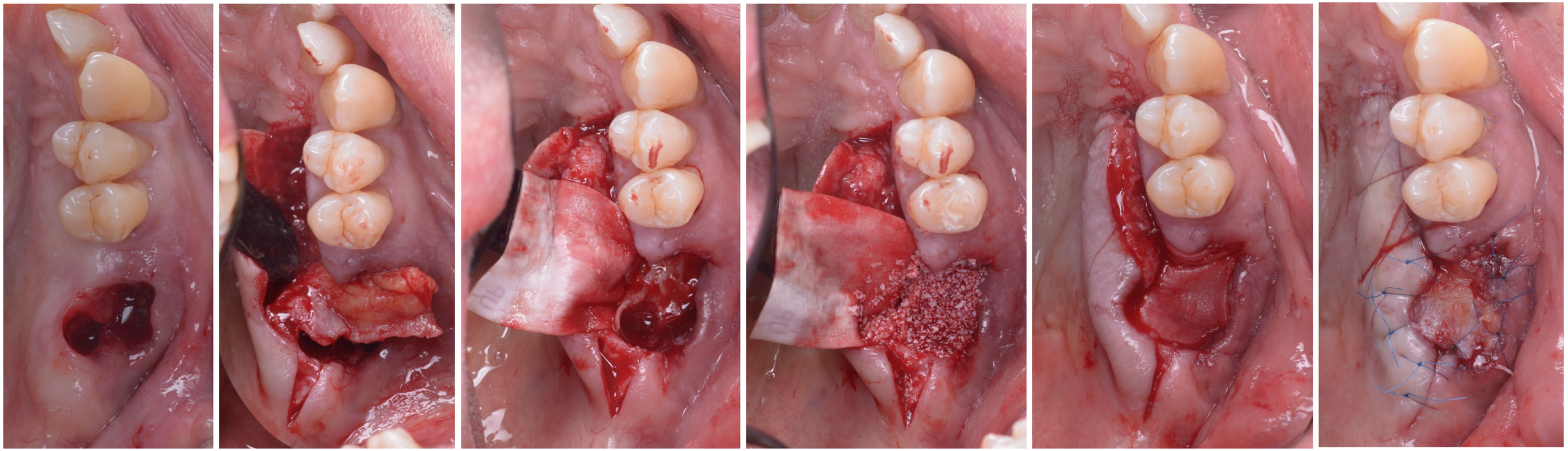
SUBGINGIVAL
INSTRUMENTATION

ADJUNCTIVE PHYSICAL
OR CHEMICAL AGENTS

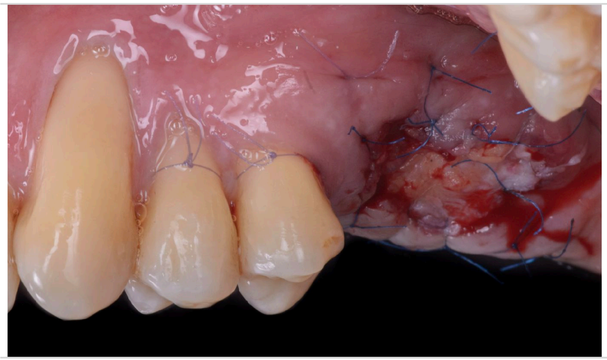
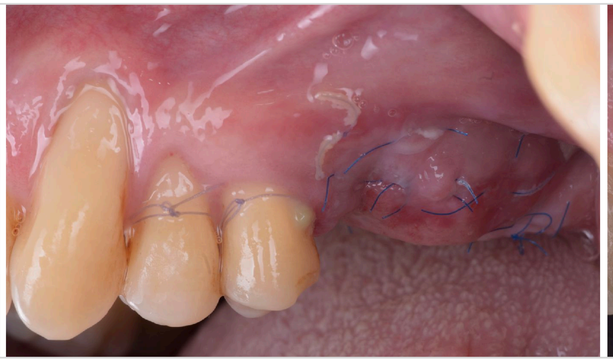


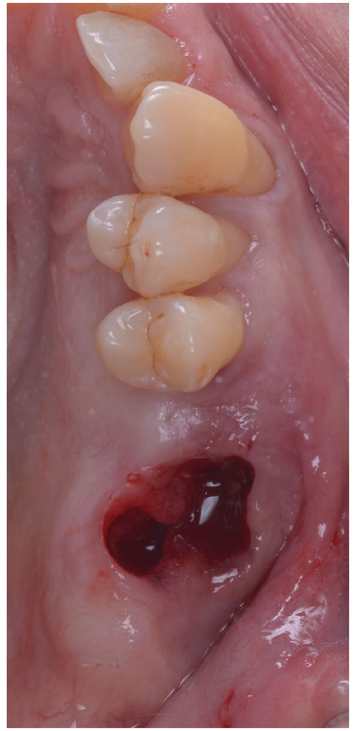
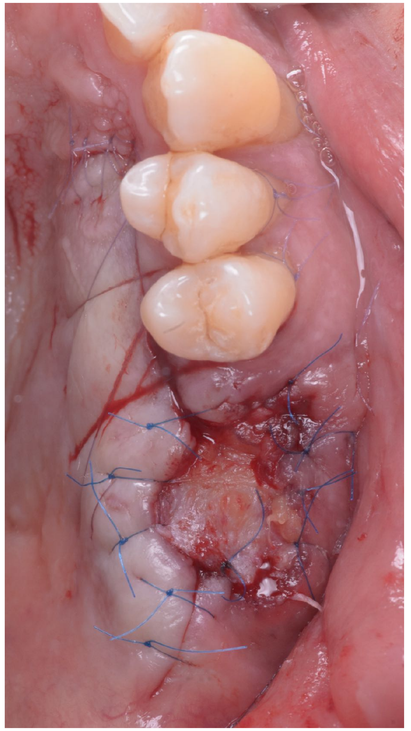
Extraction of 27 &
Alveolar Ridge
Preservation

Extraction of 27 & Alveolar Ridge Preservation



Extraction of 27 & Alveolar Ridge Preservation

2weeks

3 months

PERIODONTAL TREATMENT: SEQUENCE

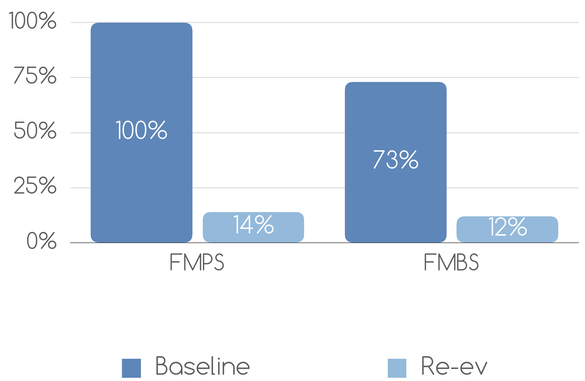
STEP I | **STEP II** | STEP III | SPC | INTERDISCIPLINARY TREATMENT

Re-evaluation 8 weeks

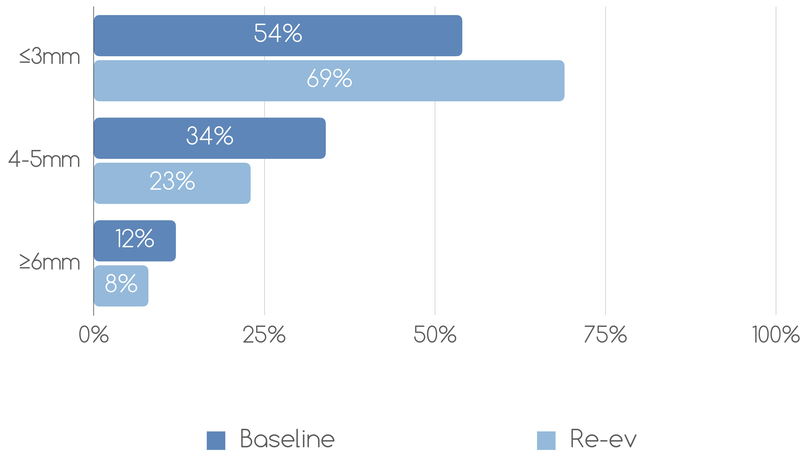
END POINTS

No PPD >4mm + BoP
No PPD >6mm

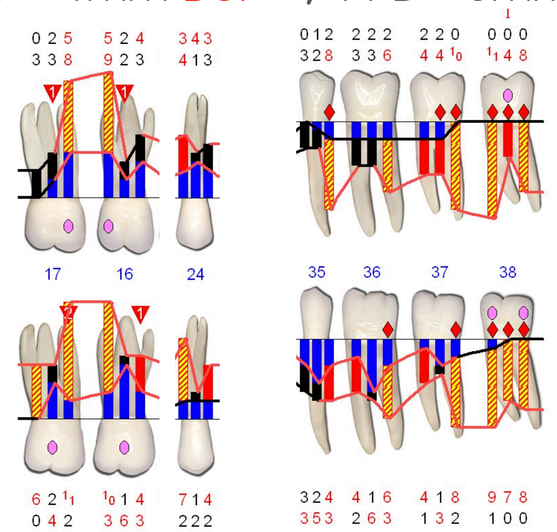
Indices



PPD distribution



PPD >4mm BoP+ / PPD ≥6mm

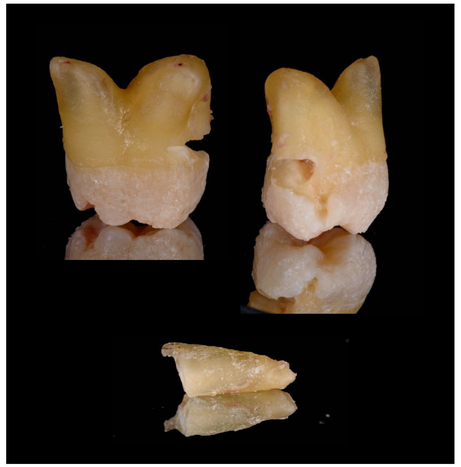


PERIODONTAL TREATMENT: SEQUENCE

STEP I | STEP II | **STEP III** | SPC | INTERDISCIPLINARY TREATMENT

1ST SEXTANT POCKET REDUCTION SURGERY	2ND SEXTANT SPC	3RD SEXTANT RE-TREATMENT OF SUBGINGIVAL INSTRUMENTATION
6TH SEXTANT SPC	5TH SEXTANT SPC	4TH SEXTANT POCKET REDUCTION SURGERY

1. APF 13-17
+
Root amputation 16
+
Exo 18



PERIODONTAL TREATMENT: SEQUENCE

1 week

1 month

2. APF 33-37
+
Exo 38

PERIODONTAL TREATMENT: SEQUENCE

1 week

1 month

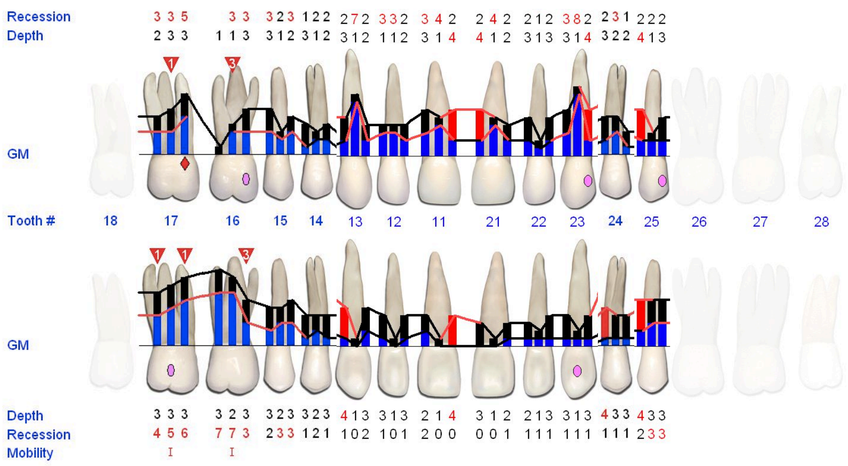
TREATMENT SEQUENCE

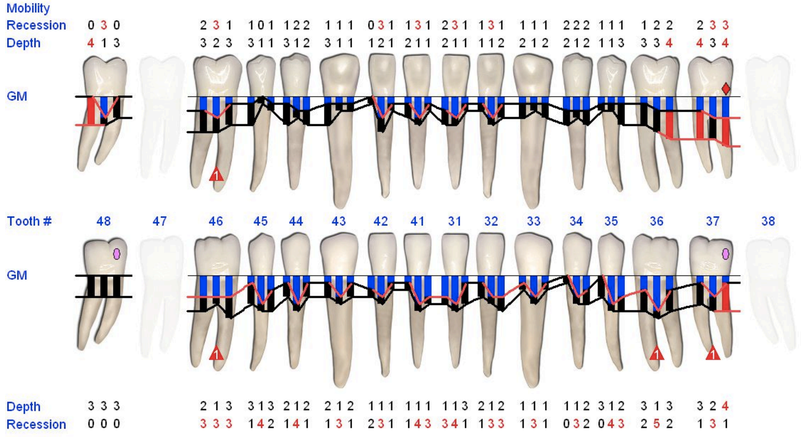
STEP I | STEP II | STEP III | **SPC** | INTERDISCIPLINARY TREATMENT

Re-evaluation

END POINTS

No PPD >4mm + BoP
No PPD >6mm

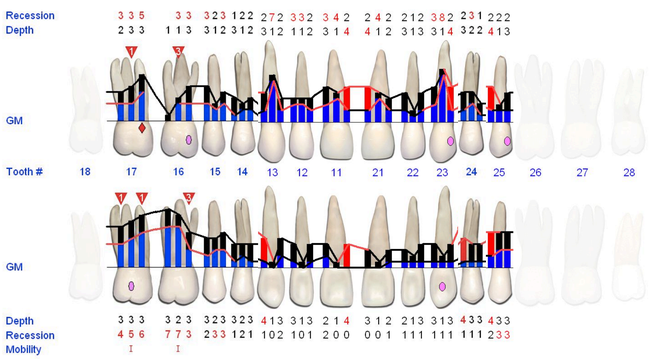


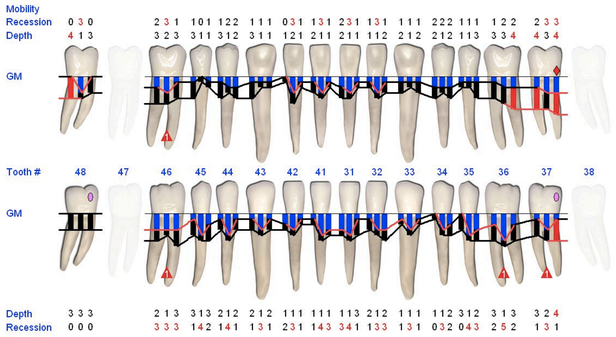


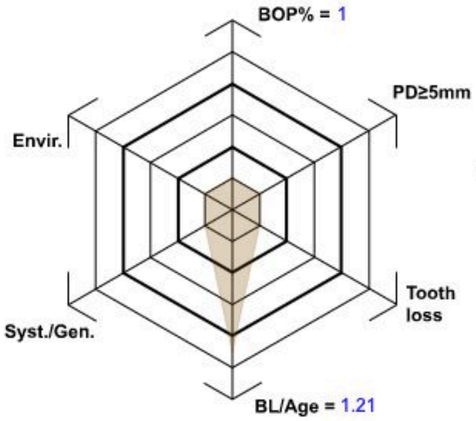
TREATMENT SEQUENCE

STEP I | STEP II | STEP III | **SPC** | INTERDISCIPLINARY TREATMENT

Re-evaluation







Age	58
Number of teeth and implants	29 (1 - 32)
Number of sites per tooth / implant	○ 2 ○ 4 ◉ 6
Number of BOP-pos. sites	2 of 174
Number of sites with PPD≥5mm	0
Number of missing teeth	2
% alveolar bone loss (estimated in % or 10% per 1mm)	70 %
Syst./Gen.	○ Yes ◉ No
Envir.	◉ Non-smoker (NS) ○ Former smoker (FS) ○ Occasional smoker (OS) ○ Smoker (S) ○ Heavy smoker (HS)

Polygon surface: 8.660254

Periodontal Risk: medium

Recommendation: **consider attention on modifiable risks**

Personalized SPT-Interval (new tool): www.perio-tools.com/spt

TREATMENT SEQUENCE

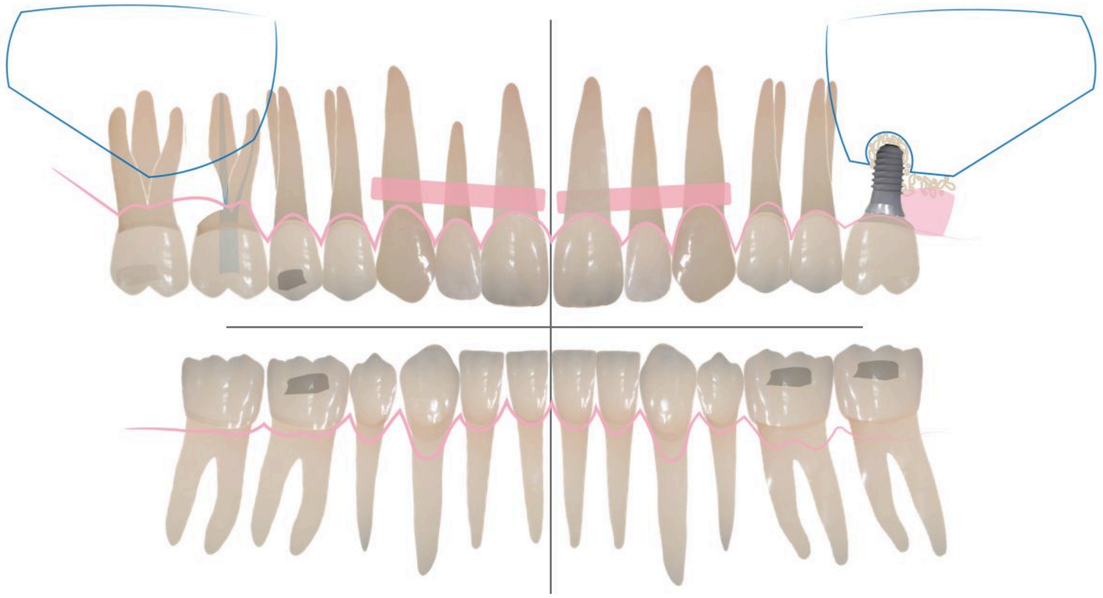
STEP I

STEP II

STEP III

SPC

INTERDISCIPLINARY TREATMENT

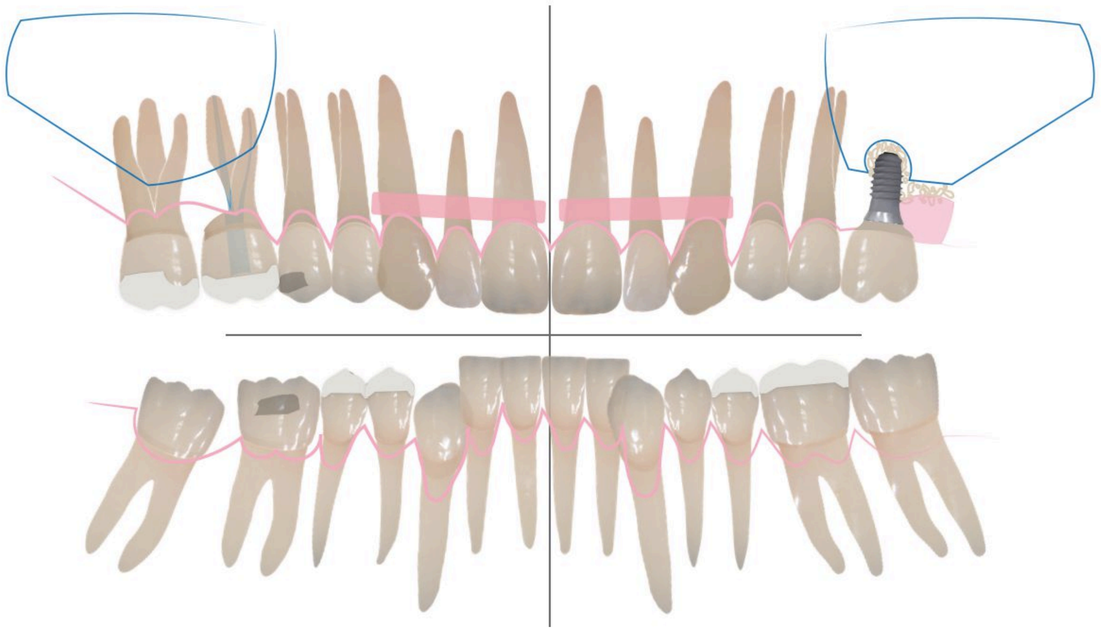


1ST SEXTANT RESTORATIVE	2ND SEXTANT MUCOGINGIVAL & RESTORATIVE	3RD SEXTANT IMPLANT & RESTORATIVE
6TH SEXTANT SPC	5TH SEXTANT SPC	4TH SEXTANT SPC

ORTHODONTICS

TREATMENT SEQUENCE

STEP I | STEP II | STEP III | SPC | **INTERDISCIPLINARY TREATMENT**



1ST SEXTANT RESTORATIVE	2ND SEXTANT MUCOGINGIVAL & RESTORATIVE	3RD SEXTANT IMPLANT & RESTORATIVE
6TH SEXTANT RESTORATIVE	5TH SEXTANT SPC	4TH SEXTANT RESTORATIVE

COMBINED RESTORATIVE - MUCOGINGIVAL TREATEMENT

Gingival site				Tooth site	
11	**REC Depth**	**GT**	**KTW**	**CEJ (A / B)**	**Step (+/-)**
No recession					
RT1					
RT2	5mm	> 1mm	> 1mm	A	+
RT3					

Gingival site				Tooth site	
21	**REC Depth**	**GT**	**KTW**	**CEJ (A / B)**	**Step (+/-)**
No recession					
RT1					
RT2					
RT3	3mm	> 1mm	> 1mm	A	-

Gingival site				Tooth site	
12	**REC Depth**	**GT**	**KTW**	**CEJ (A / B)**	**Step (+/-)**
No recession					
RT1					
RT2					
RT3	3mm	> 1mm	> 1mm	A	-

Gingival site				Tooth site	
22	**REC Depth**	**GT**	**KTW**	**CEJ (A / B)**	**Step (+/-)**
No recession					
RT1					
RT2	1mm	> 1mm	> 1mm	A	-
RT3					

Gingival site				Tooth site	
13	**REC Depth**	**GT**	**KTW**	**CEJ (A / B)**	**Step (+/-)**
No recession					
RT1					
RT2	7mm	> 1mm	>1mm	B	+
RT3					

Gingival site				Tooth site	
23	**REC Depth**	**GT**	**KTW**	**CEJ (A / B)**	**Step (+/-)**
No recession					
RT1					
RT2	8mm	> 1mm	> 1mm	B	+
RT3					

1. RESTORATIVE

2. MUCONGINGIVAL

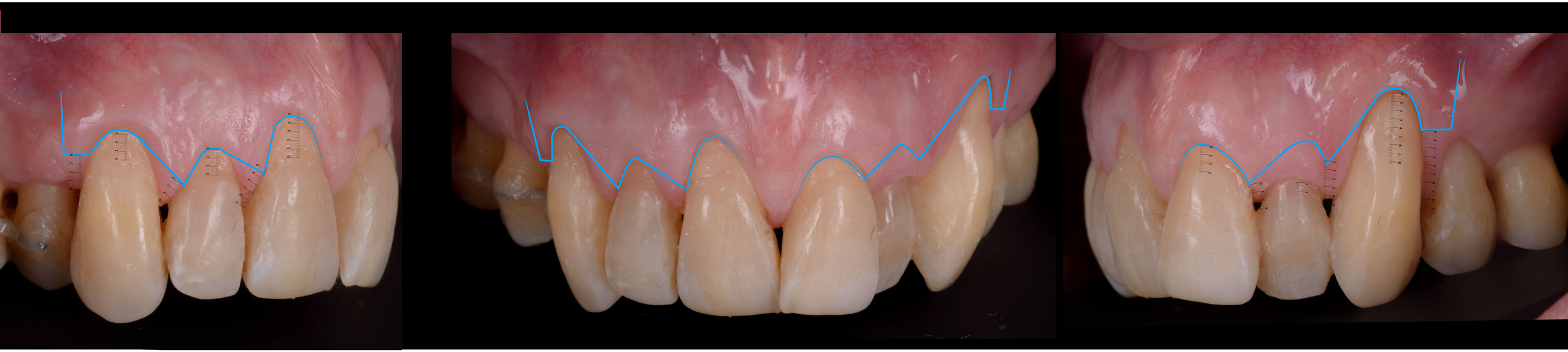
1.

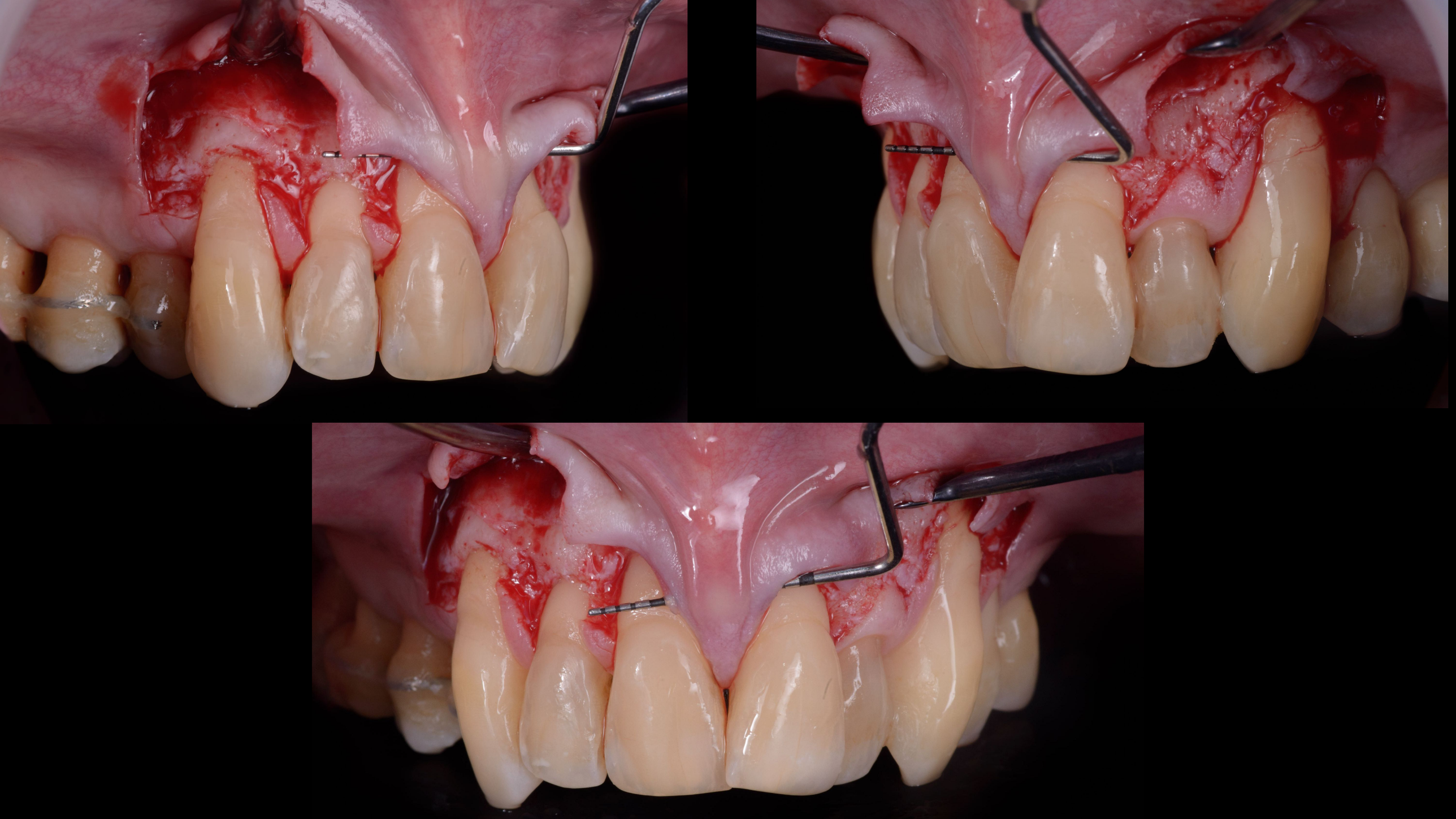
RESTORATIVE

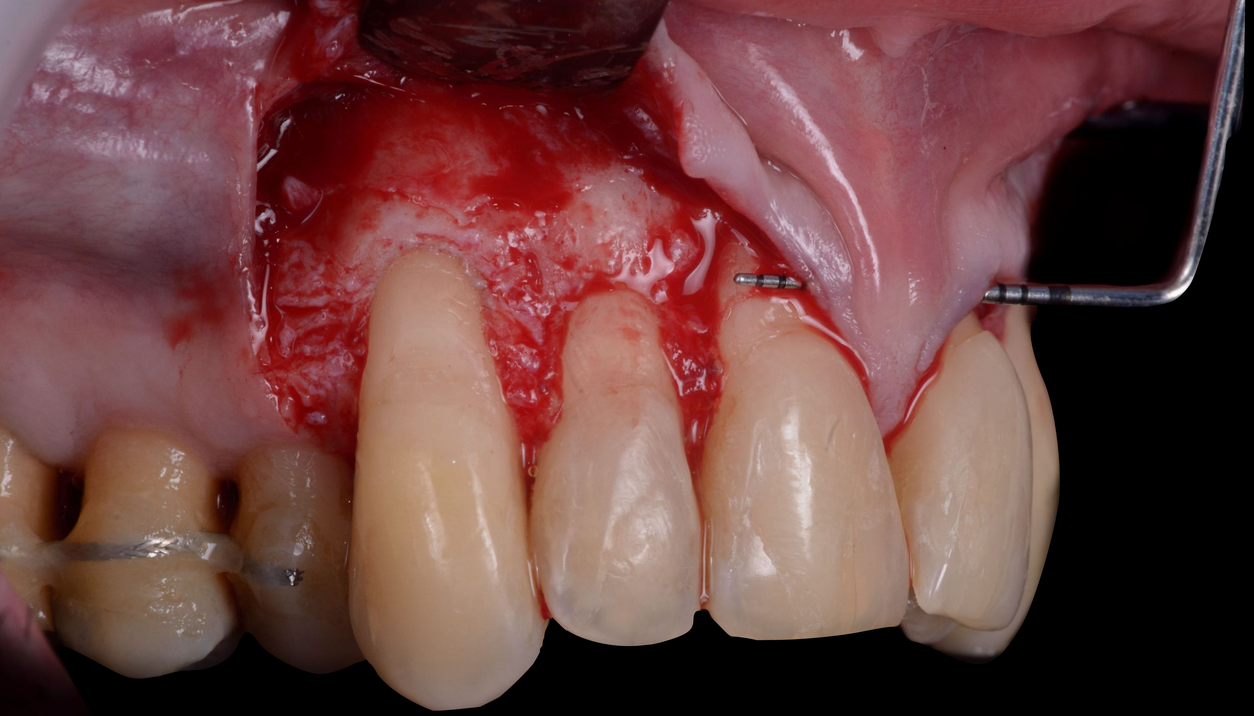
COMPOSITE RESTORATIONS AT CERVICAL AREAS

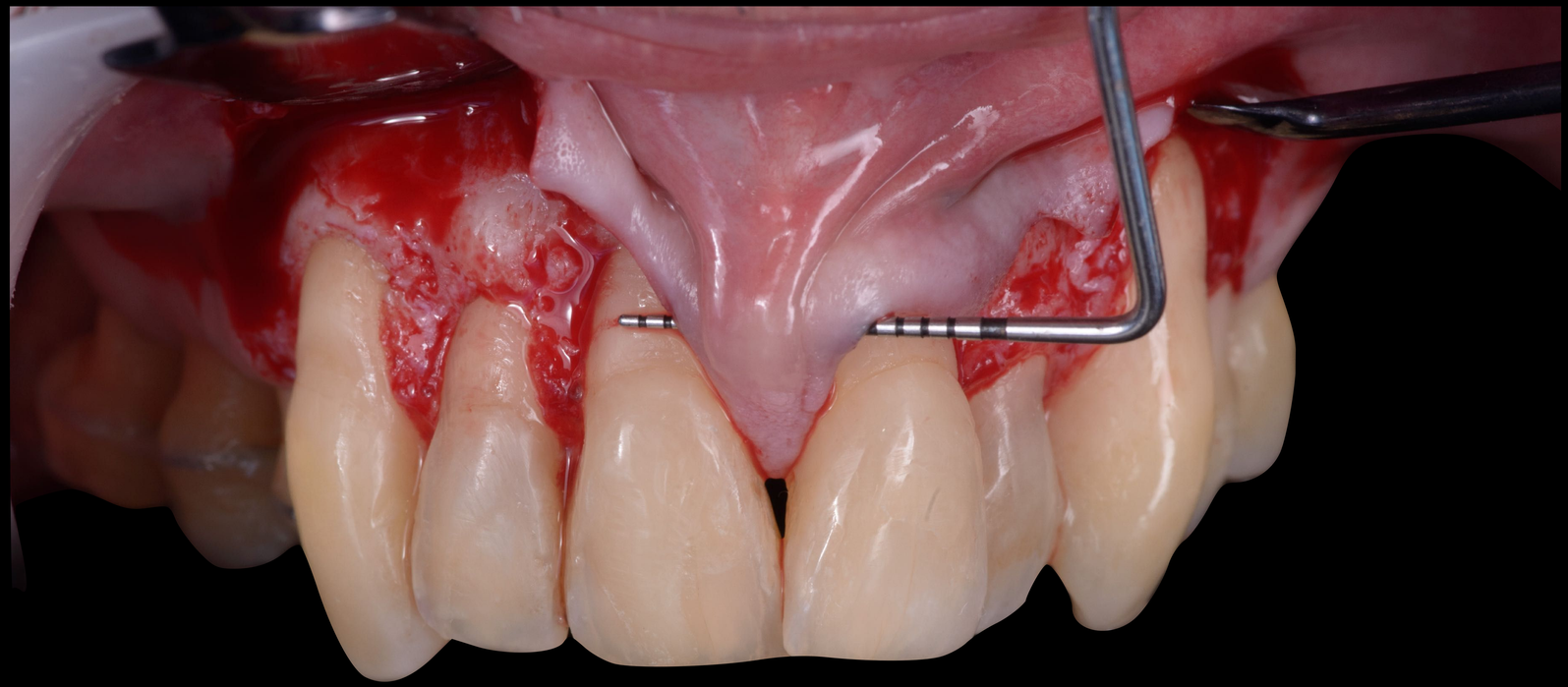
2. MUCONGINGIVAL

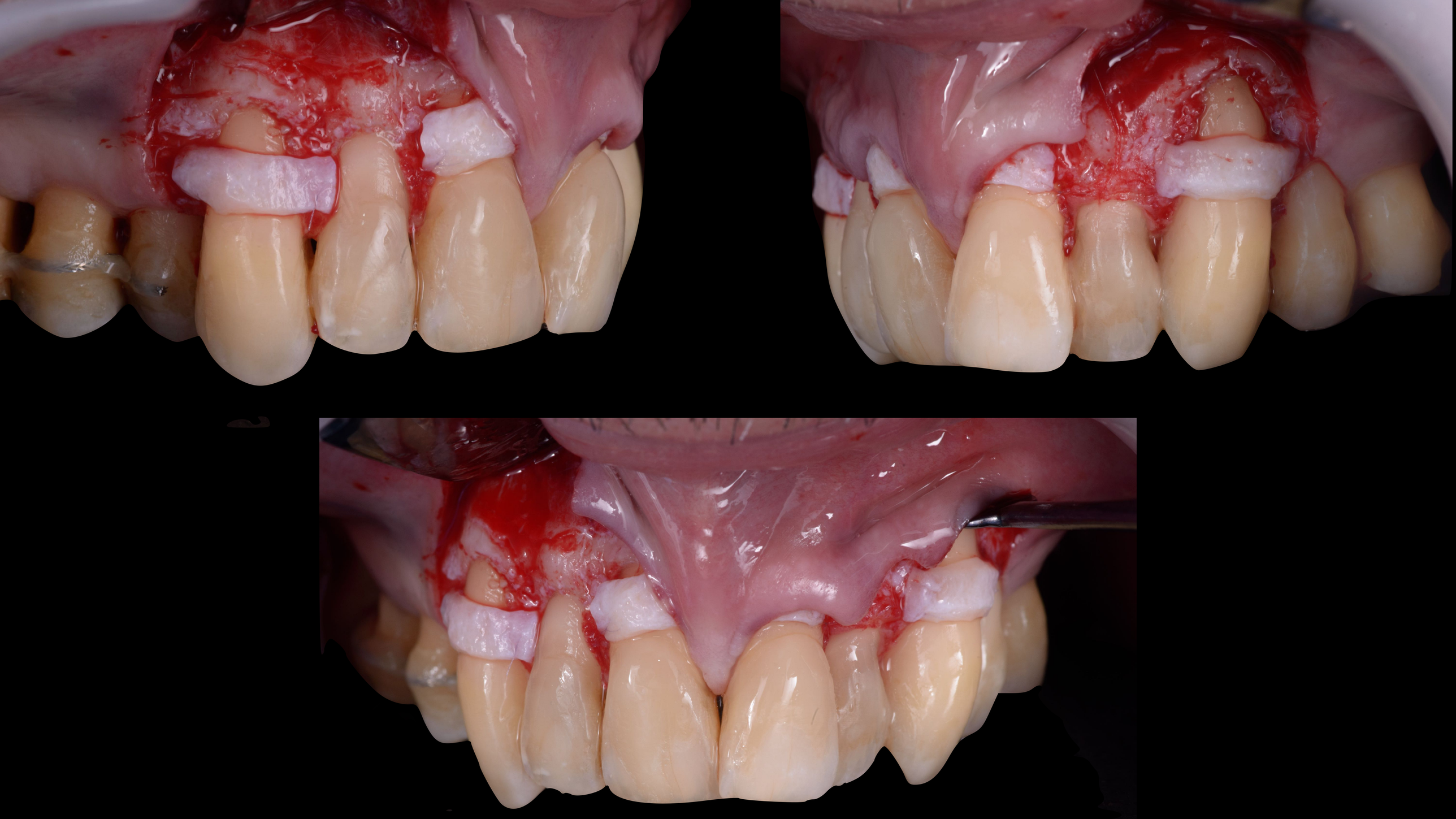
FRONTAL APPROACH CORONALLY ADVANCED FLAP WITH DISTAL RELEASING INCISIONS, FALSE RECESSION AT 2.2 & SITE SPECIFIC APPLICATION OF CONNECTIVE TISSUE GRAFTS AT 1.3, 1.1, 2.1, 1.3









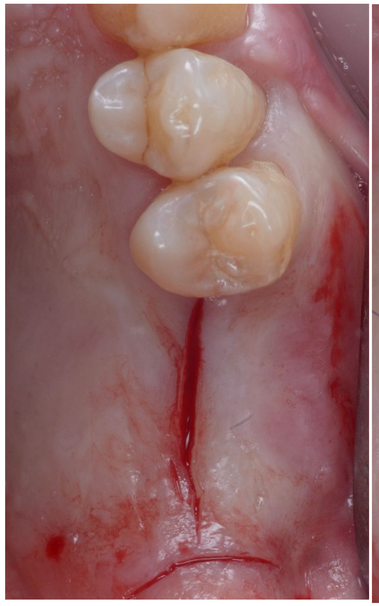


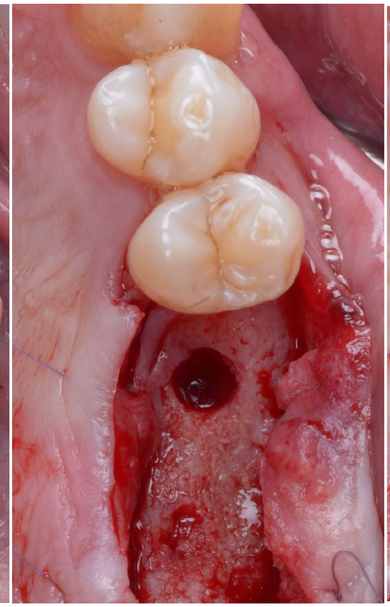
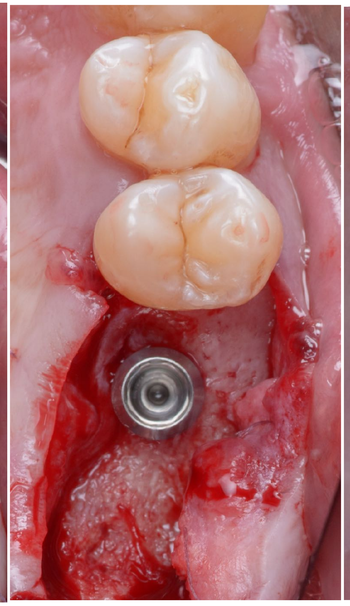
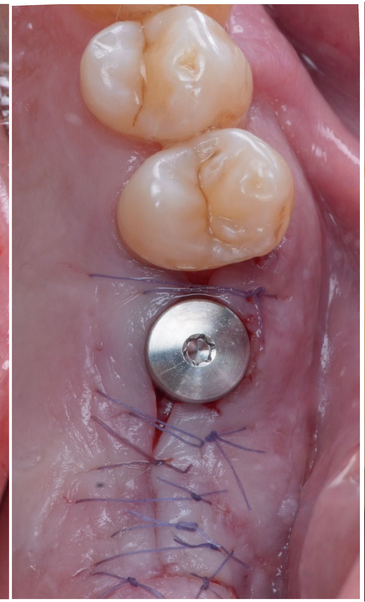
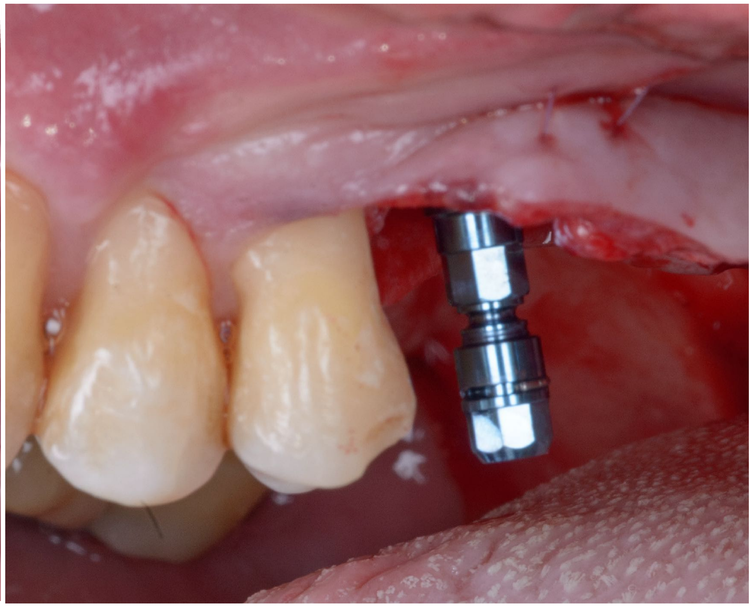
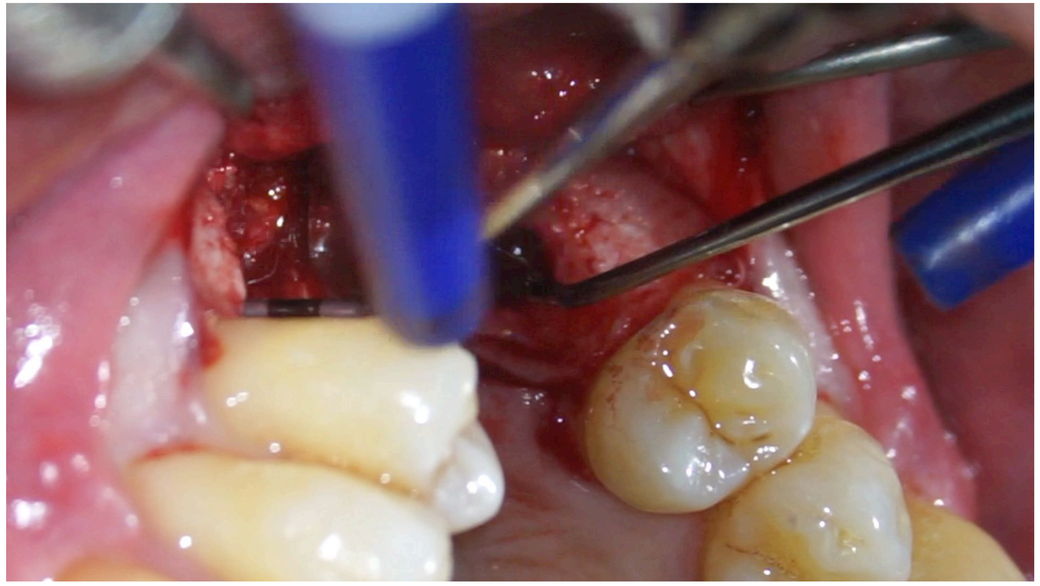
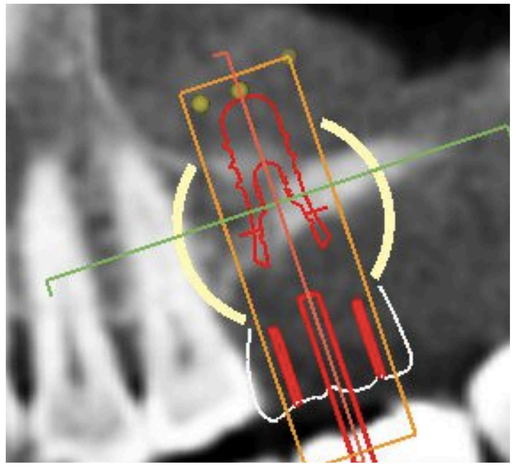
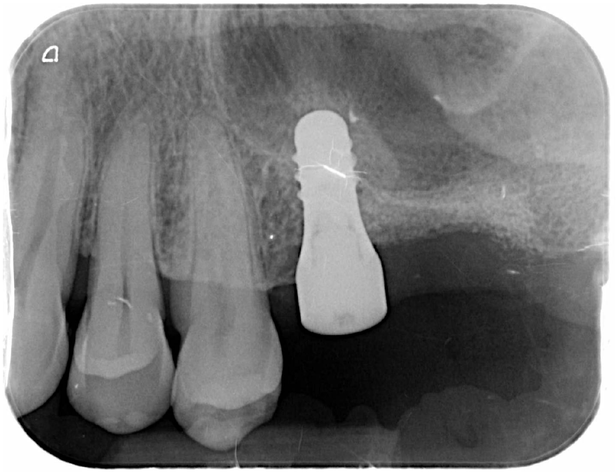
14 days

1 month

9 months

IMPLANT PLACEMENT & CLOSED SINUS LIFT



TREATMENT SEQUENCE

STEP I

STEP II

STEP III

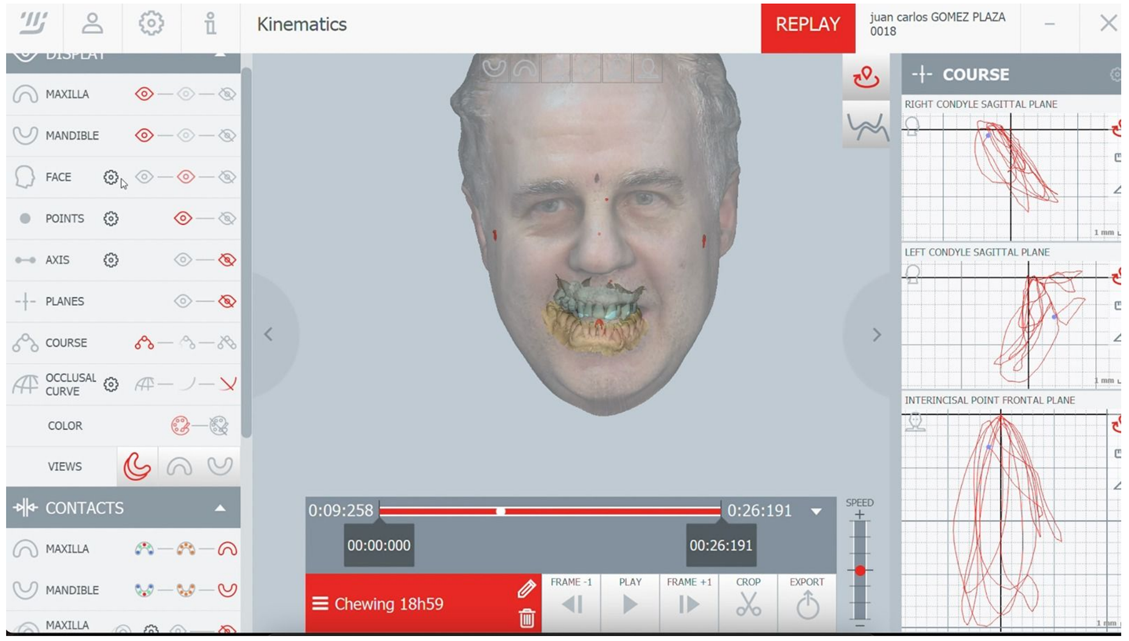
SPC

INTERDISCIPLINARY TREATMENT

MUCOGINGIVAL /RESTORATIVE TREATMENT

DENTAL IMPLANT

RESTORATIVE



TREATMENT SEQUENCE

STEP I

STEP II

STEP III

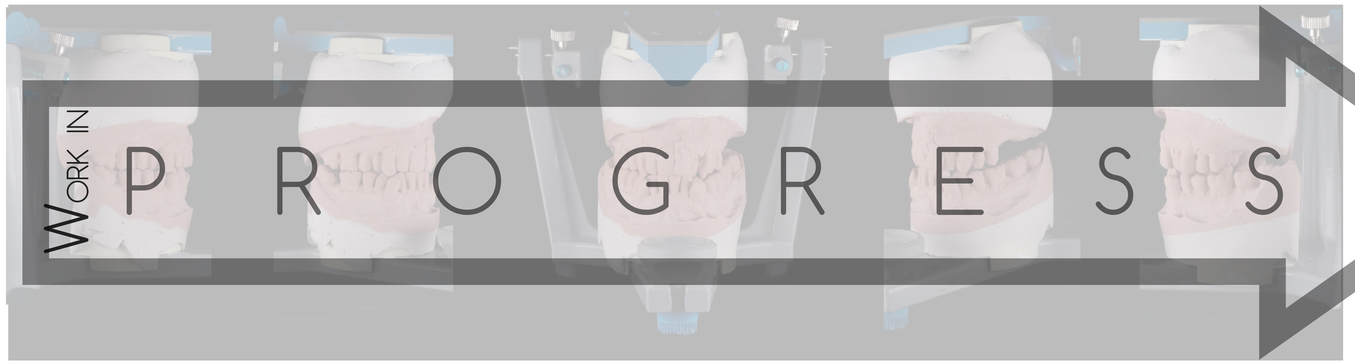
SPC

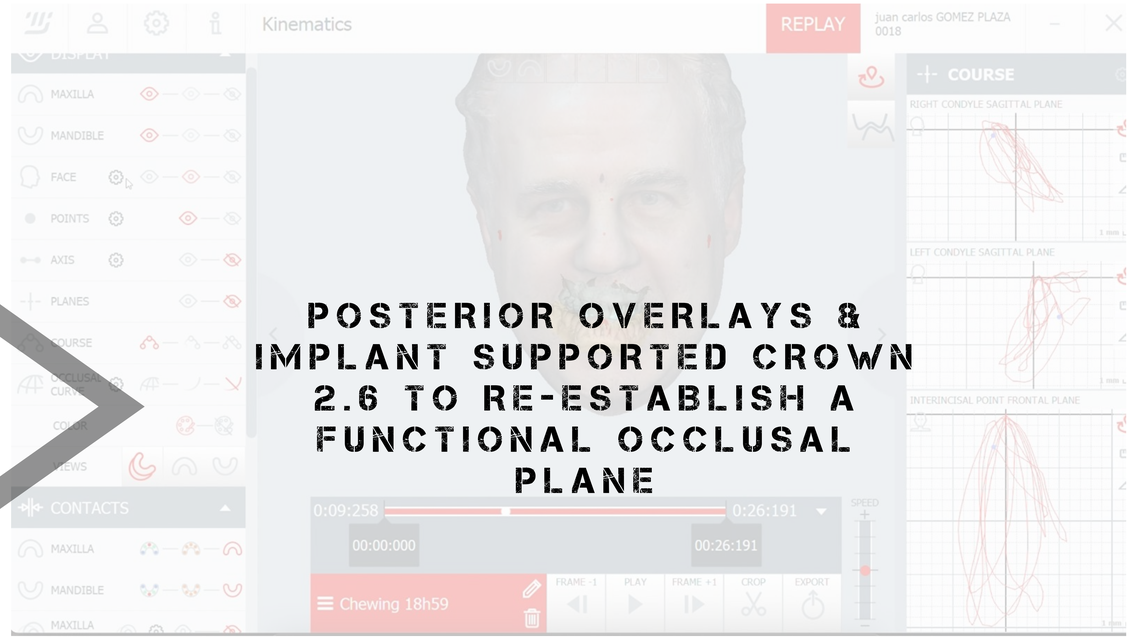
INTERDISCIPLINARY TREATMENT

MUCOGINGIVAL /RESTORATIVE TREATMENT

DENTAL IMPLANT

RESTORATIVE





CURRENT STATUS

CURRENT STATUS

Baseline

Post STEP 2

Current Status

CURRENT STATUS

18M post surgery

9M post surgery

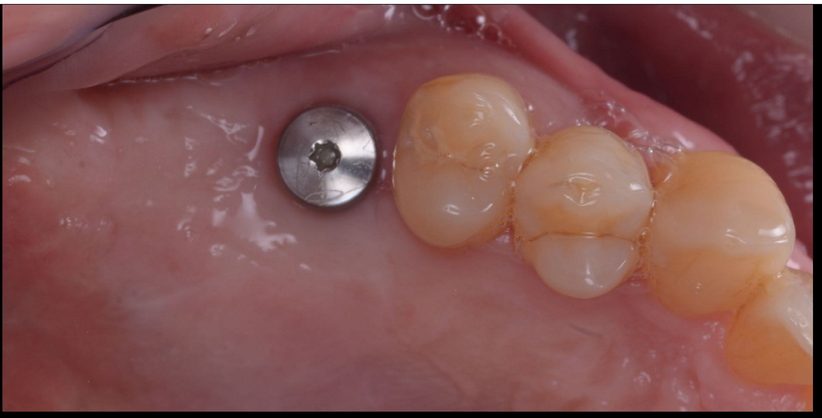
3M post surgery

21M post SRP

21M post SRP

17M post surgery

CURRENT STATUS



3M post surgery

9M post surgery

18M post surgery

17M post surgery

21M post SRP

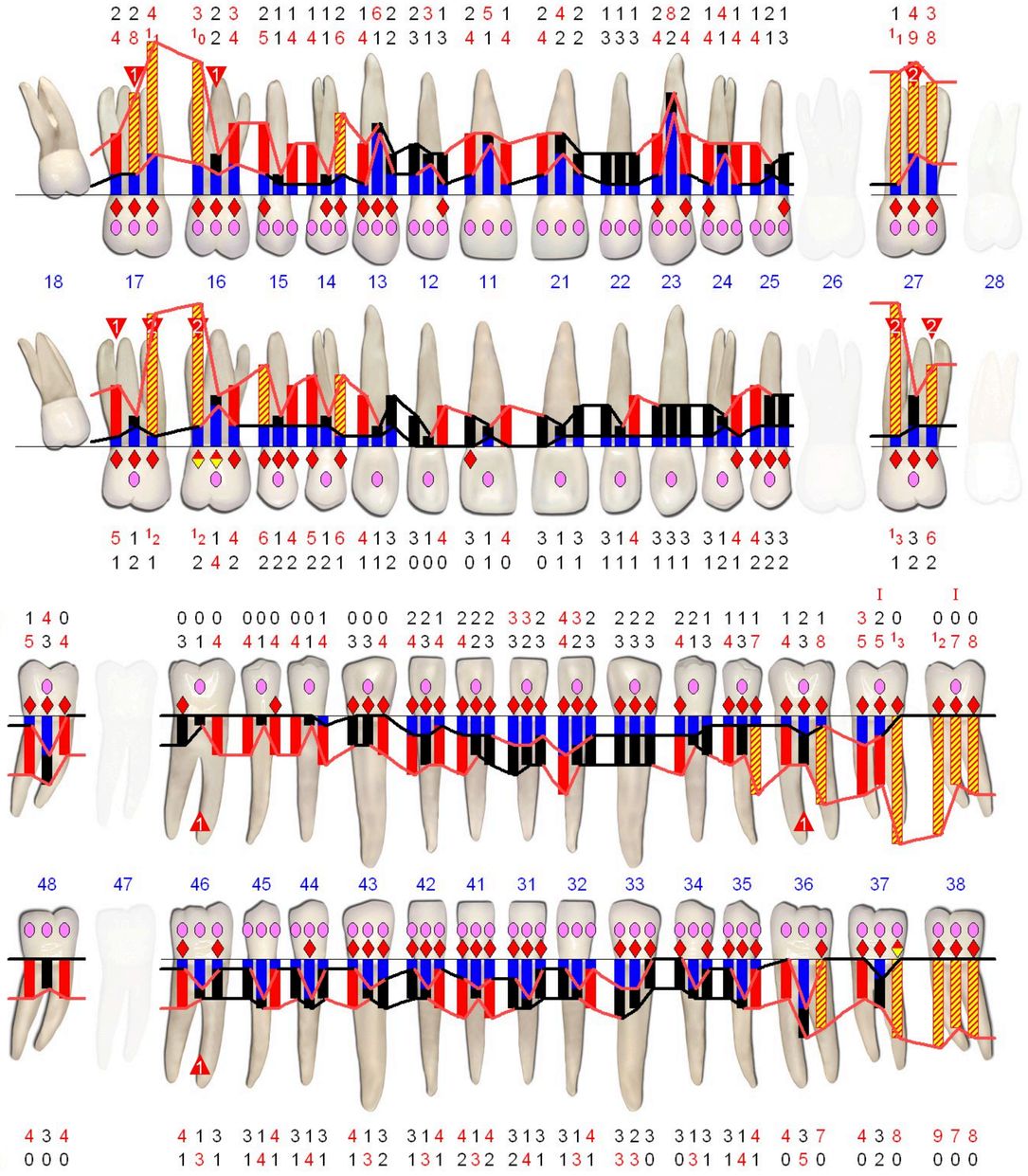
21M post SRP

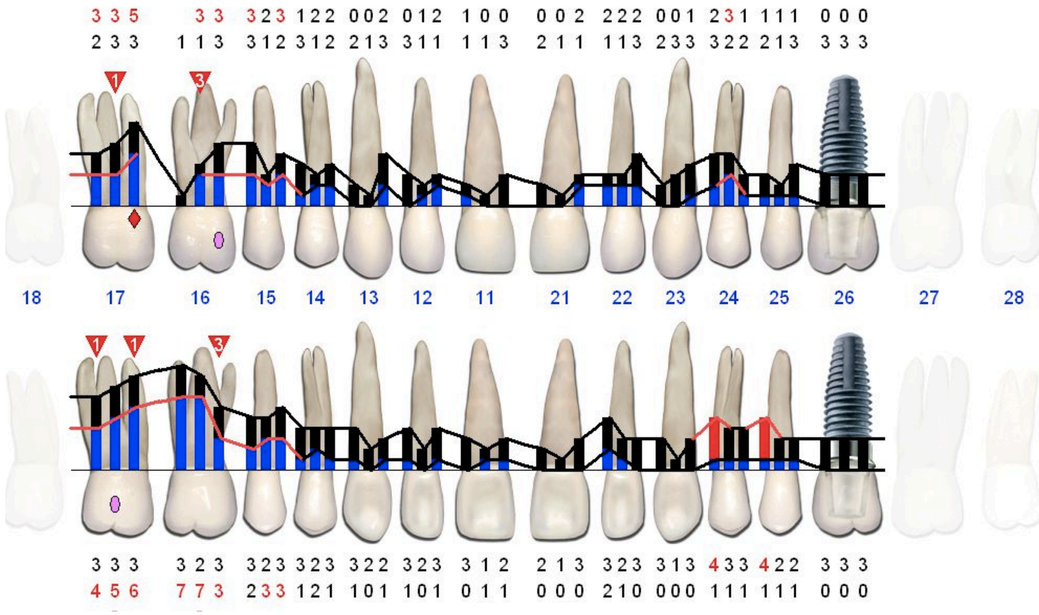
9M post surgery

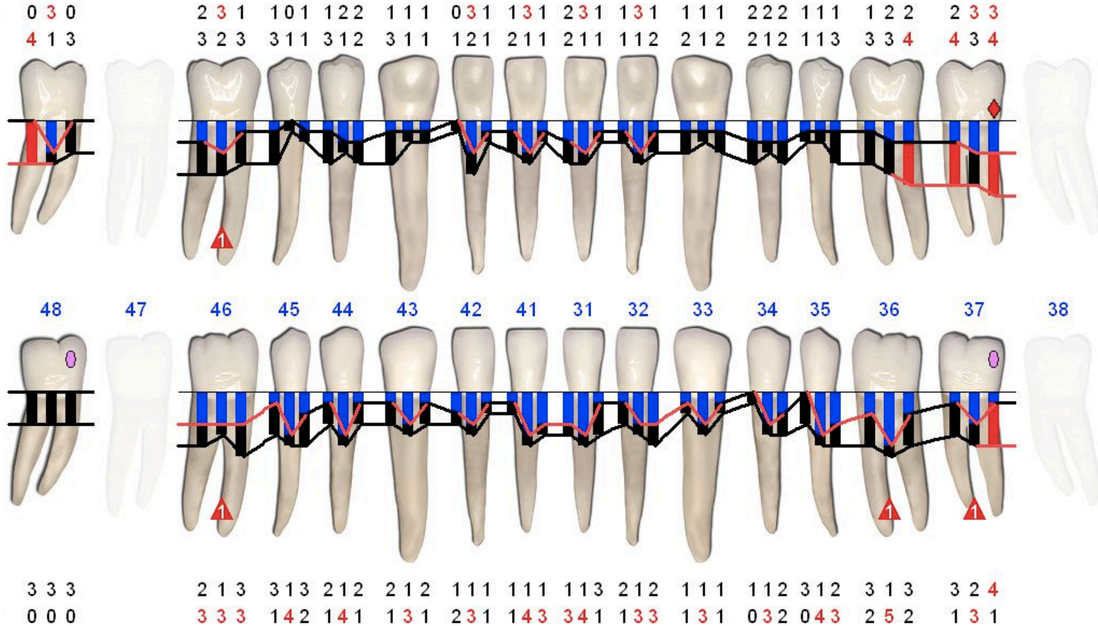
CURRENT STATUS

18M post surgery

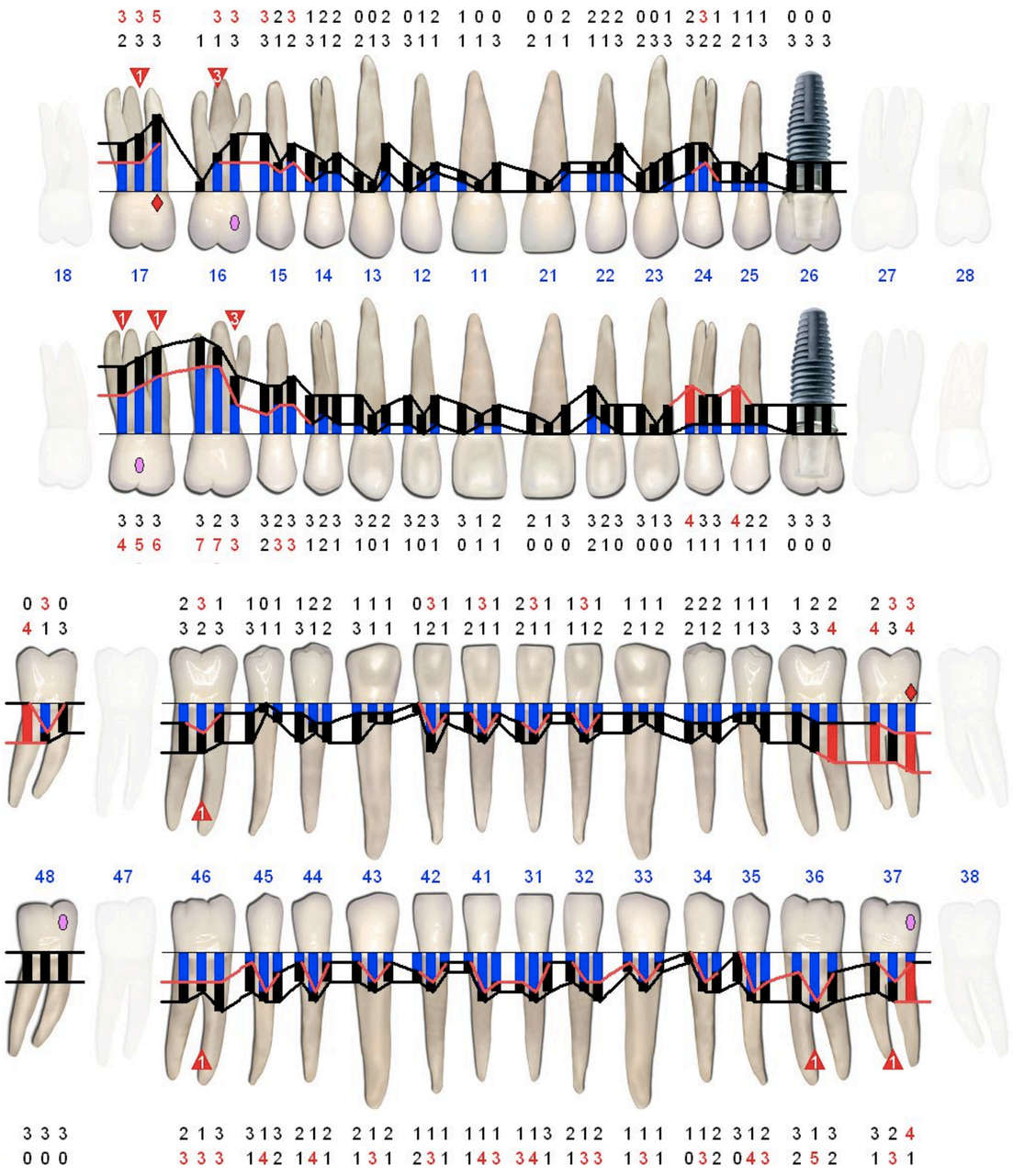
BASELINE to CURRENT STATUS

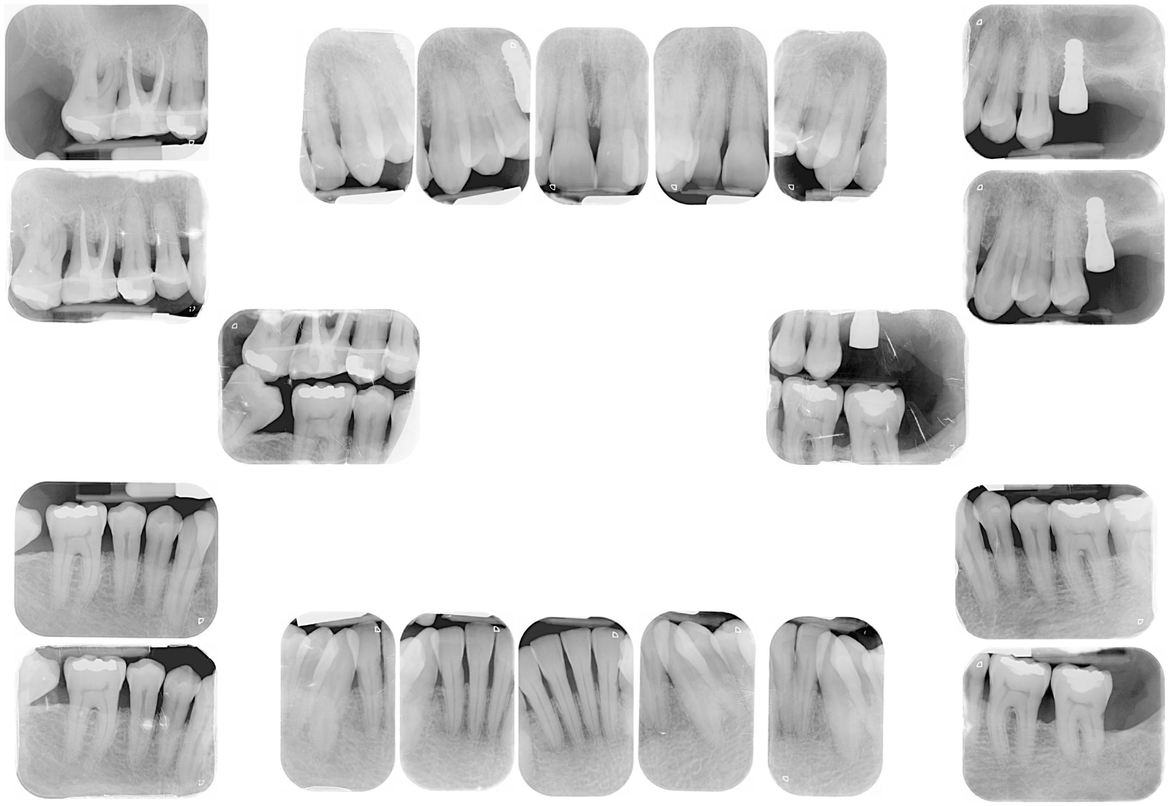


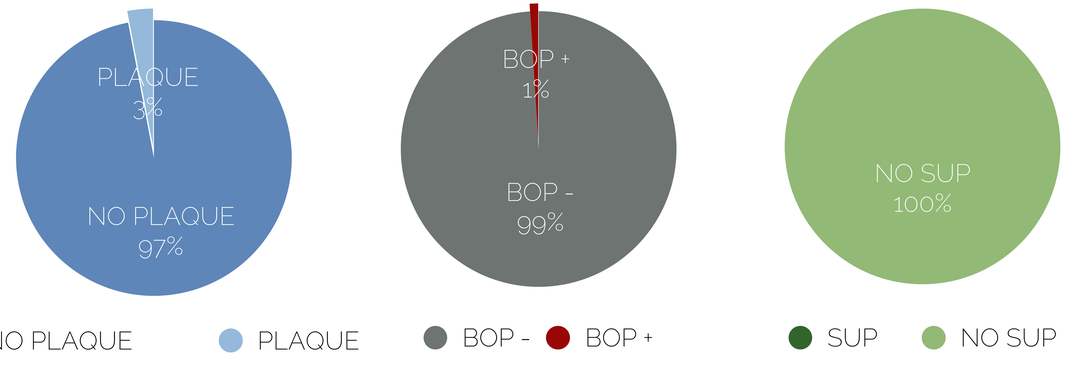




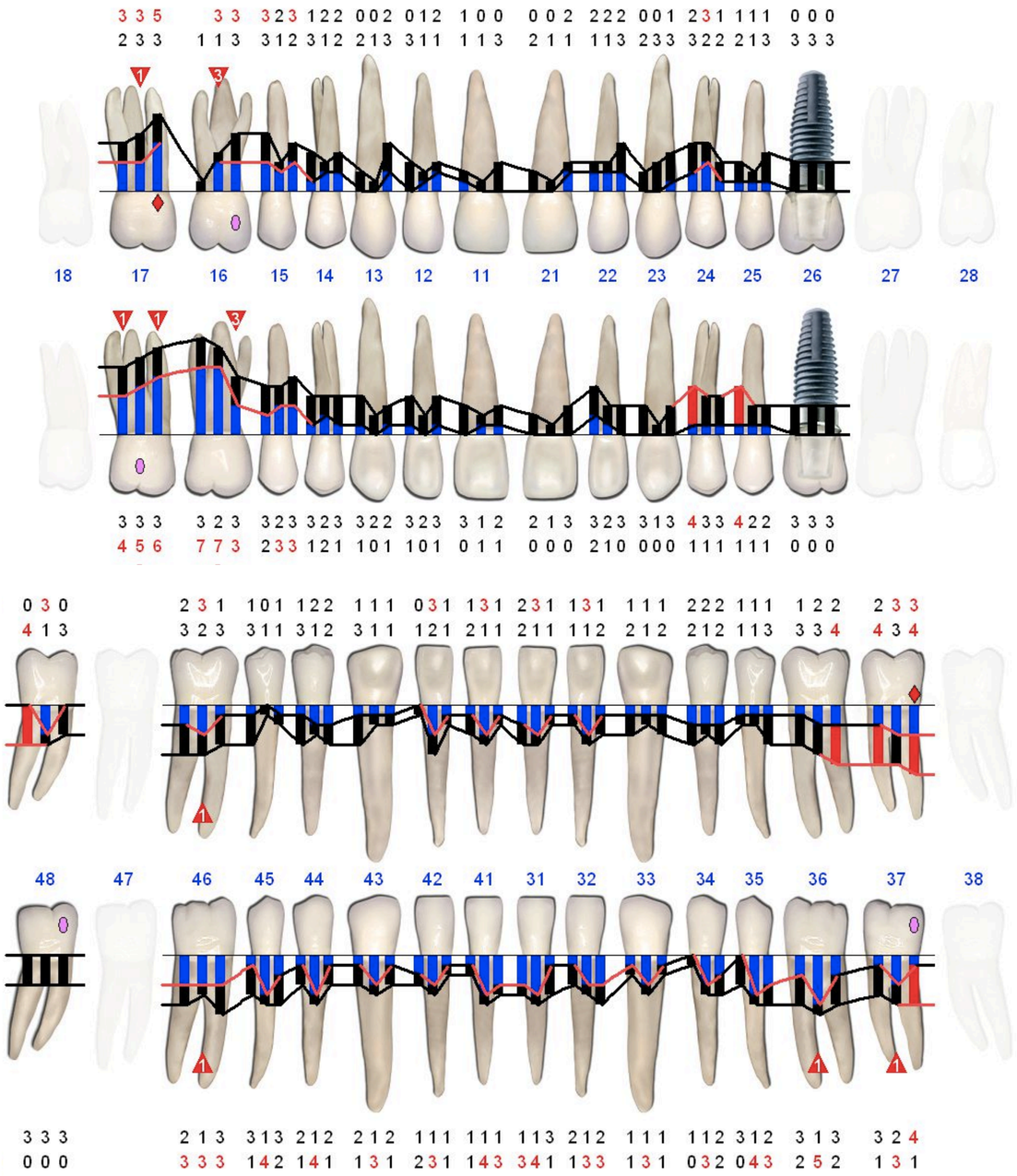
BASELINE - GENERAL VIEW

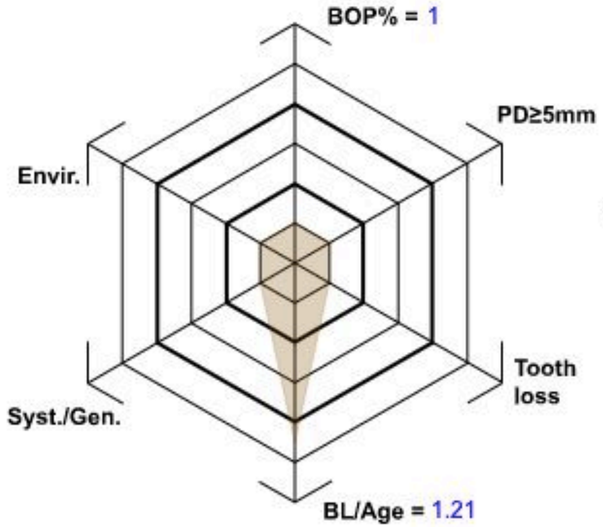






BASELINE - GENERAL VIEW





Polygon surface: 8.660254

Periodontal Risk: medium

Recommendation: **consider attention on modifiable risks**

Personalized SPT-Interval (new tool): www.perio-tools.com/spt

Age	58
Number of teeth and implants	29 (1 - 32)
Number of sites per tooth / implant	○ 2 ○ 4 ◉ 6
Number of BOP-pos. sites	2 of 174
Number of sites with PPD≥5mm	0
Number of missing teeth	2
% alveolar bone loss (estimated in % or 10% per 1mm)	70 %
Syst./Gen.	○ Yes ◉ No
Envir.	◉ Non-smoker (NS) ○ Former smoker (FS) ○ Occasional smoker (OS) ○ Smoker (S) ○ Heavy smoker (HS)

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Premio Giorgio Vogel

Combined restorative-mucogingival approach for the treatment of RT2/RT3 gingival recessions in a stage III grade C periodontitis patient