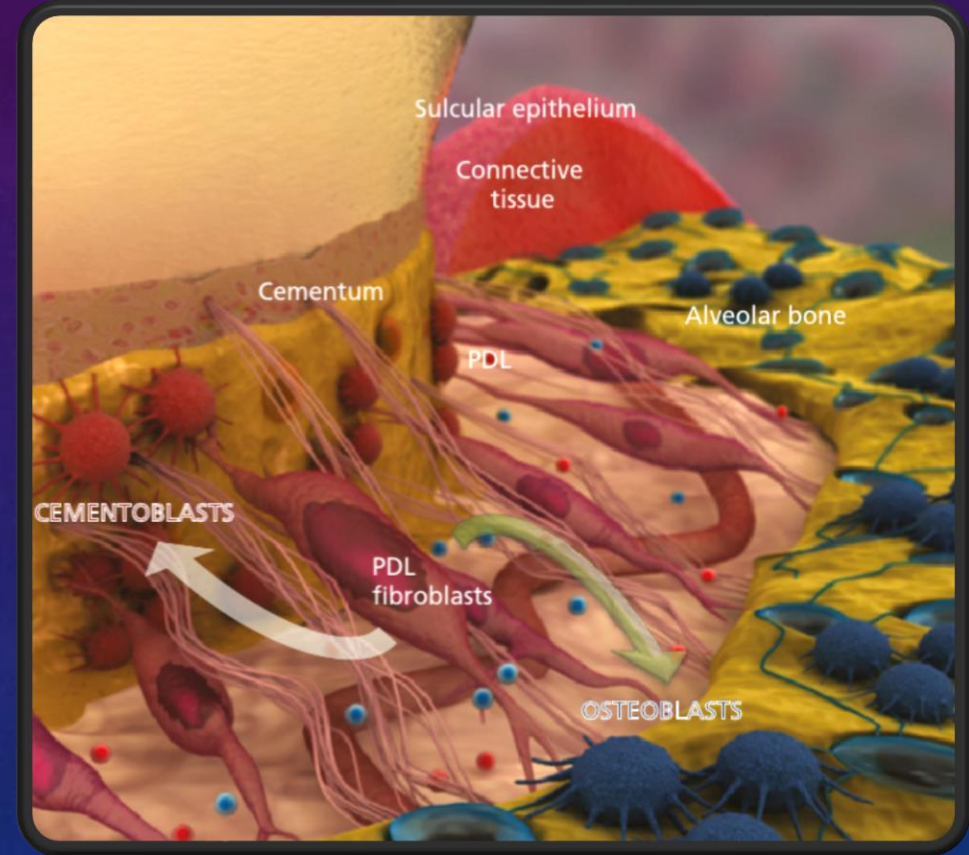
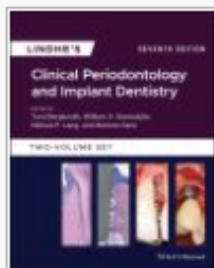


COMPREHENSIVE TREATMENT PLANNING

Leila Kazemi
Doctor of Clinical Dentistry (Periodontics) Year 3



▼ Lindhe's Clinical Periodontology and Implant Dentistry



by Tord Berglundh, William V. Giannobile, Mariano Sanz, and Niklaus P. Lang

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Practice Guideline

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Maurizio Tonetti

BDJ Minimum Intervention Dentistry Themed Issue

VERIFIABLE CPD PAPER

CLINICAL

Evidence-based, personalised and minimally invasive
treatment for periodontitis patients – the new EFP
S3-level clinical treatment guidelines

Moritz Kebschull^{*1,2,3} and Iain Chapple^{1,2}

PERIODONTICS

The Complete Summary

Edited by
Fernando Suárez, DDS, MS



QUINTESSENCE PUBLISHING

Periodontology at a Glance

Valerie Cleverhugh, Aradhna Tugnait and Robert Cenco



Principles of Periodontal Diagnosis and Treatment Planning

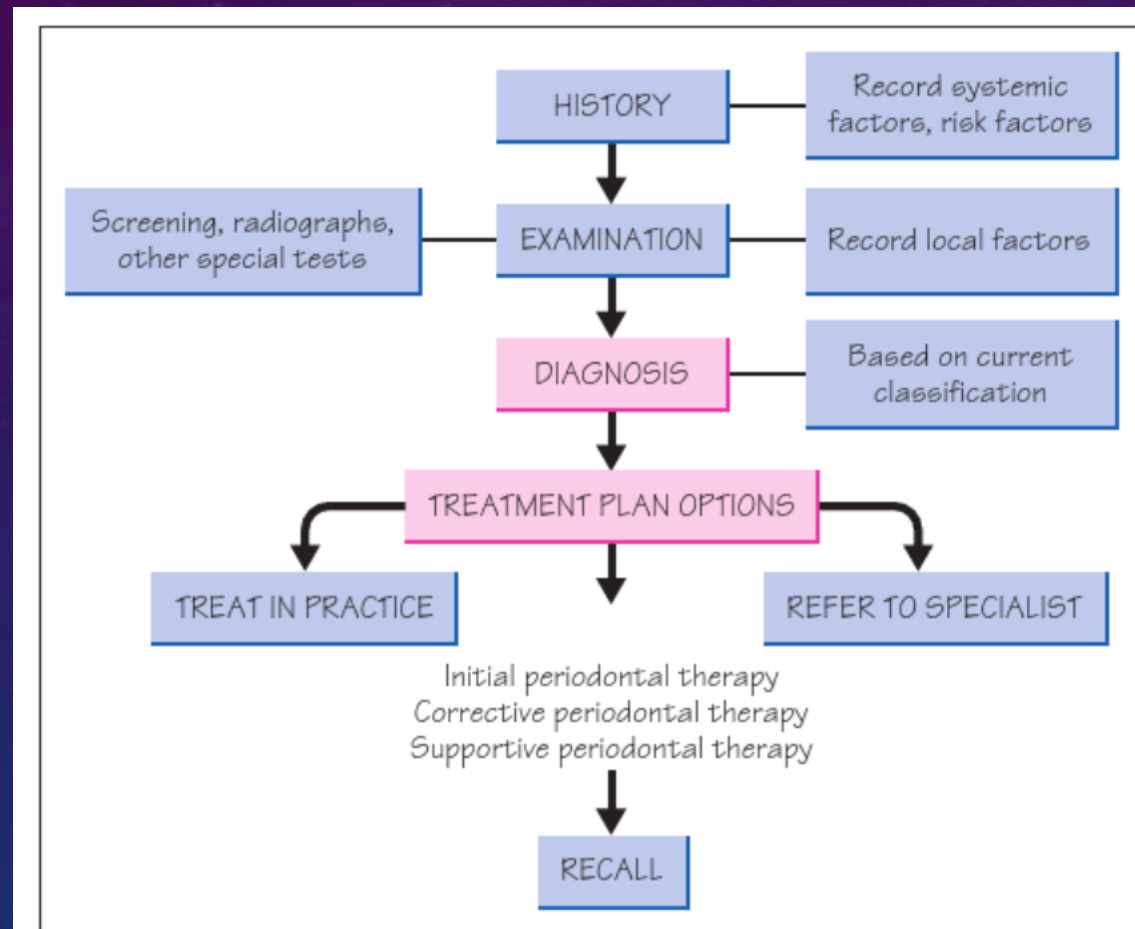


Figure 19.1 Flow diagram showing diagnosis and treatment plan options.

Aims of Periodontal Therapy

- Design a treatment plan to achieve the best possible biologic, functional, and esthetic outcomes, while preserving original structural characteristics whenever possible.
- Develop a comprehensive treatment plan with:
 - Short-term goals: Immediate resolution of acute symptoms.
 - Long-term goals: Maintenance of a healthy and functional periodontal environment.
- Treat and correct pathological processes related to periodontal tissues.
- Eliminate gingival inflammation and address conditions derived from it.
- Identify and manage risk factors.



GOALS:

- Preserve, improve and maintain natural dentition, implants and surrounding tissues.
- Obtain healthy periodontium/peri-implant tissues: absence of inflammation and progressive attachment/bone loss.

PROCEDURES TO ESTABLISH AND MAINTAIN HEALTH

Clinical Endpoints of Therapy

- 1) Attainment of sustained high levels of achievement in personal plaque control, reflected as sustained full-mouth bleeding on probing scores around 10% of teeth.

(The absence of bleeding on probing over repeated examinations is the best indicator of periodontal stability currently available.)

- 2) Absence of an increase in attachment loss and/or bone loss.
- 3) No periodontal pockets more than 4 mm with bleeding on probing or no deep periodontal pockets greater than or equal to 6 mm [≥ 6 mm]
- 4) Tooth hypermobility should be such that it does not impair the patient's plaque control efforts and allows the patient to function to an acceptable level in comfort.
- 5) Appropriate control of risk factors (smoking and diabetes)

Periodontal management form (e-form)

 ORAL HEALTH CENTRE OF WESTERN AUSTRALIA	Periodontal Examination, Diagnosis, Prognosis & Treatment Plan	Patient Details
		Given Name _____
		Surname _____
		DOB _____
		TEMP _____

1. RELEVANT MEDICAL & DENTAL HISTORY

Presenting Complaint & Expectations: _____	
RELEVANT MEDICAL HISTORY	STRESS : Y ☐ N ☐
DIABETES : Y ☐ N ☐ CONTROLLED: Y ☐ N ☐	OTHER MEDICAL CONDITIONS & MEDICATIONS _____
HbA1c level: _____ %	
SMOKING : Y ☐ N ☐ YEARS: _____ NUMBER A DAY: _____	
Quit date: _____ Interest to quit: Y ☐ N ☐	

RELEVANT DENTAL HISTORY	
Signs of Gingival bleeding ☐ Bad Breath/Taste ☐ Teeth Migration ☐ Gingival Infection ☐ Tooth loss: Caries ☐ Perio ☐	
Type of Brush: Manual ☐ Power/ Electric ☐ Type of Interdental Cleaning: Floss ☐ Brushes ☐ Other: _____	
Type of Tooth paste: Fluoridated ☐ Non Fluoridated ☐ Other: _____ Type of Mouthrinse: _____	

2. CLINICAL EXTRAORAL & INTRAORAL EXAMINATION

TMJ & PARAFUNCTION			PROSTHESES	SOFT TISSUE FINDINGS	
Bruxism: Y / N	Occlusal Wear Y / N	≤20 Teeth Y / N	When was Protheses made: _____	Lips: _____	Cheeks: _____
Clicking Y / N	Pain/Locking Y / N	Referral Y / N	Type: _____ Material: _____	Lining Mucosa: _____	Tongue: _____
Occlusal Interferences & Fractures 8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8 8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8			Patient Satisfied: Y / N	Palate: _____	Floor of the Mouth: _____
			Condition: _____	Other: _____	

GINGIVAL TISSUES		Biofilm Distribution
Colour: _____		
Contour: _____		
Texture: _____		Dental Hypersensitivity
Phenotype Thin Scallop ☐ Thick Flat ☐ Thick Scallop ☐		8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8 8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8
Biofilm Amount min mod amount abundant		

CALCULUS DISTRIBUTION	OTHER BIOFILM RETENTIVE FACTORS
Supragingival Calculus C  Gingival E  Enlargement	Overhangs: _____
Subgingival Calculus C  	Overcontoured Restorations: _____
	Pontics: _____
	Caries: _____
	Root Anomalies: _____
	Other: _____

* DO PERIODONTAL CHARTING ON TITANIUM AND THEN COMPLETE CLINICAL PARAMETERS, CPITN /PSR AND RECESSION

CLINICAL PARAMETERS PREVALENCE

Bacterial Biofilm Score %	BOP %
Periodontal Probing Depth 1-3 mm	%
Periodontal Probing Depth 4-6 mm	%
Periodontal Probing Depth 7 or more mm	%

CPITN / PSR	
0 = Healthy	3 = 4 - 5 mm
1 = BOP	4 = 6 mm or deeper
2 = Calculus/overhangs	* = Recession/furcation

GINGIVAL RECESSION DEFECTS

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

3. RADIOGRAPHIC FINDINGS

NORMAL BONE LEVEL <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> </table> MILD BONE LOSS <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> </table>	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	HORIZONTAL BONE LOSS <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> </table> MODERATE BONE LOSS <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> </table>	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	ANGULAR BONE LOSS <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> </table> SEVERE / ADVANCED BONE LOSS <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> <tr> <td style="border-bottom: 1px solid black; text-align: center;">8 7 6 5 4 3 2 1</td> <td style="border-bottom: 1px solid black; text-align: center;">1 2 3 4 5 6 7 8</td> </tr> </table>	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8	8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8
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8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8																									
8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8																									
LOCALISED BONE LOSS ☐ 30% AND LESS TEETH	GENERALISED BONE LOSS ☐ MORE THAN 35% TEETH																									

DENTAL CARIES: _____

ENDODONTIC : _____

OVERHANGS : _____

OPEN CONTACTS: _____

DEFICIENT RESTORATIONS: _____

OTHER FINDINGS: _____

☐ **CLINICAL GINGIVAL HEALTH** BOP < 10% PROBING $\leq$ 3mm

☐ **CLINICAL GINGIVAL HEALTH ON A REDUCED PERIODONTIUM** BOP < 10% ON NONPERIODONTITIS PATIENT RECESSON PROBING $\leq$ 3mm

☐ **GINGIVITIS:** BOP MORE 10% NO POCKETS

☐ **DENTAL BIOFILM ASSOCIATED GINGIVITIS** ☐ LOCALISED 30% AND LESS BOP ☐ GENERALISED MORE THAN 30% BOP

☐ **OTHER FORMS OF GINGIVITIS:** _____

PERIODONTITIS:									
INTERDENTAL CAL		RADIOGRAPHIC BONE LOSS		TOOTH LOSS		COMPLEXITY			
☐	STAGE I 1-2 mm	☐	< 15% HORIZONTAL BONE LOSS	☐	NO TOOTH LOSS	☐	MAX PROBING DEPTH ≤ 4 mm		
☐	STAGE II 3-4 mm	☐	15 - 33% HORIZONTAL BONE LOSS	☐	NO TOOTH LOSS	☐	MAX PROBING DEPTH ≤ 5 mm		
☐	STAGE III ≥ 5 mm	☐	MIDDLE ROOT THIRD AND MORE ☐ ANGULAR	☐	< 4 TEETH	☐	MAX PROBING DEPTH ≥ 6 mm	☐ FURCATION GRADE II ☐ GRADE II ☐ MODERATE RIDGE DEFECT	
☐	STAGE IV ≥ 5 mm	☐	MIDDLE ROOT THIRD AND BEYOND ☐ ANGULAR	☐	≥ 5 TEETH	☐	MAX PROBING DEPTH ≥ 6 mm	☐ FURCATION GRADE III ☐ GRADE III ☐ SEVERE RIDGE DEFECTS	
				☐ LESS THAN 20 TEETH REMAINING ☐ MASTICATORY DYFUNCTION ☐ 2 nd OCCLUSAL TRAUMA ☐ BITE COLLAPSE					

DISTRIBUTION: LOCALISED ☐ GENERALISED ☐ INCISIVE MOLAR ☐
30% AND LESS TEETH MORE THAN 30 % TEETH

		EVIDENCE OF BONE LOSS	% BONE LOSS / AGE	CASE PHENOTYPE		SMOKING	DIABETES
☐	GRADE A	NO LOSS 5 YEARS	☐ < 0.25	☐ HEAVY FILM DEPOSITS	☐ LOW DESTRUCTION	☐ NON SMOKING	☐ NORMO GLYCEMIC
☐	GRADE B	< 2 mm 5 YEARS	☐ 0.25 TO 1.0	☐ FILM DEPOSITS	☐ CORRESPOND TO DESTRUCTION	☐ < 10 CIGARETTES DAY	☐ HbA1c ≤ 7.0 %
☐	GRADE C	≥ 2 mm 5 YEARS	☐ ≥ 1.0	☐ LOW FILM DEPOSITS	☐ HIGH DESTRUCTION	☐ ≥ 10 CIGARETTES DAY	☐ HbA1c ≥ 7.0 %

OTHER MODIFYING FACTORS: _____

☐ CURRENTLY STABLE PERIODONTITIS: (REDUCED PERIODONTIUM BOP < 10% POCKETS 4 mm OR LESS)

☐ CURRENTLY REMISSION PERIODONTITIS: (GINGIVAL INFLAMMATION ON A REDUCED PERIODONTIUM BOP > 10% ON A TREATED PERIO CASE/POCKETS 4 mm OR LESS)

☐ CURRENTLY UNSTABLE PERIODONTITIS: (BOP > 10% AND POCKETS 4-6 mm OR MORE)

☐ OTHER FORMS OF PERIODONTITIS: _____

- ☐ PERI-IMPLANT HEALTH _____
- ☐ PERI-IMPLANT MUCOSITIS _____
- ☐ PERI-IMPLANTITIS _____
- ☐ PERI-IMPLANT ANOMALIES _____

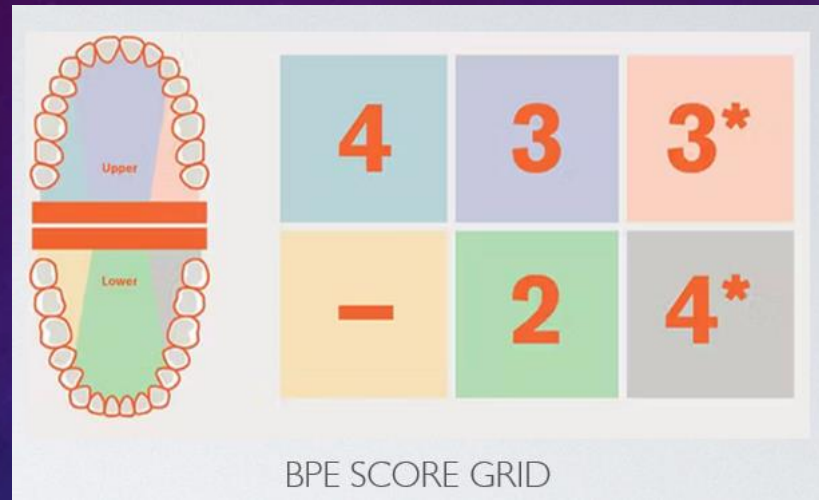
OVERALL PERIODONTAL PROGNOSIS	GOOD	FAIR	POOR	QUESTIONABLE	HOPELESS
	☐	☐	☐	☐	☐

REFERRAL REQUIRED *describe unit and needs*

5. PERIODONTAL TREATMENT PLAN

EMERGENCIES PHASE OF PERIODONTAL TREATMENT	DATE	UPDATED MEDICAL	ATS	ITEM COMPLETED TUTOR SIGNATURE
RISK MANAGEMENT PHASE OF PERIODONTAL TREATMENT				
FUNDAMENTAL PHASE OF PERIODONTAL TREATMENT				
RE-EVALUATION PHASE OF PERIODONTAL TREATMENT				
CORRECTIVE PHASE OF PERIODONTAL TREATMENT				
MAINTENANCE PHASE:				
PROPOSED MAINTENANCE INTERVAL: 3 Months ☐ 6 months ☐ 12 months ☐ Other:				

Basic Periodontal Examination (BPE)



An example BPE score grid might look like this:

4	3	3*
-	2	4*

Both the number and the * should be recorded if a furcation is detected. E.g. the score for a sextant could be 3* (indicating a probing depth 3.5-5.5mm plus a furcation involvement in the sextant).

How to record the BPE:



British Society of
Periodontology

Basic Periodontal Examination (BPE)

How to record the BPE

1. The dentition is divided into 6 sextants and the **highest** score for each sextant is recorded:

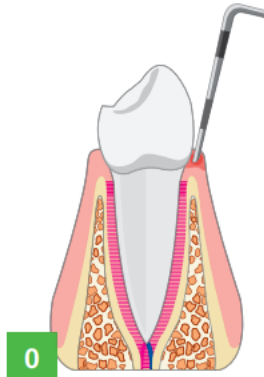
Upper right (17 to 14)
Lower right (47 to 44)

Upper anterior (13 to 23)
Lower anterior (43 to 33)

Upper left (24 to 27)
Lower left (34 to 37)
2. All teeth in each sextant are examined (with the exception of 3rd molars unless 1st and/or 2nd molars are missing).
3. For a sextant to qualify for recording, it must contain at least 2 teeth.
4. A World Health Organisation (WHO) **BPE** probe is used. This has a 'ball end' 0.5mm in diameter and a black band from 3.5mm to 5.5mm. Light probing force should be used (20-25 grams).
5. The probe should be 'walked around' the teeth in each sextant. All sites should be examined to ensure that the highest score in the sextant is recorded before moving on to the next sextant. If a code 4 is identified in a sextant, continue to examine all sites in the sextant. This will help to gain a fuller understanding of the periodontal condition and will make sure that furcation involvements are not missed.

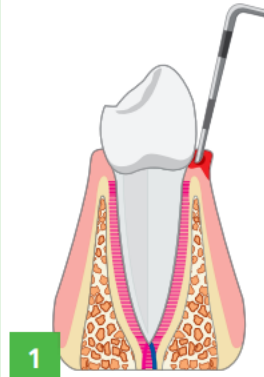
Scoring

—● Scoring Codes



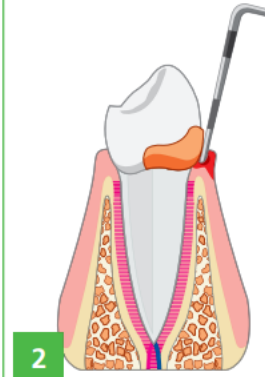
0
**Pockets
<3.5mm**

No calculus/overhangs,
no bleeding on probing
(black band entirely
visible)



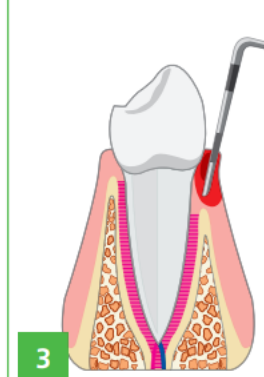
1
**Pockets
<3.5mm**

No calculus/overhangs,
bleeding on probing
(black band entirely
visible)



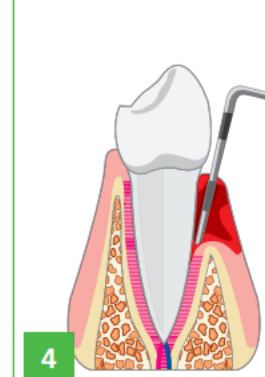
2
**Pockets
<3.5mm**

Supra or subgingival
calculus/overhangs
(black band entirely
visible)



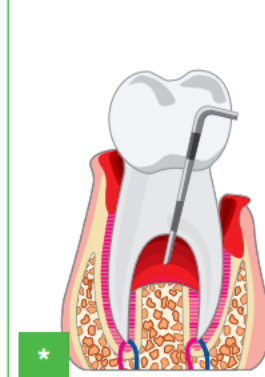
3
**Probing depth
3.5-5.5mm**

(Black band partially
visible, indicating
pocket of 4-5mm)



4
**Probing depth
>5.5mm**

(Black band disappears,
indicating a pocket of
6mm or more)



**Furcation
involvement**

How to use BPE:

How to Use BPE

- All new patients should have the **BPE** recorded
- For patients with codes 0, 1 or 2, the **BPE** should be recorded at every routine examination
- For patients with **BPE** codes of 3 or 4, more detailed periodontal charting is required
- **Code 3:** Initial therapy including self-care advice (oral hygiene instruction and risk factor control) then, post-initial therapy, record a 6-point pocket chart in that sextant only
- **Code 4:** If there is a Code 4 in any sextant then record a 6-point pocket chart throughout the entire dentition
- **BPE** cannot be used to monitor the response to periodontal therapy because it does not provide information about how sites within a sextant change after treatment. To assess the response to treatment, a 6-point pocket chart should be recorded pre and post- treatment
- For patients who have undergone initial therapy for periodontitis, and who are now in the maintenance phase of care, then full probing depths throughout the entire dentition should be recorded at least annually

In addition it is recommended that:

- **BPE** should not be used around implants (4 or 6-point pocket charting should be used)
- Radiographs should be available for all Code 3 and Code 4 sextants. The type of radiograph used is a matter of clinical judgement but crestal bone levels should be visible. Many clinicians would regard periapical views as essential for Code 4 sextants to allow assessment of bone loss as a percentage of root length and visualisation of the periapical tissues
- When a 6-point pocket chart is indicated it is only necessary to record sites of 4mm and above (although 6 sites per tooth should be measured)
- Bleeding on probing should always be recorded in conjunction with a 6-point pocket chart

—• Guidance on Interpretation of BPE Scores



No need for periodontal treatment



Oral hygiene instruction (OHI)



As for Code 1, plus removal of plaque retentive factors, including all supra and subgingival calculus



As for Code 2 and RSD if required

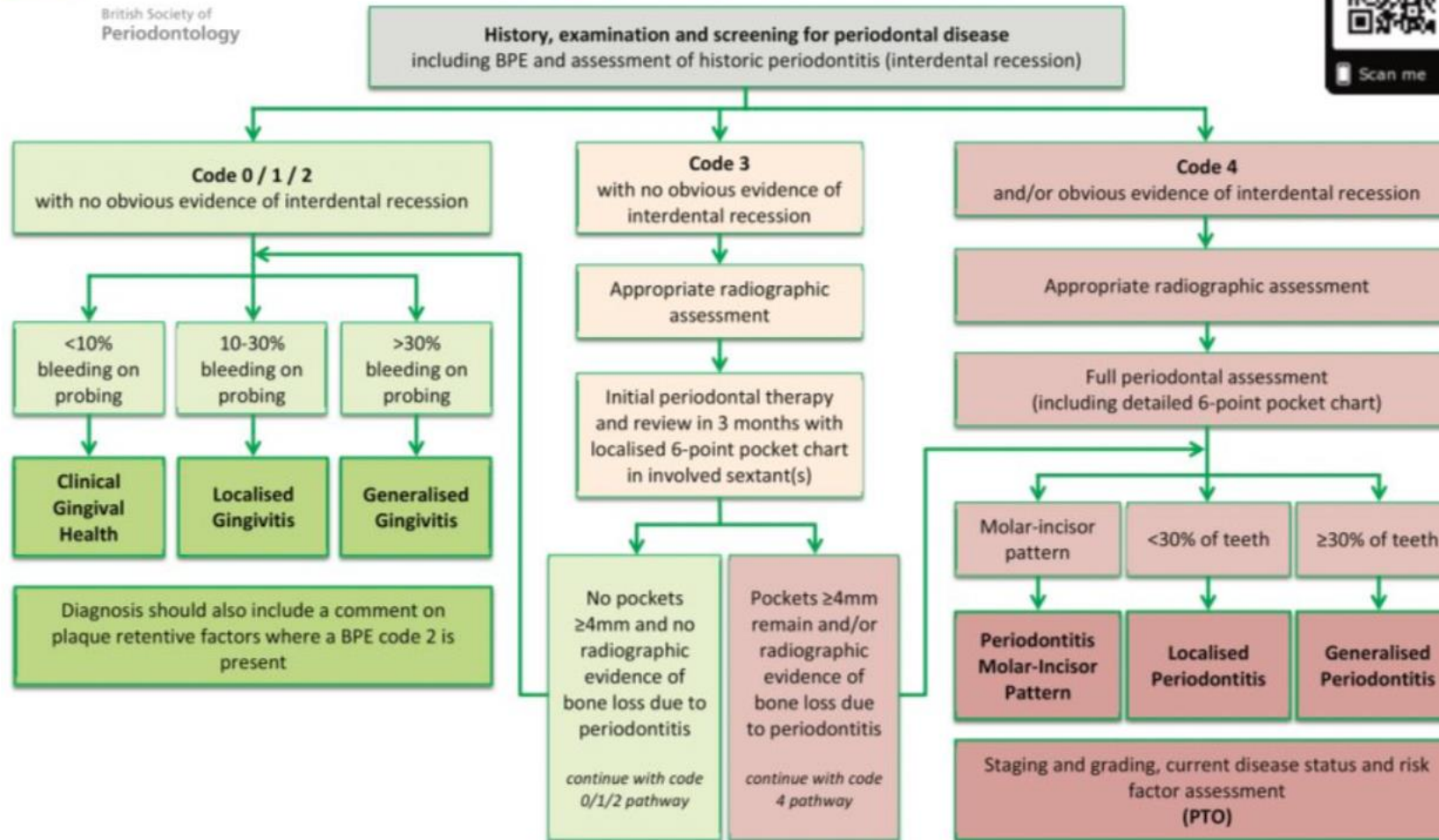


OHI, RSD. Assess the need for more complex treatment; referral to a specialist may be indicated



Treat according to BPE Code (0- 4). Assess the need for more complex treatment; referral to a specialist may be indicated

Implementing the 2017 Classification of Periodontal Diseases to Reach a Diagnosis in Clinical Practice



Phases/Steps of Periodontal Treatment

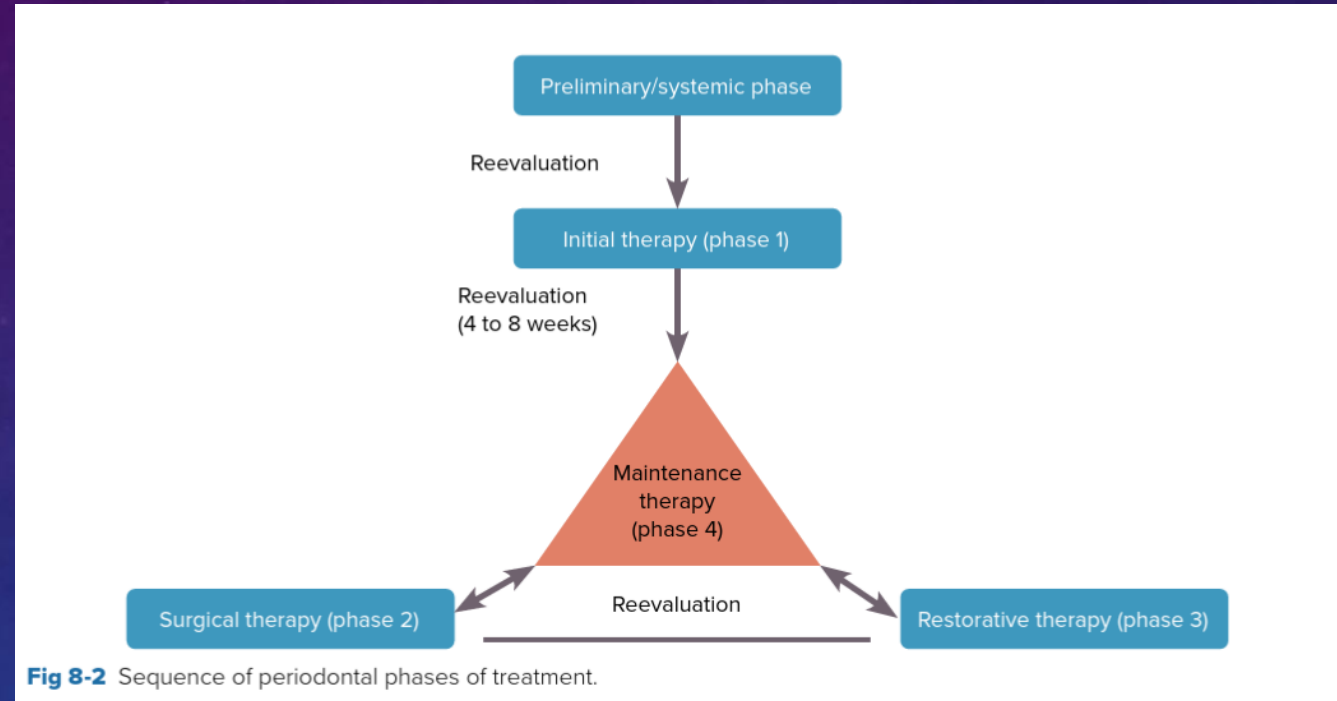
Emergency care phase

Fundamental phase (Step 1 and 2 EFP Guideline)

Re-assessment/re-evaluation phase

Corrective phase (Step 3 EFP Guideline)

Supportive care phase of periodontal therapy



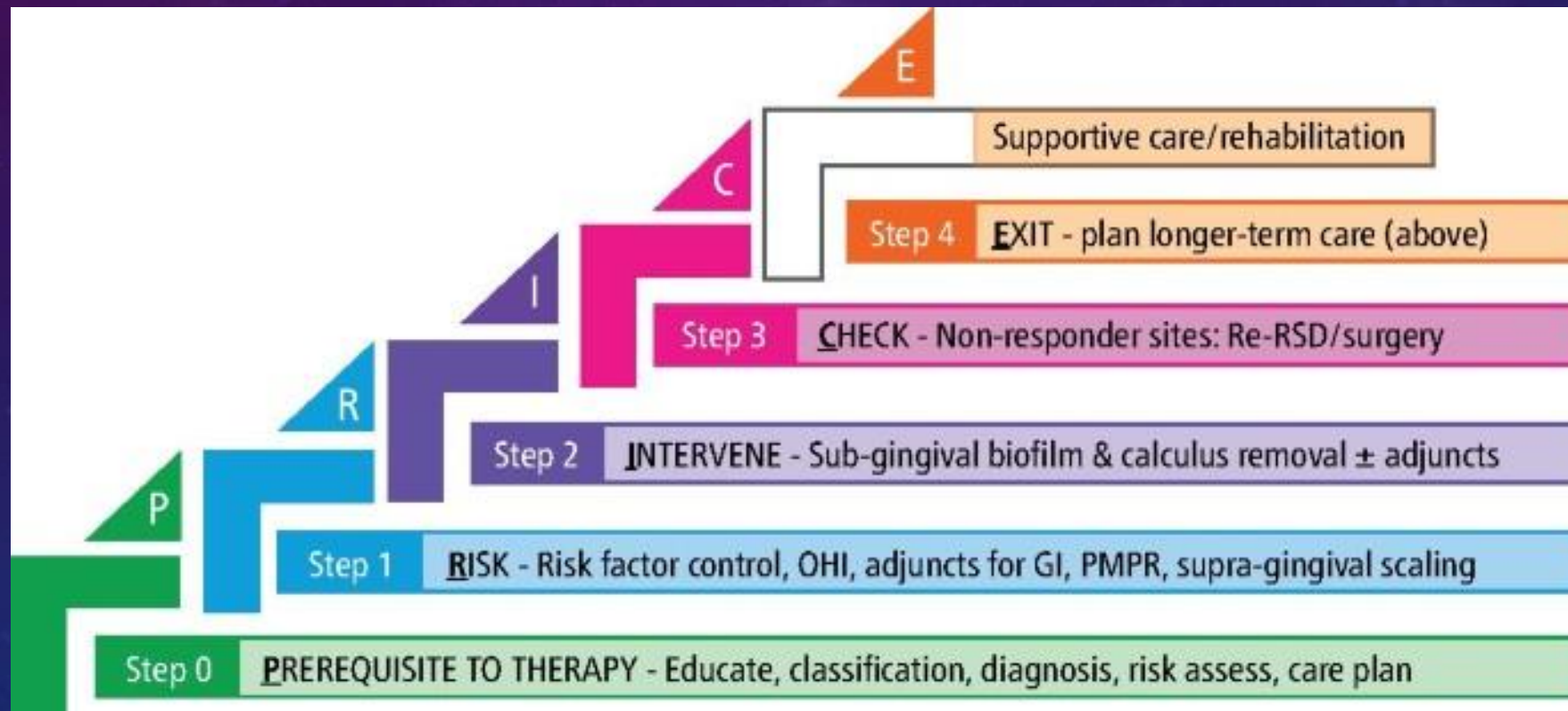
Treatment of stage I–III periodontitis—The EFP S3 level clinical practice guideline

Mariano Sanz¹  | David Herrera¹  | Moritz Kebschull^{2,3,4}  | Iain Chapple^{2,3}  |
Søren Jepsen⁵  | Tord Beglundh⁶  | Anton Sculean⁷  | Maurizio S. Tonetti^{8,9}  |
On behalf of the EFP Workshop Participants and Methodological Consultants

- The 2017 World Workshop on Periodontitis Classification introduced a system linking stages and grades of the disease to tailored prevention and treatment strategies, addressing severity, complexity, and individual risk factors.
- Developed by the European Federation of Periodontology (EFP) using evidence from 15 systematic reviews and the GRADE system, the S3-Level Clinical Practice Guidelines outline a stepwise approach for managing Stage I–III periodontitis.
- Recommendations focus on behavioral changes, biofilm control, surgical interventions, and supportive care to ensure long-term periodontal health.
-
- These guidelines provide an evidence-based framework for effective treatment, supporting lifelong oral health and informing clinical practice and policy.

Evidence-based, personalised and minimally invasive treatment for periodontitis patients – the new EFP S3-level clinical treatment guidelines

Moritz Kebschull*^{1,2,3} and Iain Chapple^{1,2}



Preliminary/Emergency Phase:



Emergency Dental Treatments

- Pain and acute infections should be managed promptly, including:
 - Endodontic treatment for infected or abscessed teeth.
 - Treatment of periodontal abscesses.
 - Management of necrotizing periodontal diseases (painful and acute).
 - Extraction of hopeless teeth (can be postponed if necessary).

1st Step

The first step in therapy is aimed at guiding behaviour change by motivating the patient to undertake successful removal of supragingival dental biofilm and risk factor control and may include the following interventions:

- Supragingival dental biofilm control
- Interventions to improve the effectiveness of oral hygiene [motivation, instructions (oral hygiene instructions, OHI)]
- Adjunctive therapies for gingival inflammation
- Professional mechanical plaque removal (PMPR), which includes the professional interventions aimed at removing supragingival plaque and calculus, as well as possible plaque-retentive factors that impair oral hygiene practices.
- Risk factor control, which includes all the health behavioural change interventions eliminating/mitigating the recognized risk factors for periodontitis onset and progression (smoking cessation, improved metabolic control of diabetes, and perhaps physical exercise, dietary counselling and weight loss).

Treatment of stage I–III periodontitis—The EFP S3 level clinical practice guideline

Mariano Sanz¹  | David Herrera¹  | Moritz Kebschull^{2,3,4}  | Iain Chapple^{2,3}  |
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On behalf of the EFP Workshop Participants and Methodological Consultants

Re-evaluation/Re-assessment

This first step of therapy should be implemented in all periodontitis patients, irrespective of the stage of their disease, and should be re-evaluated frequently in order to:

- Continue to build motivation and adherence, or explore other alternatives to overcome the barriers
- Develop skills in dental biofilm removal and modify as required
- Allow for the appropriate response of the subsequent steps of therapy

2nd Step:

The second step of therapy (cause-related therapy) is aimed at controlling (reducing/eliminating) the subgingival biofilm and calculus (subgingival instrumentation). In addition to this, the following interventions may be included:

- Use of adjunctive physical or chemical agents
- Use of adjunctive host-modulating agents (local or systemic)
- Use of adjunctive subgingival locally delivered antimicrobials
- Use of adjunctive systemic antimicrobials
- This second step of therapy should be used for all periodontitis patients, irrespective of their disease stage, only in teeth with loss of periodontal support and/or periodontal pocket formation.
- In specific clinical situations, such as in the presence of deep probing depths, first and second steps of therapy could be delivered simultaneously (such as for preventing periodontal abscess development).

Re-evaluation/Re-assessment

The individual response to the second step of therapy should be assessed once the periodontal tissues have healed (periodontal re-evaluation).

➤ If the endpoints of therapy:

- No periodontal pockets greater than 4 mm with bleeding on probing or
- No deep periodontal pockets greater than or equal to 6 mm [≥ 6 mm] have not been achieved,

the third step of therapy should be considered.

➤ If the treatment has been successful in achieving the endpoints of therapy, patients should be placed in a supportive periodontal care (SPC) programme.

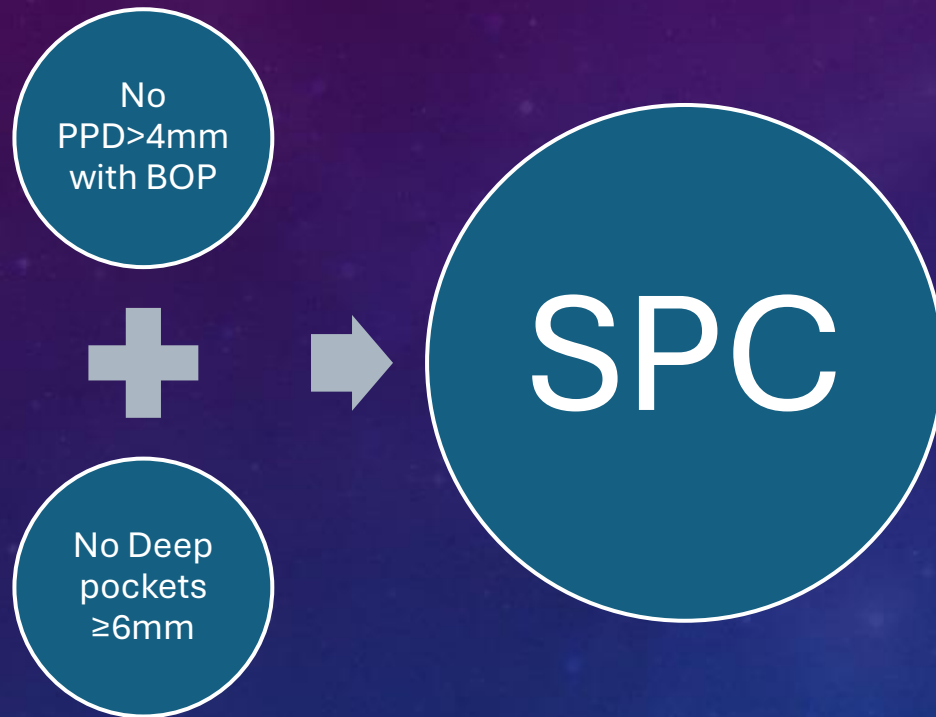


3rd Step:

- The third step of therapy is aimed at treating those areas of the dentition non-responding adequately to the second step of therapy (presence of pockets greater than or equal to 4 mm [≥ 4 mm] with bleeding on probing or presence of deep periodontal pockets greater than or equal to 6 mm [≥ 6 mm]), with the purpose of gaining further access to subgingival instrumentation, or aiming at regenerating or resecting those lesions that add complexity in the management of periodontitis (intra-bony and furcation lesions). It may include the following interventions:
 - Repeated subgingival instrumentation with or without adjunctive therapies
 - Access flap periodontal surgery
 - Resective periodontal surgery
 - Regenerative periodontal surgery

Additional surgical procedures, such as mucogingival, preprosthetic, preimplant, or implant surgeries, may be performed depending on patient needs. When there is indication for surgical interventions, these should be subject to an additional patient consent and specific evaluation of risk factors or medical contra-indications should be considered. This corrective phase may also entail the orthodontic repositioning of drifted teeth.

Re-evaluation/Re-assessment



Supportive Periodontal Care (Maintenance Phase)

Objective:

- Maintain periodontal stability in treated periodontitis patients.
- Integrates preventive and therapeutic interventions from earlier therapy steps.

Personalized Care:

- Tailored based on gingival and periodontal status of the patient.
- Regular recall visits scheduled according to individual patient needs.

Monitoring and Re-Treatment:

- Re-treatment may be necessary if recurrent disease is detected.
- Requires proper diagnosis and treatment planning when needed.
- In some cases, extraction of hopeless teeth may be required.

Patient Compliance:

- Adherence to oral hygiene regimens is crucial.
- Encouragement of healthy lifestyle habits to prevent disease recurrence.

Supportive Periodontal Care (Maintenance Phase)

- Update medical and smoking history
- Oral hygiene assessment and reinforcement of oral hygiene if necessary
- Full periodontal charting
- Sensibility testing of suspected teeth
- Instrumentation of sites with residual pocket >4mm
- Fluoride application on the exposed roots to prevent dental caries
- Regular assessment of prosthetic restorations and radiographic evaluation may also be indicated.

SPC In Daily Practice:

The recall hour should be planned to meet patient's individual needs.

It consist of four sections:

1. EXAMINATION, RE-EVALUATION & DIAGNOSIS (ERD): This section consists of 10-15mins.
2. MOTIVATION, REINSTRUCTION & INSTRUMENTATION: This section consist of 30-40mins of motivation, reinstruction of oral hygiene, instrumentation concentrated on sites diagnosed with persistent inflammation
3. TREATMENT OF REINFECTED SITES may include small surgical corrections .
4. POLISHING OF ENTIRE DENTITION, APPLICATION OF FLUORIDES & DETERMINATION OF FUTURE SPT APPOINTMENT: 5-10mins should be reserved for this section.

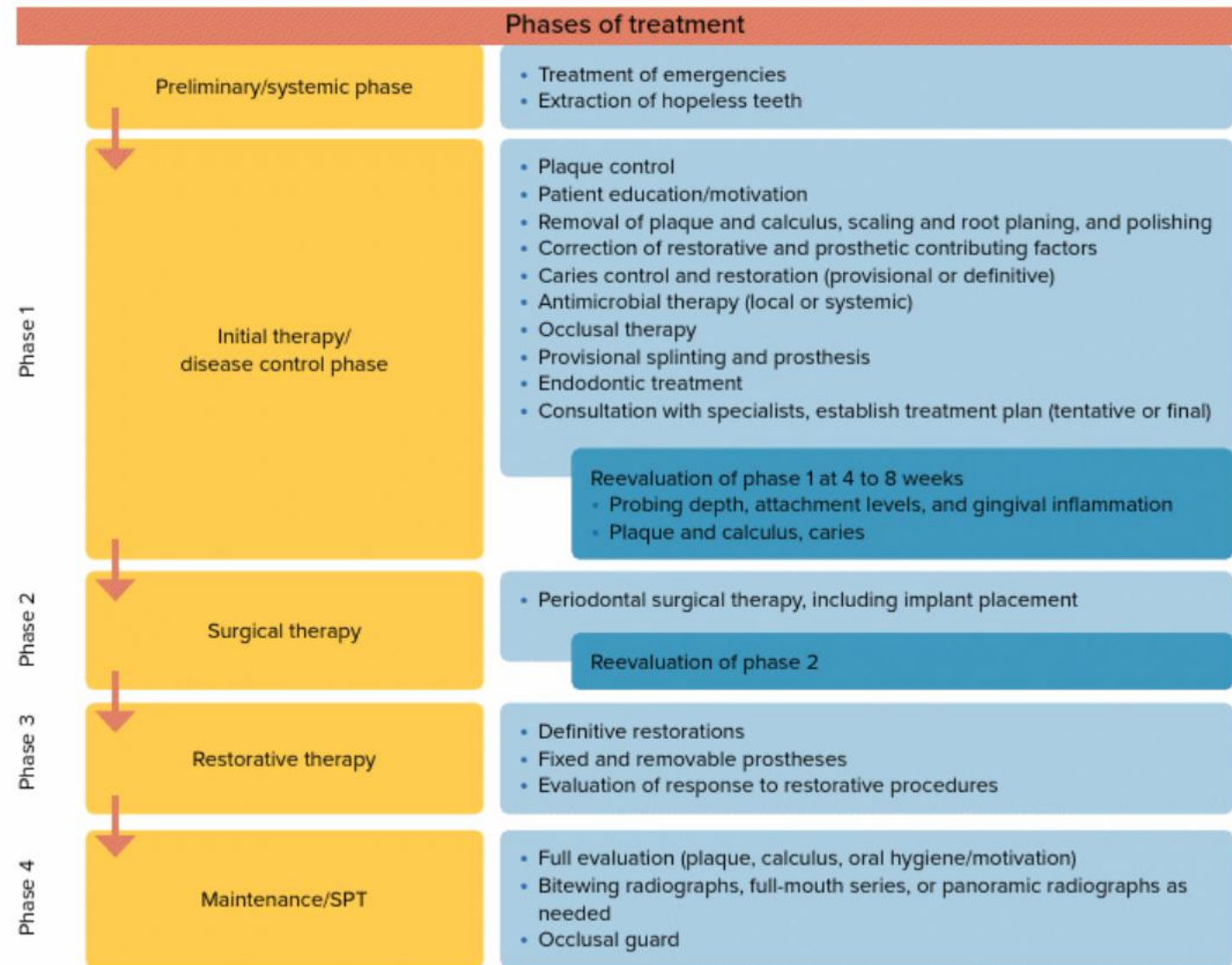


Fig 8-3 Phases of periodontal therapy.

ORAL HEALTH AND RISK ASSESSMENT, DIAGNOSIS & CARE PLAN

Diagnosis

Periodontal Health

Gingivitis

Periodontitis

Extract teeth with hopeless prognosis or unsavable teeth – eg grade III mobile

STEP 1

Building foundations for optimal treatment outcomes

- I: Explain disease, risk factors & treatment alternatives, risks & benefits including no treatment
- II: Explain importance of Oral Hygiene (OH), encourage and support behaviour change for OH improvement
- III: Reduce risk factors including removal of plaque retentive features, smoking cessation and diabetes control interventions
- IV: Provide individually tailored OH advice including interdental cleaning, + / - adjunctive efficacious toothpaste & mouthwash, + / - Professional Mechanical Plaque Removal (PMPR) including supra and subgingival scaling of the clinical crown
- V: Select recall period following published guidance and considering risk factors such as smoking and diabetes
- VI: Oral Health Educator (I, II), Hygienist, Therapist (I – IV), Dentist, Practitioner accredited for Level 2 and 3 care (I – V)



BSP
British Society of
Periodontology and
Implant Dentistry

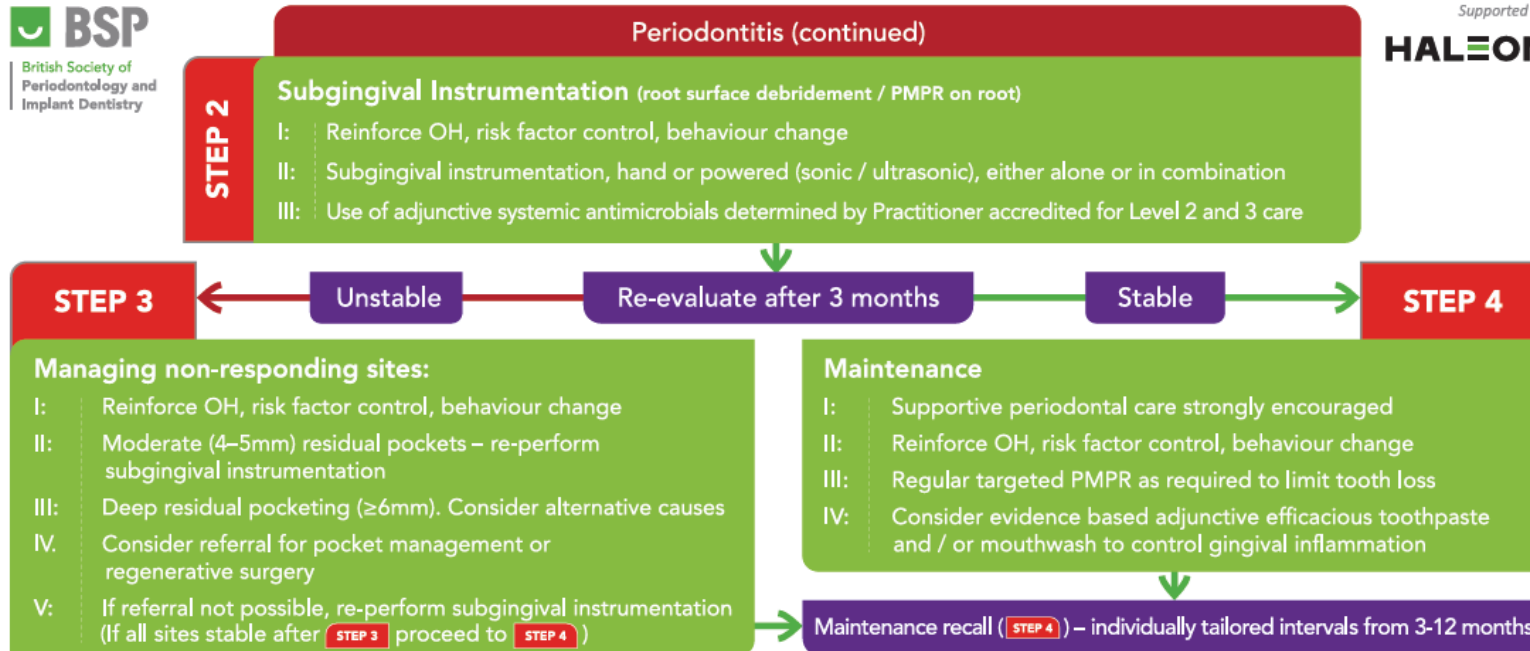
Re-evaluate

Non-engaging patient –
return to **STEP 1** & repeat

Engaging patient –
move to **STEP 2**

Consider referral

STEP 2 ➔ (see over)



BSP top tips

- I: Patients should be made aware that regular effective self-performed plaque removal offers the largest treatment benefit – engage the patient in a verbal contract to perform daily plaque control
- II: Toothbrushing should be supplemented by the use of interdental brushes (where anatomically possible)
- III: Individual patient's abilities, needs, preferences and manual dexterity should be considered when selecting toothbrush & interdental brush
- IV: Refer to BSP website for further clarification and glossary of terms

- I: Favourable improvement in OH – indicated by ≥50% improvement in plaque and marginal bleeding scores OR
- II: Plaque levels ≤20% & bleeding levels ≤30% OR
- III: Patient has met targets outlined in their personal self-care plan as determined by their healthcare practitioner

Defining **engaging & non-engaging** patients
(this is a guide)

- I: Insufficient improvement in OH – indicated by <50% improvement in plaque and marginal bleeding scores OR
- II: Plaque levels >20% & bleeding levels >30% OR
- III: Patient states preference to a palliative approach to periodontal care

Australian Schedule of Dental Services and Glossary - ADA

111 Removal of plaque and/or stain #

Removal of dental plaque and/or stain from the surfaces of all teeth and/or implants. This item is included in procedures described by items 114, 115, 250 and 251.

113 Recontouring and polishing of pre-existing restoration(s) – per tooth

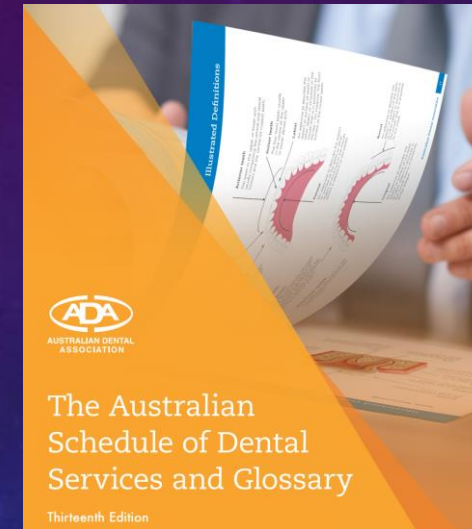
The reshaping and polishing of pre-existing restorations.

114 Removal of calculus – first appointment

Removal of calculus from the surfaces of teeth and/or implants.

115 Removal of calculus – subsequent appointment

This item describes procedures in item 114 when, because of the extent or degree of calculus, an additional appointment(s) is required to remove deposits from the teeth and/or implants.



250 Active non-surgical periodontal therapy – per quadrant

Non-surgical management of uncontrolled periodontal disease in a quadrant with at least three teeth with clinical attachment loss of at least 3 mm or pocketing of at least 4 mm. This includes procedures described in items 111, 114, 115 and 222 for the quadrant. Items such as 113, 131 and 142 may be itemised separately.

251 Supportive periodontal therapy – per appointment

Maintenance of periodontal health subsequent to active, non-surgical or surgical periodontal therapy. This includes procedures described in items 111, 114, 115 and 222. Items such as 113, 131 and 142 may be itemised separately.

213 Treatment of acute periodontal infection – per appointment

This item describes the treatment of acute periodontal infection(s). It may include establishing drainage and the removal of calculus from the affected tooth (teeth) or implant.

221 Clinical periodontal analysis and recording

This is a special examination performed as part of the diagnosis and management of periodontal disease. The procedure consists of assessing and recording a patient's periodontal condition.

222 Periodontal debridement – per tooth

The mechanical removal of biofilm and calculus from a periodontally diseased tooth to a level consistent with periodontal health. Where calculus removal is undertaken for other teeth at the same or a subsequent appointment that do not require debridement, it is appropriate to itemise 114/115 for these teeth in conjunction with but separate from the teeth that have undergone periodontal debridement.

223 Non-surgical treatment of peri-implant disease – per implant

The process of debridement using specialised instrumentation to remove the microbial biofilm from the implant and/or abutment surface, which may include localised application of medicaments.

CASE PRESENTATION AND TREATMENT PLANNING EXAMPLE



PATIENT PROFILE

About:
Mrs Smith, 37 yrs old, female
Referral from:
OHCWA DMD Clinic (Jan 2023)
First Periodontal Consultation:
24-Apr-2023
Patient Concerns:
○ Doesn't want to lose any more teeth and wants to take better care of herself. ○ Notices bleeding while brushing. ○ Feels that her lower front teeth are moving. ○ Reports a bad taste and bad breath. ○ Feels that her teeth and gums are sensitive.

CLINICAL PHOTOGRAPHS – INITIAL EXAMINATION:



PATIENT HISTORY:

SOCIAL	DENTAL	MEDICAL
Single	Sporadic attendance till 2022 only visit dentist in case of problems	Recent blood test revealed no medical condition
4 Children	Started being seen by DMD student since Jan 2023	Takes supplements
Doesn't work	Treatment provided in DMD Clinic since Jan 2023 include: -Periodontal tx -Extractions -Extensive restorative treatment requirements	
Feels stressed		
Highly motivated		
Recently was released from prison		
Smoking: She has been smoking 10-15 cigarettes per day for the past 20 years		
Drug: Used Methamphetamine for 13 years. Quit drugs 3 years ago.		

DISCUSSION AND EDUCATION

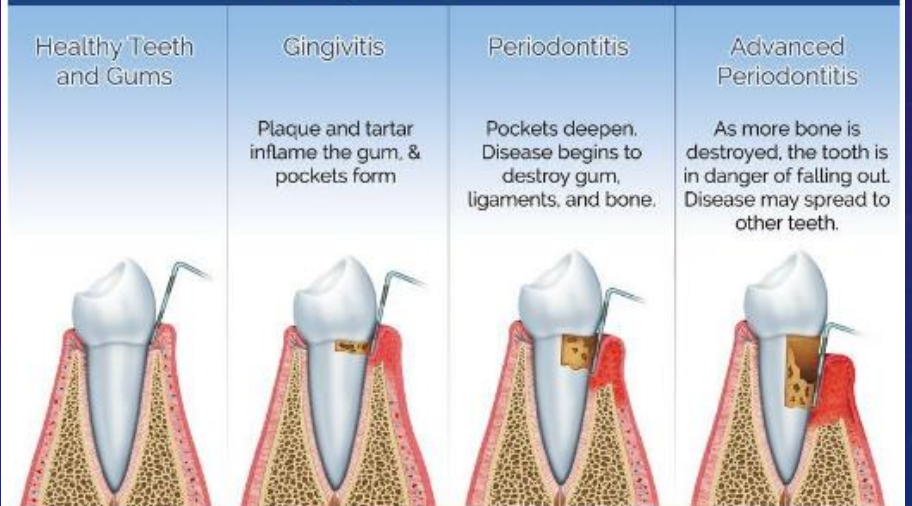
- What is periodontal disease
- What are the risk factors

Development of Periodontitis

Periodontitis means "inflammation around the tooth". It is a serious gum infection that damages the soft tissue and destroys the bone that supports your teeth. Periodontitis can cause tooth loss or worse, an increased risk of heart attack or stroke and other serious health problems.

Periodontitis is common but largely preventable. Periodontitis is usually the result of poor oral hygiene. Brushing at least twice a day, flossing daily and getting regular dental checkups can greatly reduce your chance of developing periodontitis.

The Stages of Dental Disease



SYMPTOMS

- Breath odor
- Gums are bright red, sometimes purple
- Pus may appear between the teeth & gums
- Bleeding when brushing teeth
- Bleeding when flossing
- Extra spaces appear between the teeth
- Gums hurt when touched
- Loose teeth
- Swollen gums
- Metallic taste in the mouth

WHEN TO SEE A DENTIST?

Healthy gums are firm and pale pink. If your gums are puffy, dusky red and bleed easily, or show other signs or symptoms of periodontitis, see your dentist soon. The sooner you seek care, the better your chances of reversing damage from periodontitis, potentially preventing other serious health problems.

ALTERNATIVE NAMES

PYORRHEA - GUM DISEASE;
INFLAMMATION OF GUMS - INVOLVING BONE

PERIODONTAL ASSESSMENT

PATIENT SIGNS & SYMPTOMS

SYMPTOMS:

Pain/sensitivity	Teeth are sensitive to cold drinks
Bleeding	Pt noticed bleeding while brushing
Bad taste/smell	Noticed bad breath / bad taste

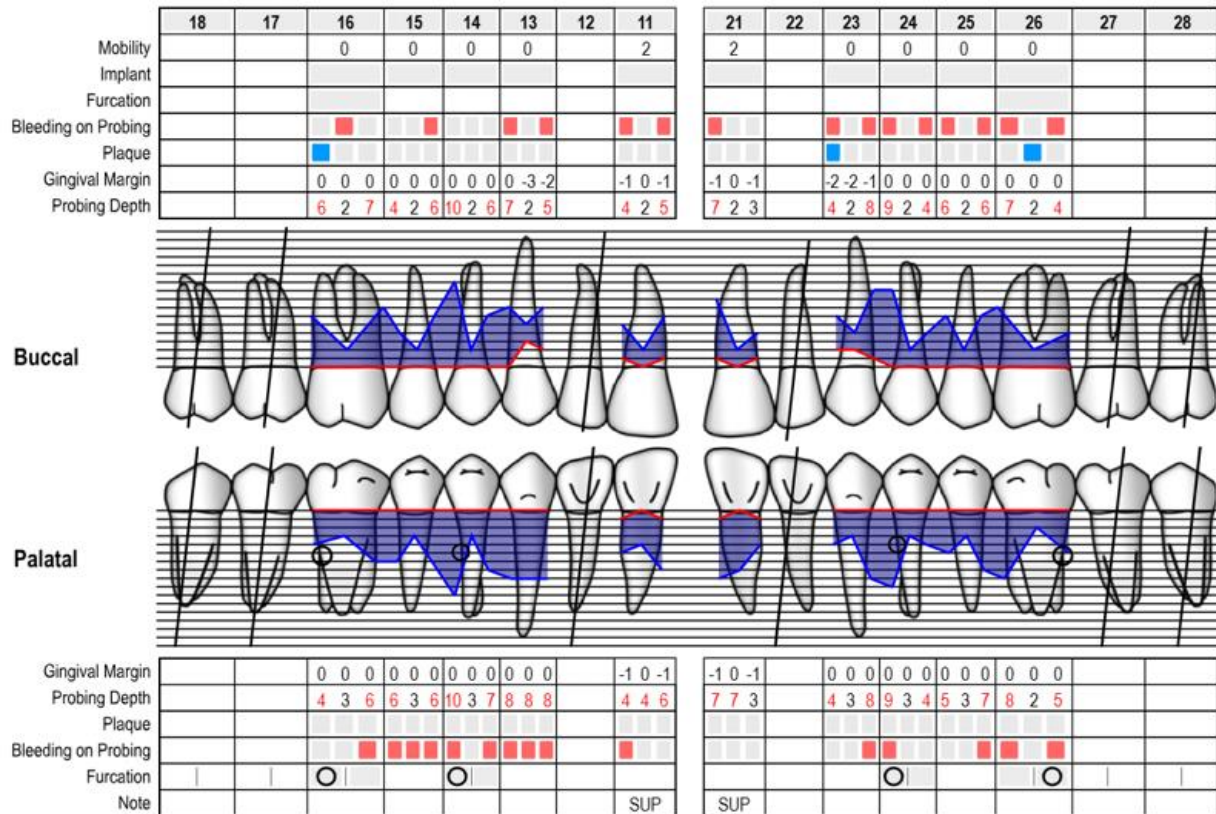
SIGNS:

Suppuration	Teeth # 31, 41, 43, 11, 21
Migration	Nil
Mobility	Lower / upper front teeth
Food impaction/ chewing efficiency	Nil
Tooth loss	4 (due to tooth decay)
Parafunction	She used to clench her teeth when she was on drugs

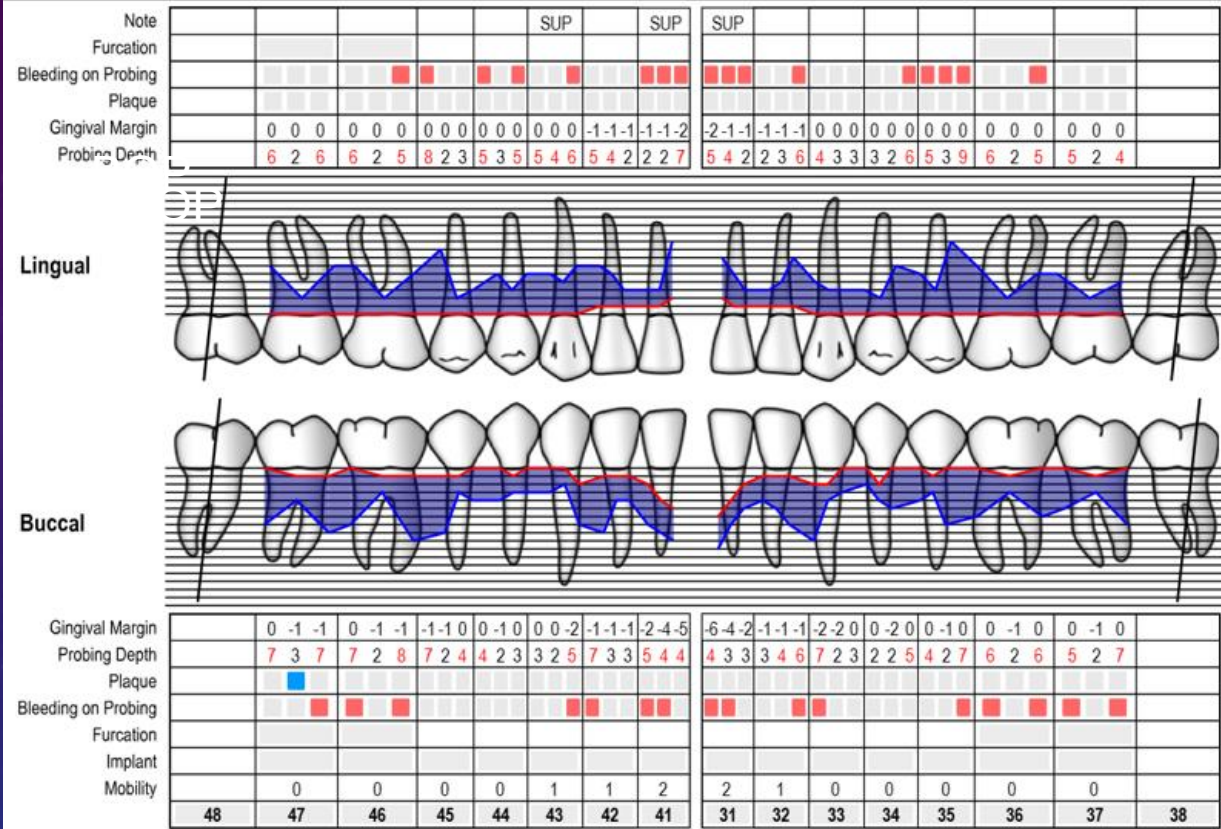
ORAL HYGIENE ROUTINE

Tooth brushing	Soft electric toothbrush in morning and at night
Toothpaste	Oral B
Flossing	Nil
Other interproximal tool(s)	Piksters, Pink#00, every couple of days since seeing DMD students
Mouth wash	Colgate Plax
Tongue brushing	Yes

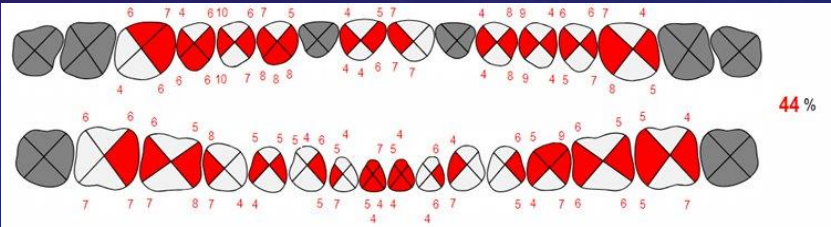
INITIAL PERIODONTAL EXAM:



Maxilla



Mandible



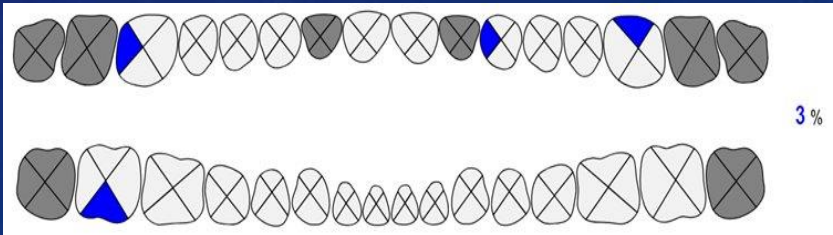
BOP

GINGIVA

Thick, scalloped Phenotype; Erythematous

BIOFILM 3%

BOP 44%



BIOFILM

PANORAMIC RADIOGRAPH:



CLINICAL EXAMINATION (KEY FINDINGS)



CARIES

43M, 42D, 21MDBP, 45DO, 46MO, 13MB,
11MBP, 31M, 32D, 34D

ENDODONTIC

21 root-filling, slightly overfilled with
no signs and symptoms



PROSTHODONTIC

Upper partial acrylic denture
demonstrates insufficient adaptation,
exhibiting bulkiness and improper fit



OCCLUSAL

Occlusal analysis: Missing 12, 22

Molar Class I RHS, class III LHS

Crowded 13-23

Occlusal interferences:

RHS lateral excursion: canine guidance, Nil
interferences

LHS lateral excursion: Canine guidance, Nil
interferences

Protrusion: Nil molar interference



PERIODONTAL DIAGNOSIS

Generalised Stage III, Grade C, Unstable Periodontitis

Three Steps to Staging and Grading a Patient



Step 1:
Initial Case Overview to Assess Disease

Screen:

- Full mouth probing depths
- Full mouth radiographs
- Missing teeth

Mild to moderate periodontitis will typically be either Stage I or Stage II
Severe to very severe periodontitis will typically be either Stage III or Stage IV

Step 2:
Establish Stage

For mild to moderate periodontitis (typically Stage I or Stage II):

- Confirm clinical attachment loss (CAL)
- Rule out non-periodontitis causes of CAL (e.g., cervical restorations or caries, root fractures, CAL due to traumatic causes)
- Determine maximum CAL or radiographic bone loss (RBL)
- Confirm RBL patterns

For moderate to severe periodontitis (typically Stage III or Stage IV):

- Determine maximum CAL or RBL
- Confirm RBL patterns
- Assess tooth loss due to periodontitis
- Evaluate case complexity factors (e.g., severe CAL frequency, surgical challenges)

Step 3:
Establish Grade

- Calculate RBL: $\frac{\text{RBL} \times 100}{\text{length} \times \text{age}}$
- Assess risk factors (e.g., smoking, diabetes)
- Measure response to scaling and root planing and plaque control
- Assess expected rate of bone loss
- Conduct detailed risk assessment
- Account for medical and systemic inflammatory considerations

Stage descriptions taken from Tonetti, Greenwell, Adriaens, J Periodontol 2018; 89(1): 1-12. © 2018 American Academy of Periodontology

	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			

	Progression		Grade A: Slow rate	Grade B: Moderate rate	Grade C: Rapid rate
Primary criteria	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

PERIODONTAL PROGNOSIS

PERIODONTAL - TOOTH-BASED (KWOK AND CATON 2007)

Prog	-	-	Q	F	Q	Q	-	Q	Q	-	Q	Q	Q	Q	-	-
Max	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
Man	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
Prog	-	Q	Q	Q	F	Q	Q	U	U	Q	Q	Q	Q	F	Q	-

F = Favourable

Q = Questionable

U = Unfavourable

H = Hopeless

NON-SURGICAL PERIODONTAL THERAPY

**Step 1 EFP Guidelines /
Risk Management Phase**

Risk factor control:
Encourage & discuss relationship between
smoking and periodontal disease

After our discussion about smoking, she
demonstrated encouragement and
determination.

Instructions on self-performed biofilm
control

She sought additional support from her
general practitioner (GP) during her smoking
cessation journey and successfully quit
smoking following her initial consultation
with her GP.

Stress management

Began her journey to quit smoking in May
2023.

Remove Plaque-retentive factors that impair
oral hygiene practices

Treatment Plan

**Step 1 and 2 EFP Guidelines /
Cause-related/ Fundamental
Phase**

Supra and subgingival
instrumentation (Quadrant-by-
Quadrant under LA)

Use of adjunctive systemic
antimicrobials

Azithromycin (500 mg once per
day for 3 days) on 03-Jul-2023

Reassess biofilm control and
motivate if necessary

1ST REASSESSMENT

Assessed Patient experience

Reassessed systemic risk factors (Smoking)

Continued to avoid smoking

Updated Medical history

Reevaluated local risk factors and plaque-retentive factors

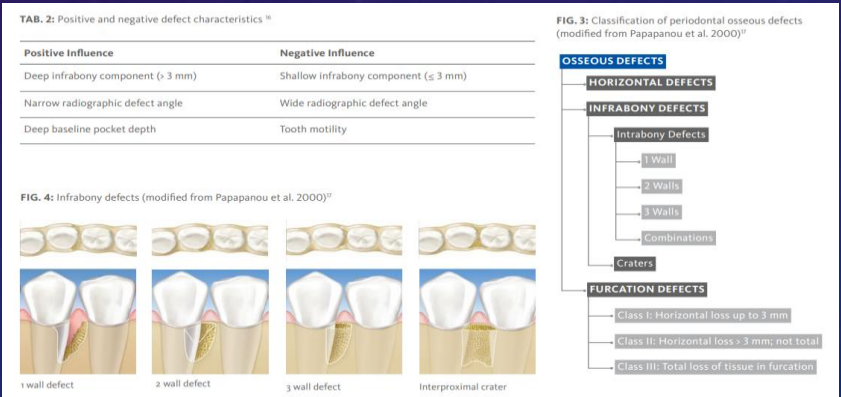
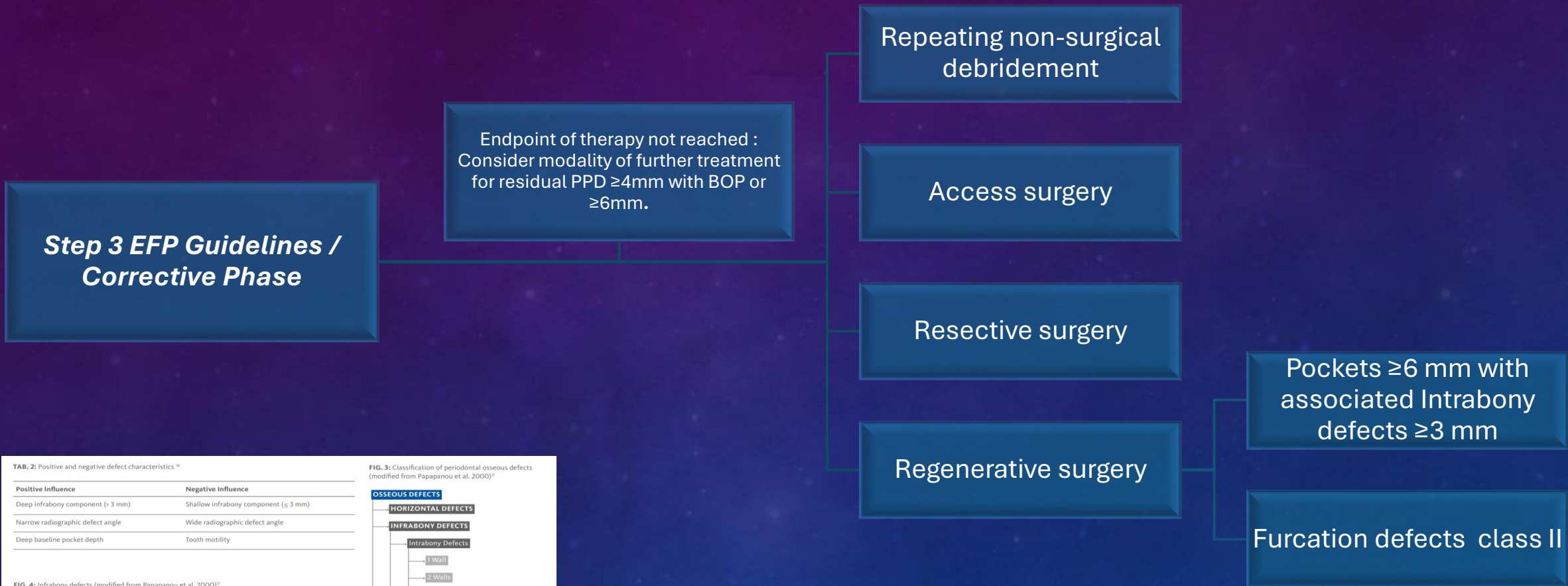
Reassessed occlusion

Performed Periodontal Analysis: Assessed patient response to NSPT

PMPR (Provided professional mechanical plaque and supragingival calculus removal)

Assessed compliance

SURGICAL PERIODONTAL THERAPY



REASSESSMENT

Step 4 EFP Guidelines / SPC

Goal of Supportive Periodontal Care:
To maintain periodontal stability in treated periodontitis patients through preventive and therapeutic interventions

Conduct Periodontal Risk Assessment to determine and individualised maintenance interval

Smoking Cessation Support:
Continued encouragement to quit smoking, recognizing her motivation despite previous relapses

Ongoing support for oral hygiene practices and education to maintain periodontal health

Regular maintenance appointments:
Update medical history, examination, plaque removal, subgingival debridement, and monitoring of risk factors

Re-treatment if recurrent disease is detected

Tooth Extraction Consideration:
Extraction may be an option for teeth with a hopeless prognosis

Thank You

