Supportive Periodontal Therapy (SPT)

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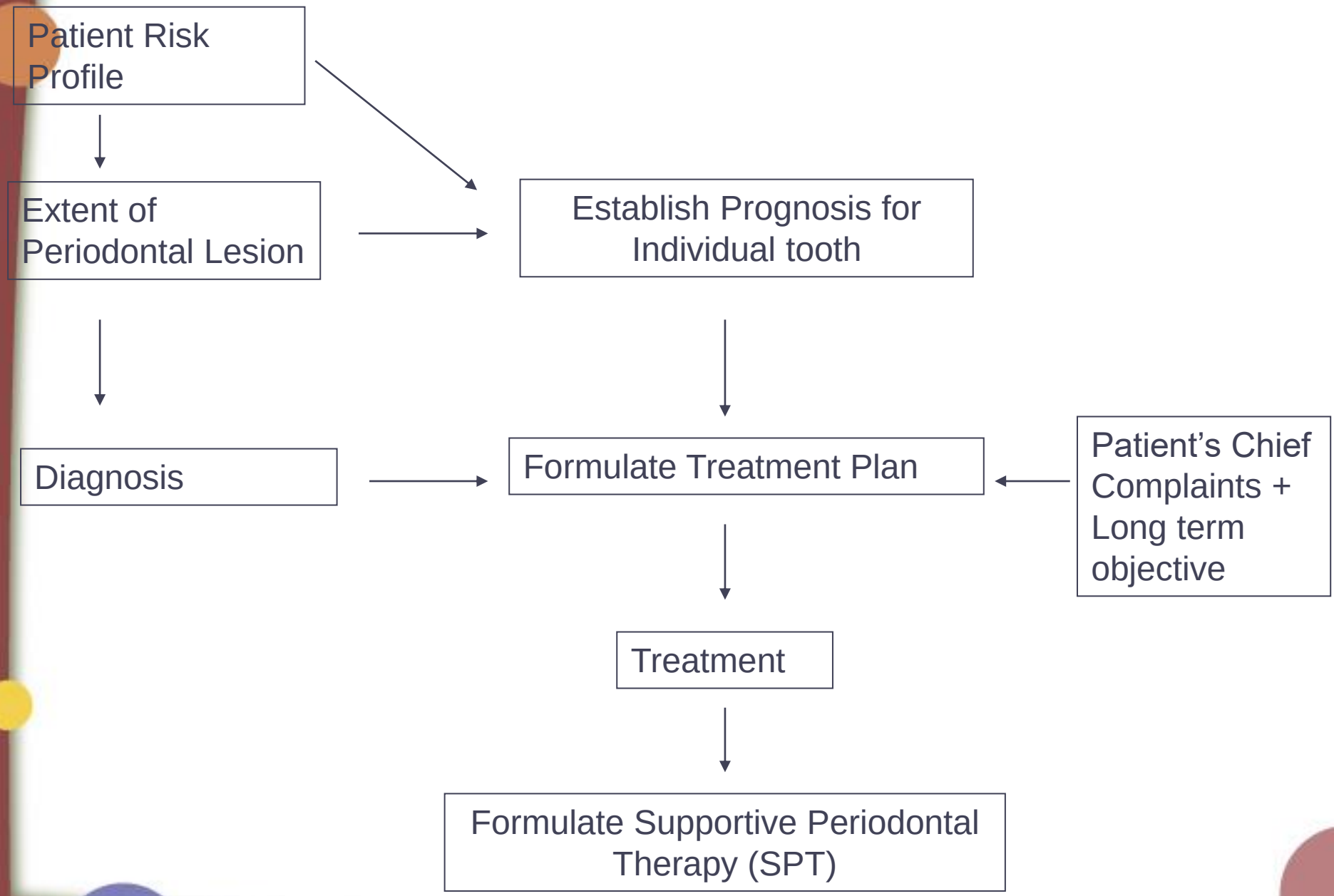
Current Concept

- Gingivitis is an inflammatory response in the gingiva that result from non-specific plaque build up (modifying factors)

- Periodontitis is an inflammatory response that associate with a specific group of gram negative anaerobic bacteria and the supporting structure (periodontium) is subsequently destroyed

Periodontal Treatment Goals (PM Bartold)

- Control of infection
- Remove any predisposing factor
- Regulate or control any modifying factor
- Regenerate to their original form and function
- Maintain the lifespan, function and aesthetics of remaining dentition


Patient Risk Profile
Extent of Periodontal Lesion
Establish Prognosis for Individual tooth
Diagnosis
Formulate Treatment Plan
Patient's Chief Complaints + Long term objective
Treatment
Formulate Supportive Periodontal Therapy (SPT)

Rational for SPT

- Patients who have irregular SPT are 3 to 5 times more likely to have tooth loss compared to patients who have regular SPT

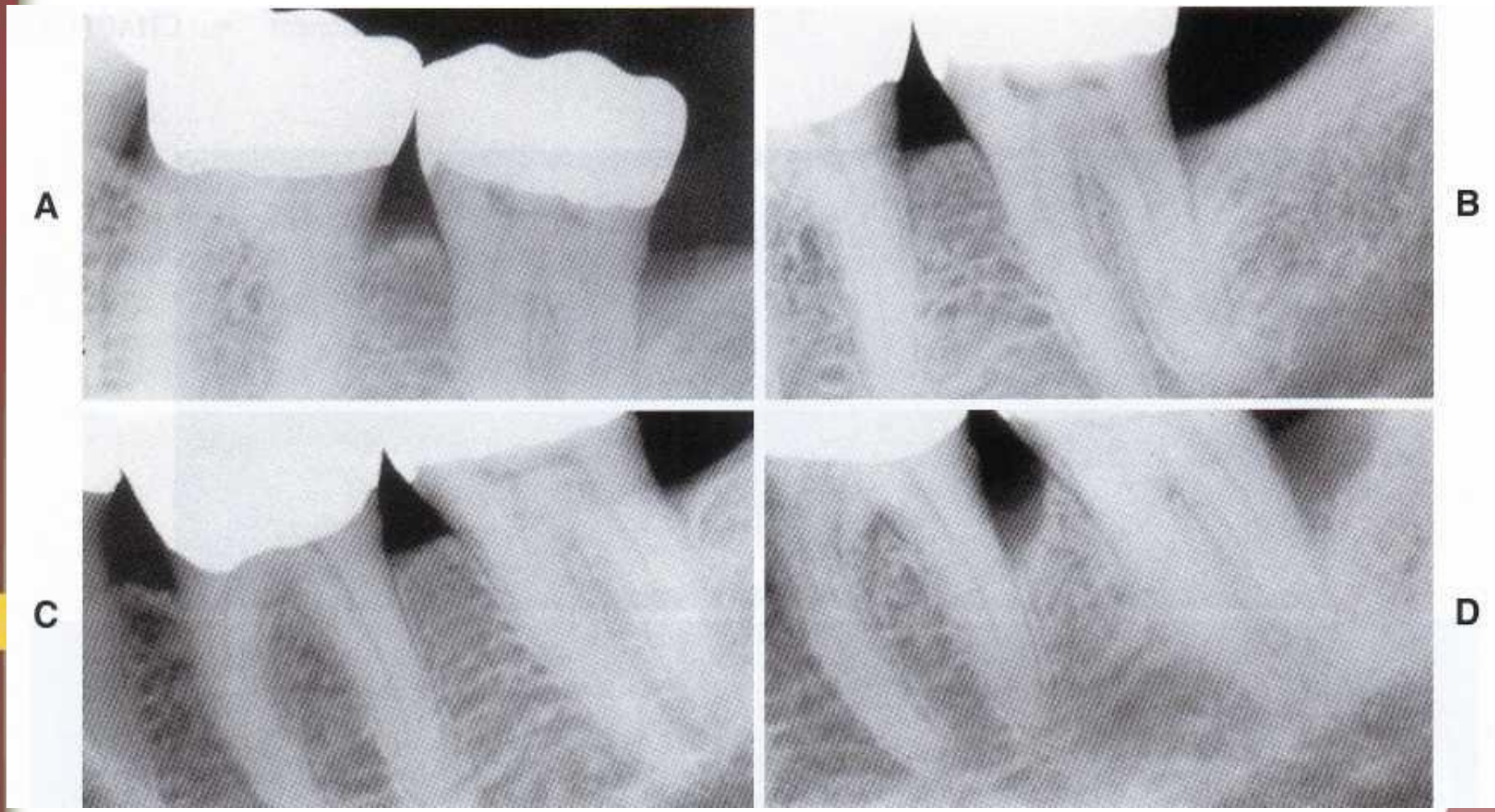
- If sub-gingival plaque is left behind during scaling, it regrows within the pocket. inadequate subgingival plaque control can lead to continued loss of attachment, even without the presence of clinical gingival inflammation

- Bacteria left behind in gingival tissues in chronic and aggressive periodontitis cases may recolonize the pocket and cause recurrent disease.

Rational for SPT(cont..)

- After periodontal procedures healing is usually with long junctional epithelium that inflammation may rapidly separate it from the tooth.

- Although pocket debridement suppresses components of the subgingival microflora associated with periodontitis, periodontal pathogens may return to baseline levels within days or months.


A
B
C
D

- The interval between visits is initially set at 3 months

At SPT appointment

1. Examination and re-evaluation
2. Motivation, re-instruction and instrumentation
3. Treatment of reinfected sites
4. Polish, application of fluoride and determination of future SPT

Examination and Re-evaluation

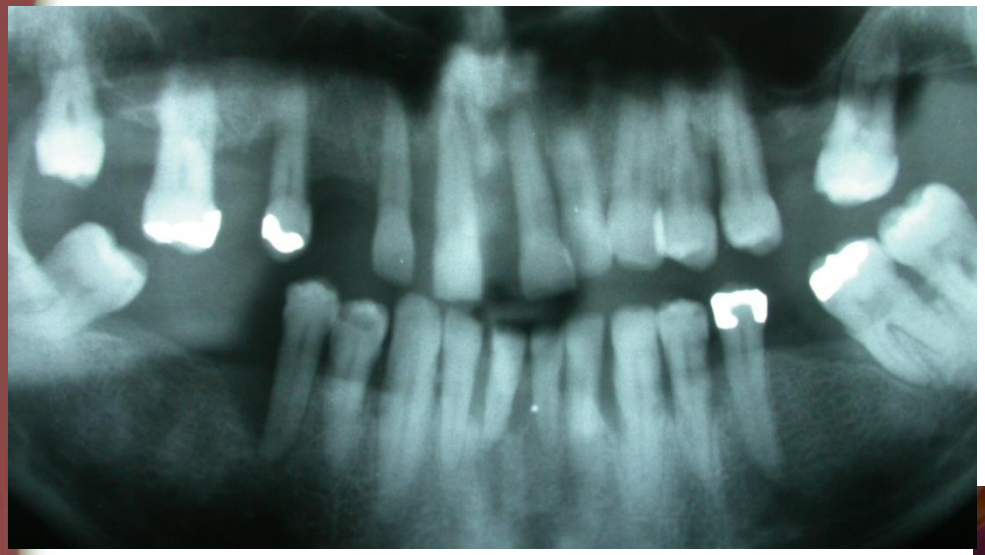
Look for changes that have occurred since the last evaluation.

- Patient Factors
- Oral Factors
- Site Factors

Patient Factor

- Age
- Smoking
- Medical conditions - uncontrolled diabetes
- Medications
- Stress
- Compliance / motivation
- Initial diagnosis – aggressive perio/advanced chronic perio
- Genetic factors-IL 1 Polymorphism

Systemic Influence – Uncontrolled diabetes



Oral Factors

- Oral Hygiene
- Parafunctional habits
- Previous history of tooth loss
- Bone loss/age
- Mucocutaneous disorders
- Prosthesis – dentures/ bridge

Oral Hygiene/Prostheses

Tooth Factors

- Calculus
- Probing depths + Recession = attachment loss
- BOP – bleeding of gingiva upon probing
- Furcation – Nabers probe
- Bone loss (>75%)
- Suppuration
- Mobility

Mobility – Is a loose tooth a bad tooth??

Predisposing Factors

- Enamel Projection, enamel pearl
- Grooves and fissures on root surfaces
- Carious lesions, resorptive defects
- Subgingival restorations, overhang restorations
- Vertical root fractures
- Endodontic considerations

Signs and Causes of Recurrence of Disease

1.Increased mobility:

Causes

- Increased inflammation
- Poor oral hygiene
- Inadequate restorations
- Deteriorating or poorly designed prostheses
- Systemic disease modifying host response to plaque
- Occlusal trauma
- Bruxism
- High restoration
- Poor crown-to-root ratio

Signs and Causes of Recurrence of Disease

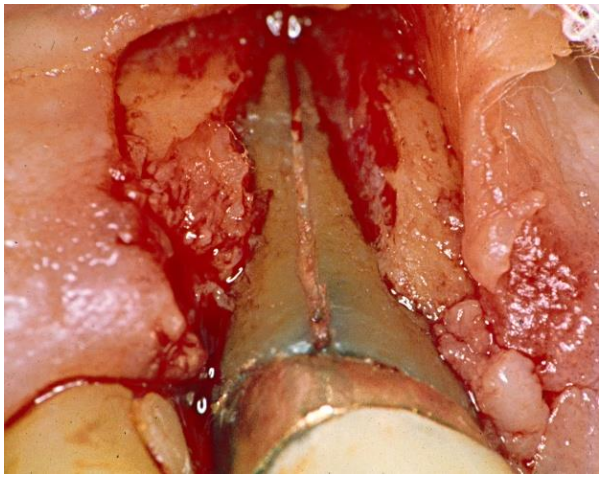
2.Recession:

Causes

- Toothbrush abrasion
- Inadequate keratinized gingiva
- Frenum pull
- Orthodontic therapy

Signs and Causes of Recurrence of Disease

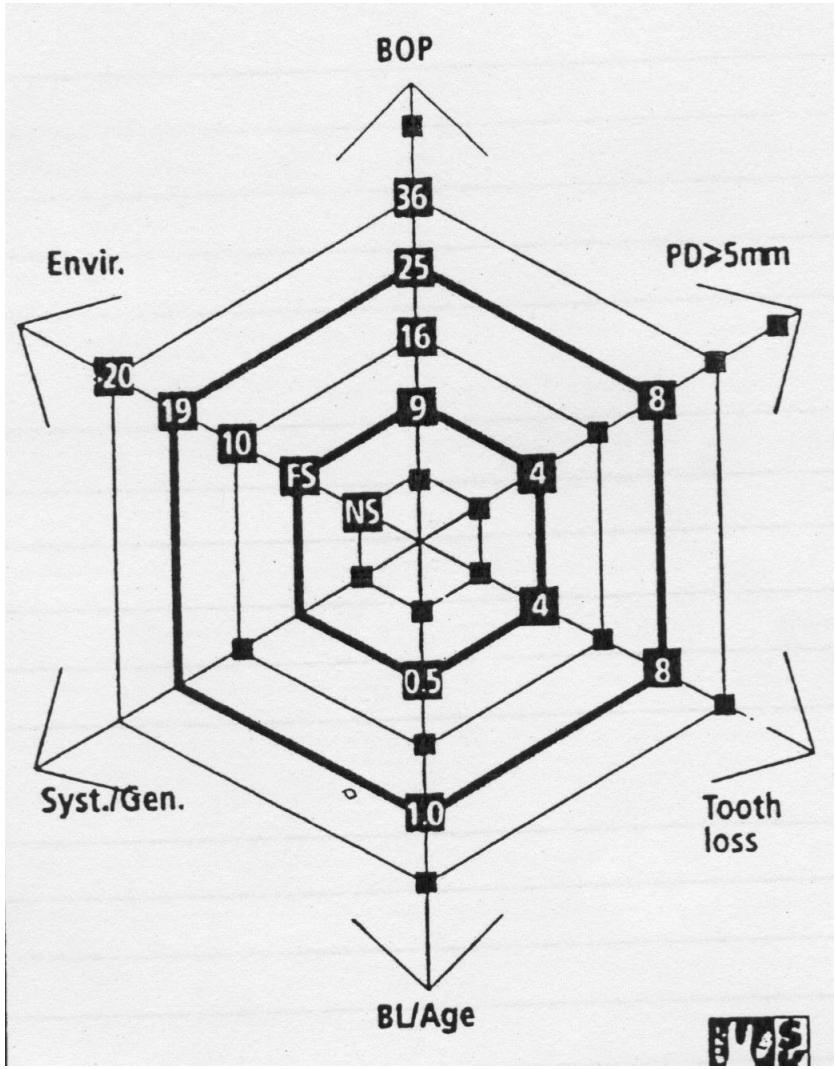
3.Increased pocket depth



Causes

- Poor oral hygiene
- Infrequent recall visits
- Subgingival calculus
- Poorly fitting partial denture
- Mesial inclination into edentulous space
- Failure of new attachment surgery
- Cracked teeth
- Grooves in teeth
- Gingival overgrowth caused by medication

Periodontal Risk Assessment (Lang and Tonnetti 2003)



Clinical Research Foundation and the University of Bern at

http://www.perio-tools.com/PRA/en/index.asp.

Table 2a. Coding system for the periodontal risk assessment functional diagram (Lang & Tonetti 2003)

Risk	Bleeding on probing	*N* of sites PPD >5 mm	Tooth loss	BL/age	Smoking	Genetic systemic
Low risk	0–9%	0–4	0–4	0–0.5	Non-smoker Former smokers	Negative
Moderate risk	10–25 %	5–8	5–8	>0.5–1.0	10–19 cig./day	
High risk	>25%	>8	>8	>1.0	>19 cig./day	Positive

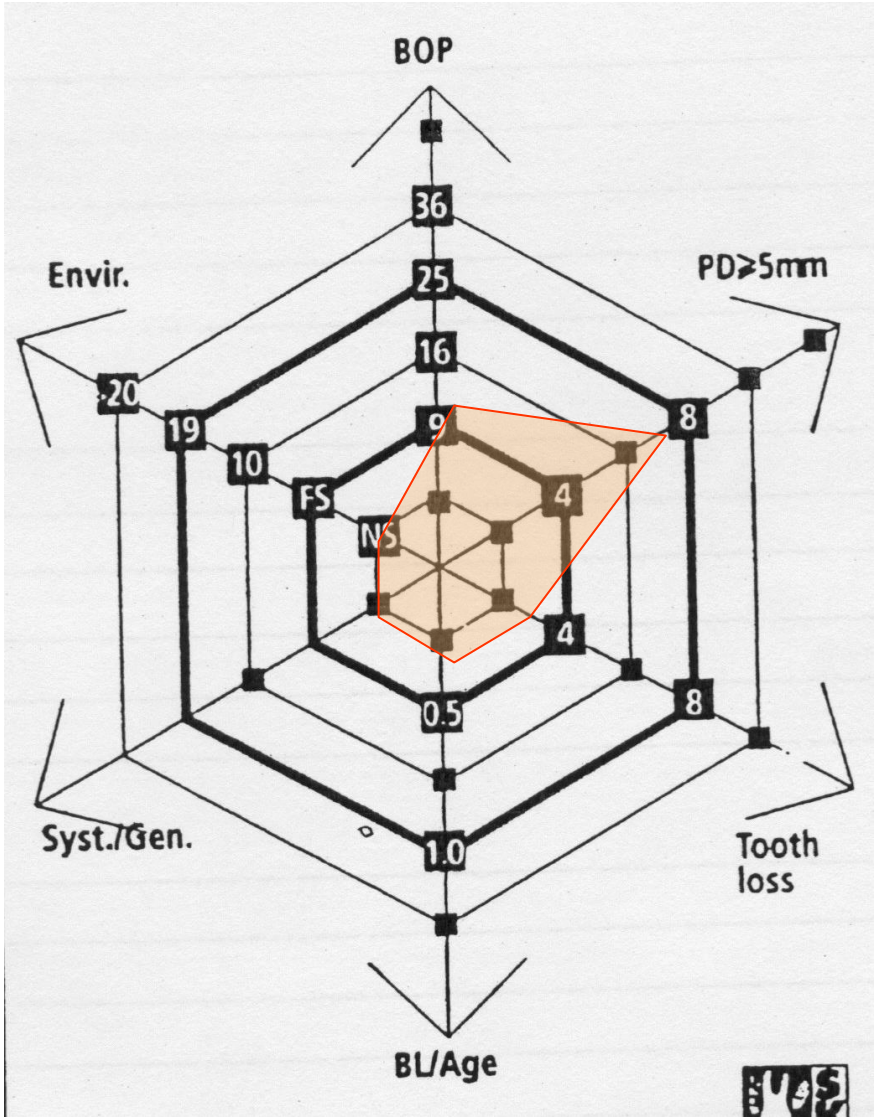
BL, estimation of bone loss in percent of the root length at the worst site in the posterior region on periapical radiographs, or on bitewing radiographs, where 1 mm is equivalent to 10% bone loss.

Table 2b. Calculation of periodontal risk assessment

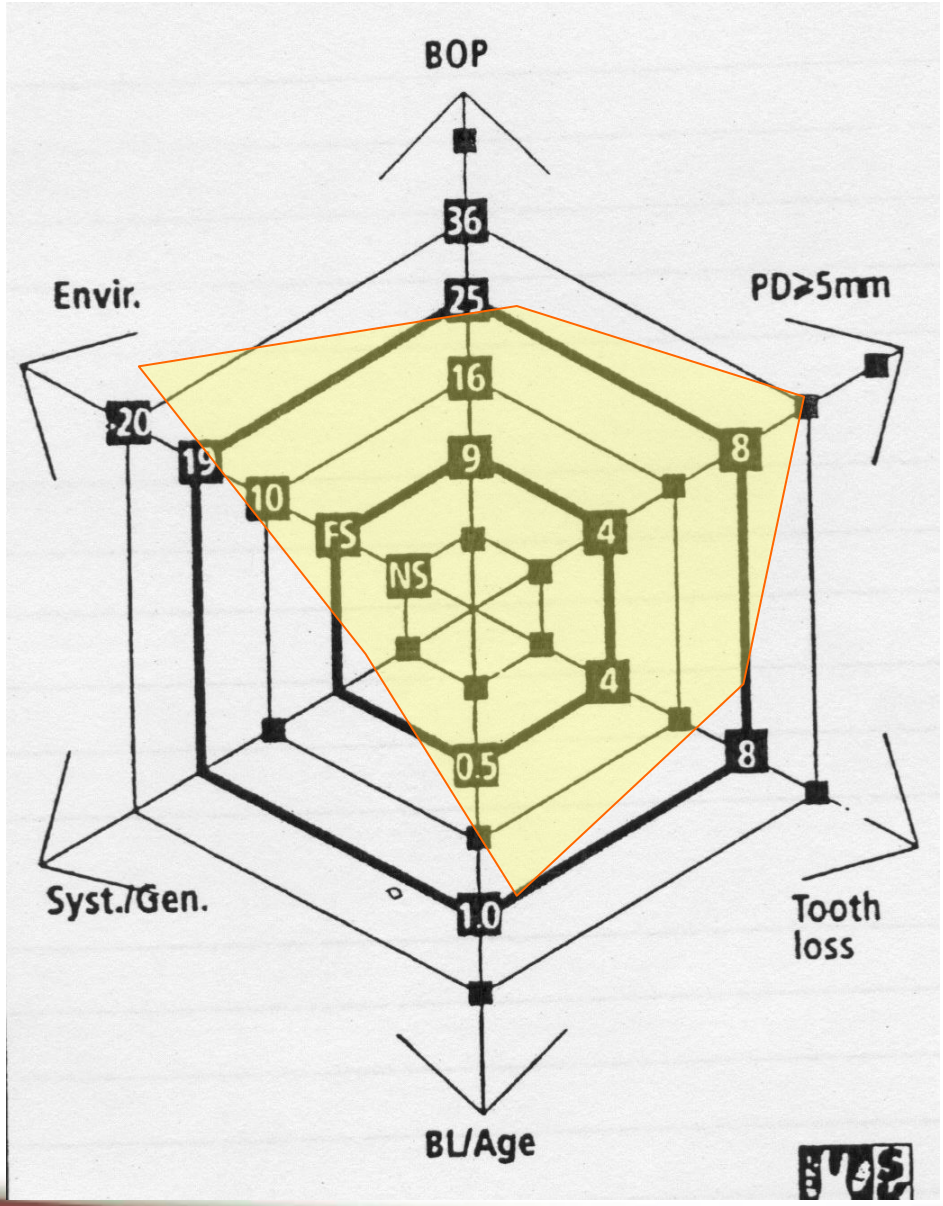
Low-risk individual	All parameters are within the low-risk categories or at the most one parameter is in the moderate-risk category
Moderate-risk individual	At least two parameters are in the moderate-risk category but at most one parameter is in the high-risk category
High-risk individual	At least two parameters are in the high-risk category

Lang and Tonnetti Periodontal risk assessment (PRA) for patients in supportive periodontal therapy (SPT) Oral health and preventitive dentistry 2003 1: 7-16

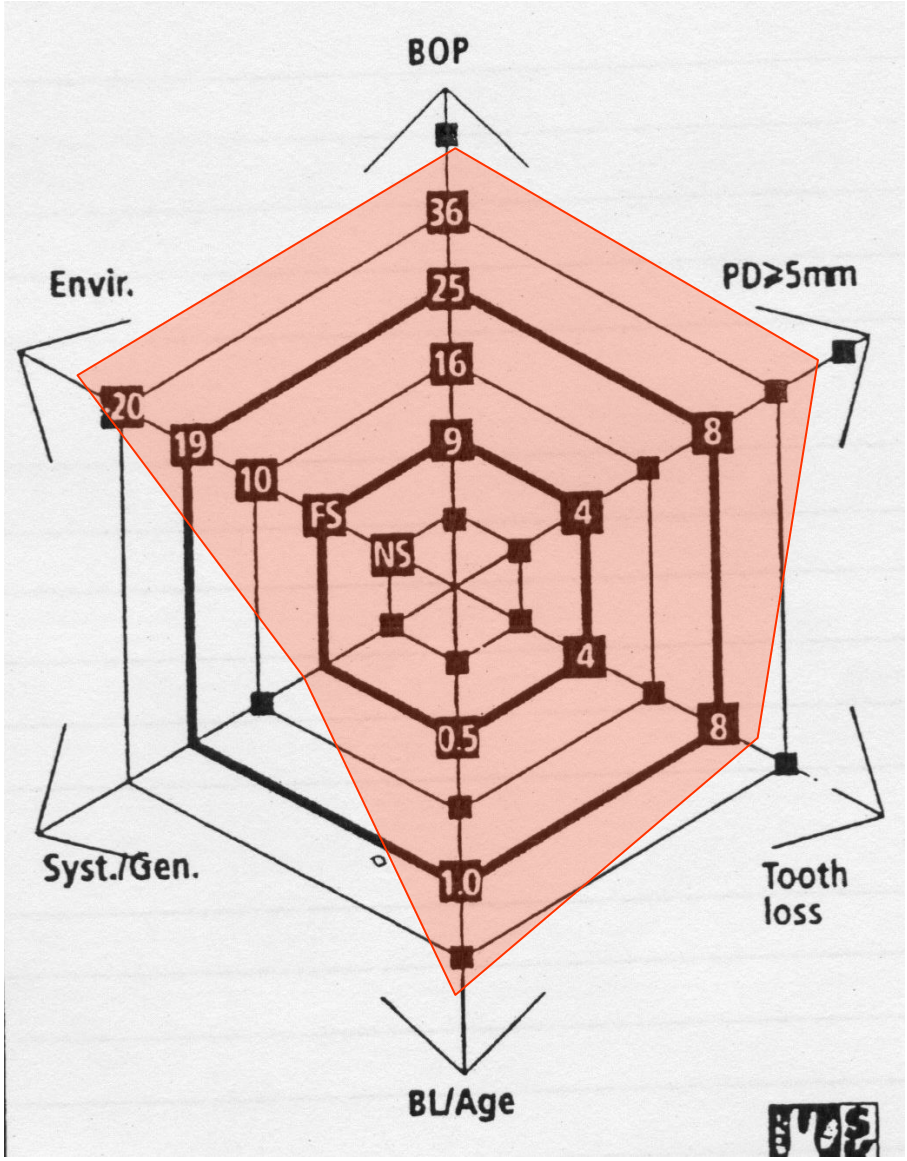
Periodontal Risk Assessment



Periodontal Risk Assessment



Periodontal Risk Assessment



Conclusion

- Regular SPT is prudent for preventing tooth loss and periodontal attachment loss after active therapy
- Initial records – charting and x-rays
- Tailor treatment plan and maintenance for each patient
- Periodontal risk assessment

Maintenance for Implants

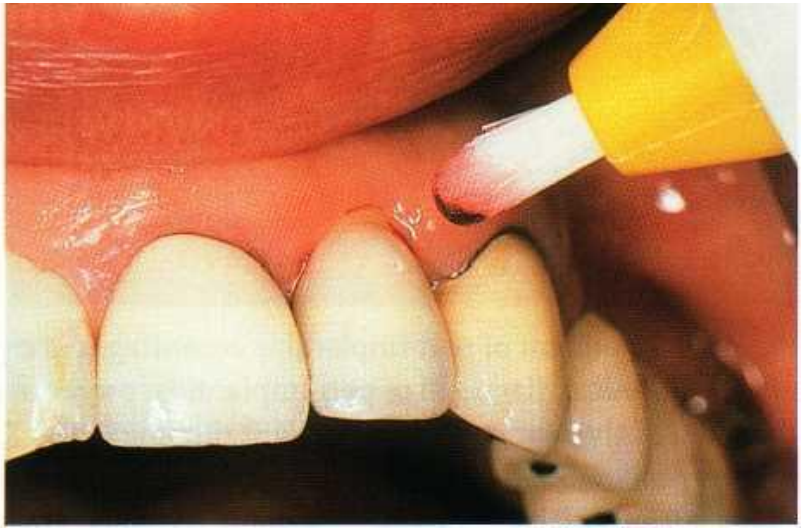
Examination:

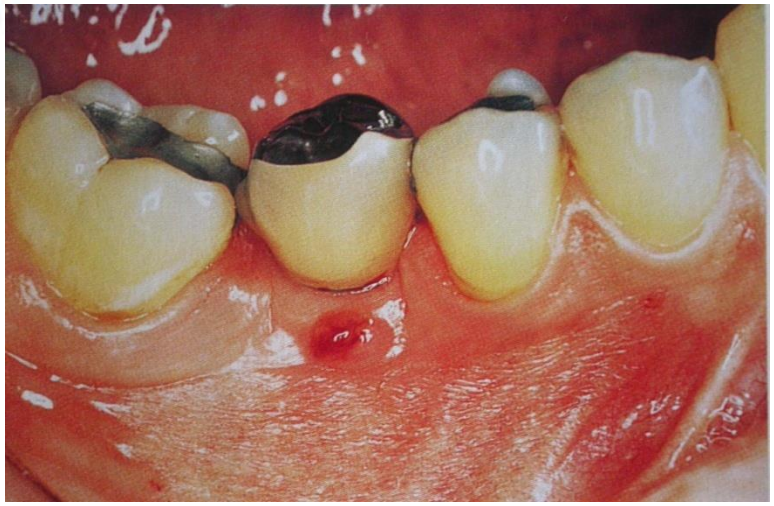
- Presence or absence of dental plaque
- Presence or absence of bleeding on gentle probing
- Presence or absence of suppuration
- Peri-implant probing depths
- Evidence of radiographic bone loss

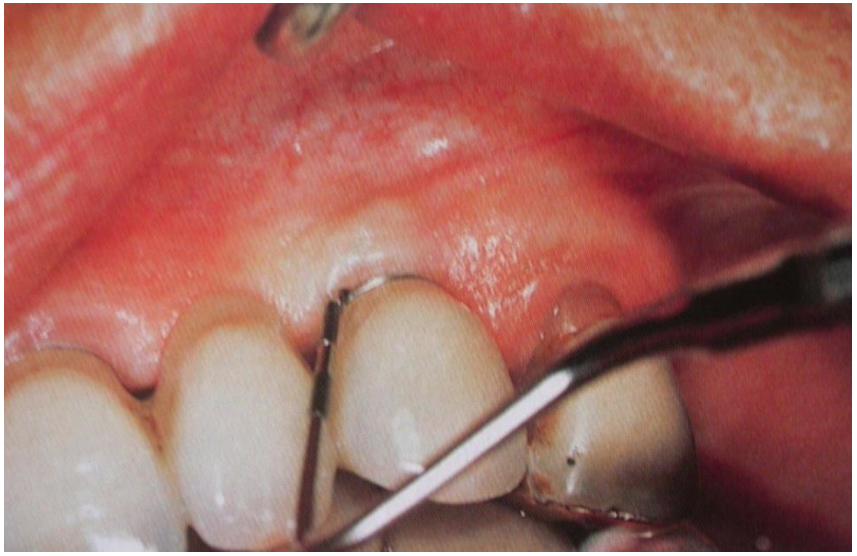
Maintenance for Implants

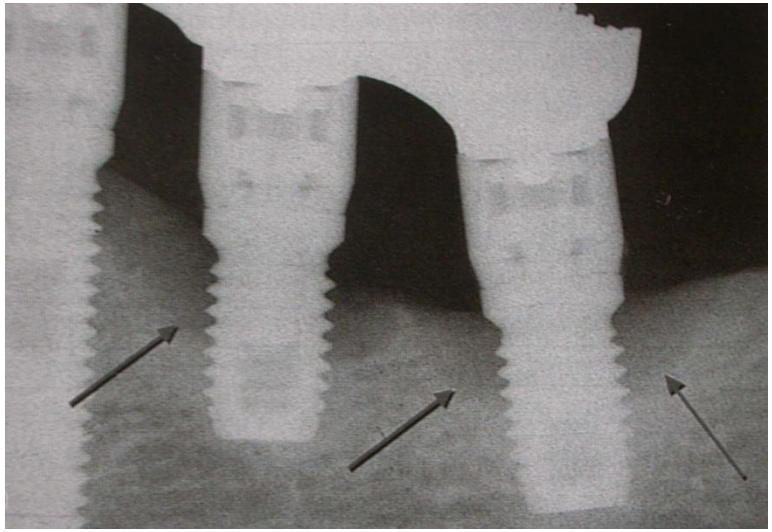
- In general, procedures for maintenance of patients with implants are similar to those for patients with natural teeth with the following three differences:

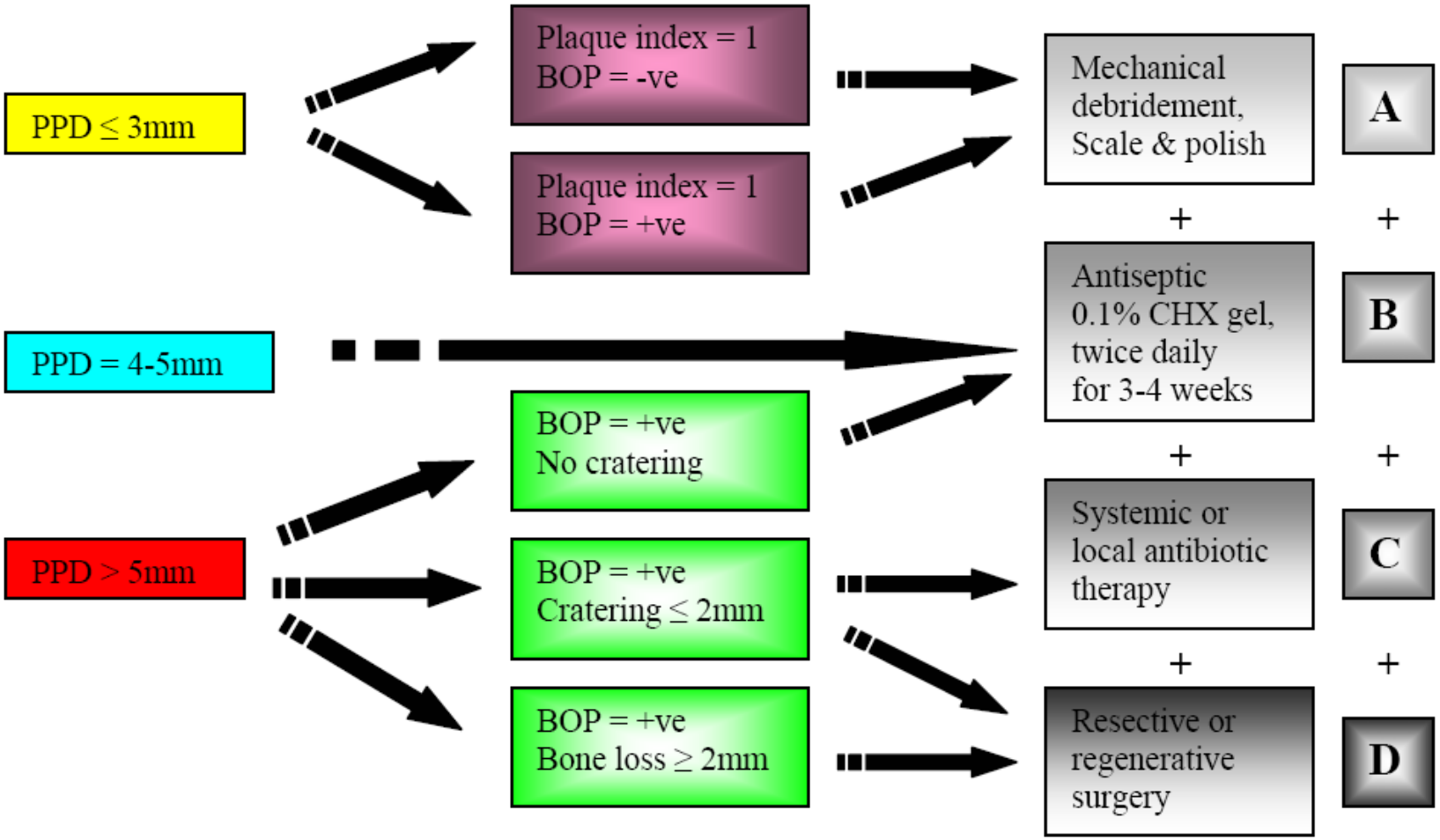
1. Special instrumentation that will not scratch the implants are used for calculus removal on the implants. (plastic instruments or specially designed gold-plated curettes, carbon fiber curettes)
2. Acidic fluoride prophylactic agents are avoided.
3. Nonabrasive prophy pastes are used.





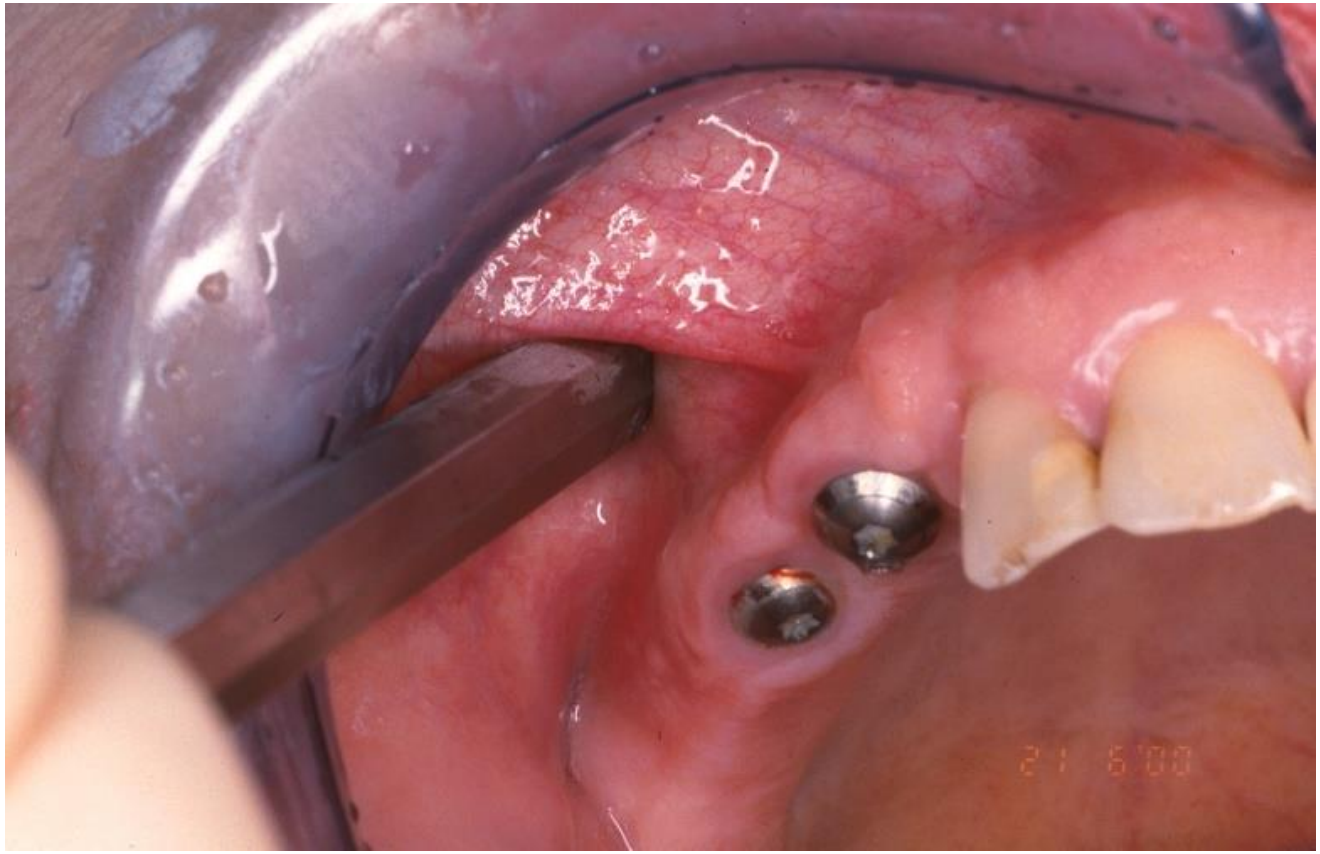






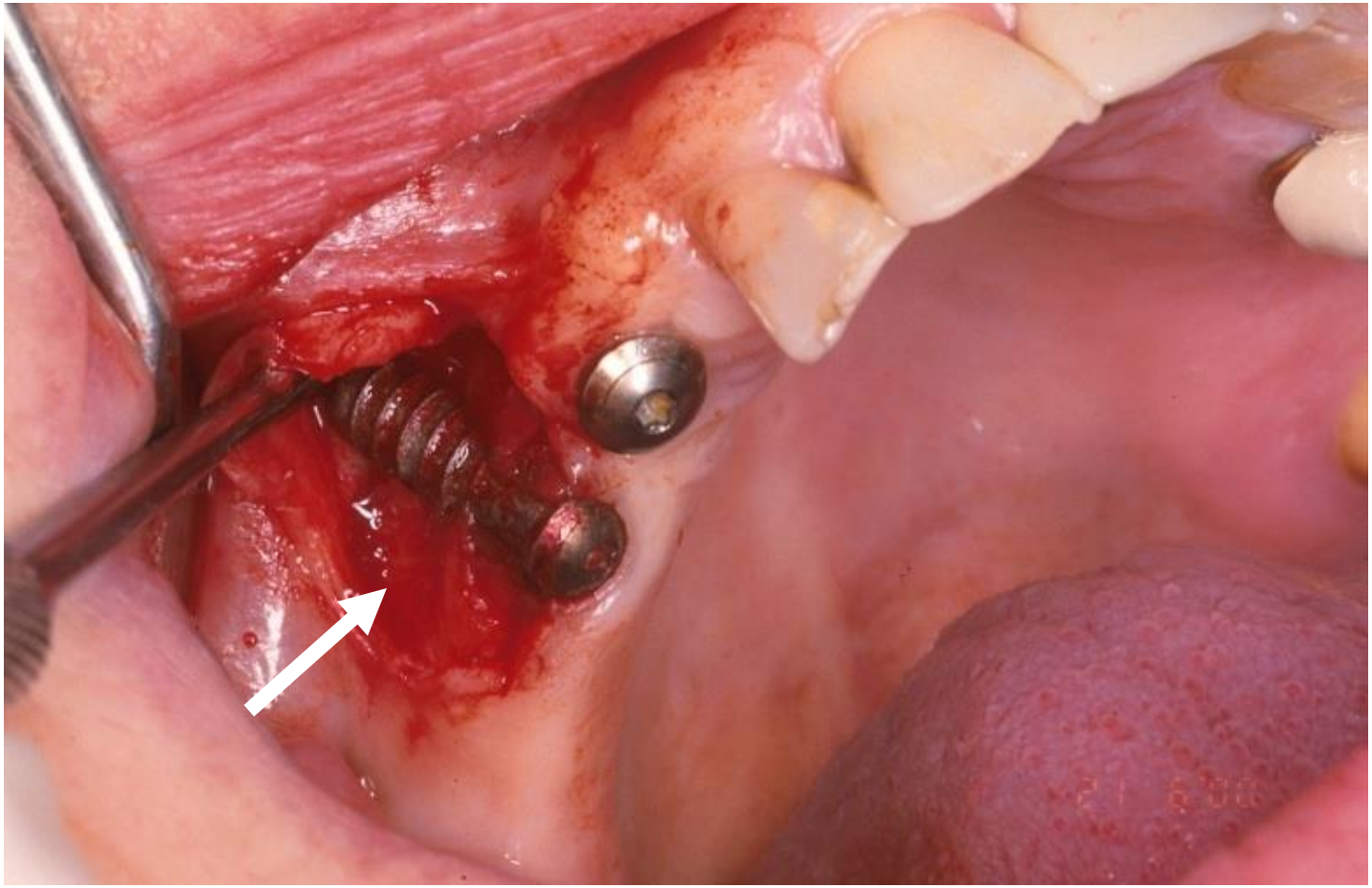
Lang NP, Lindhe J Maintenance of the implant patient. In: Lindhe J, Karring T, Lang N, Eds. Clinical Periodontology and Implant Dentistry. 4th ed. Oxford: Blackwell Munksgaard; 2003

Peri-implantitis



Courtesy: Dr Sam Chen

Peri-implantitis treatment



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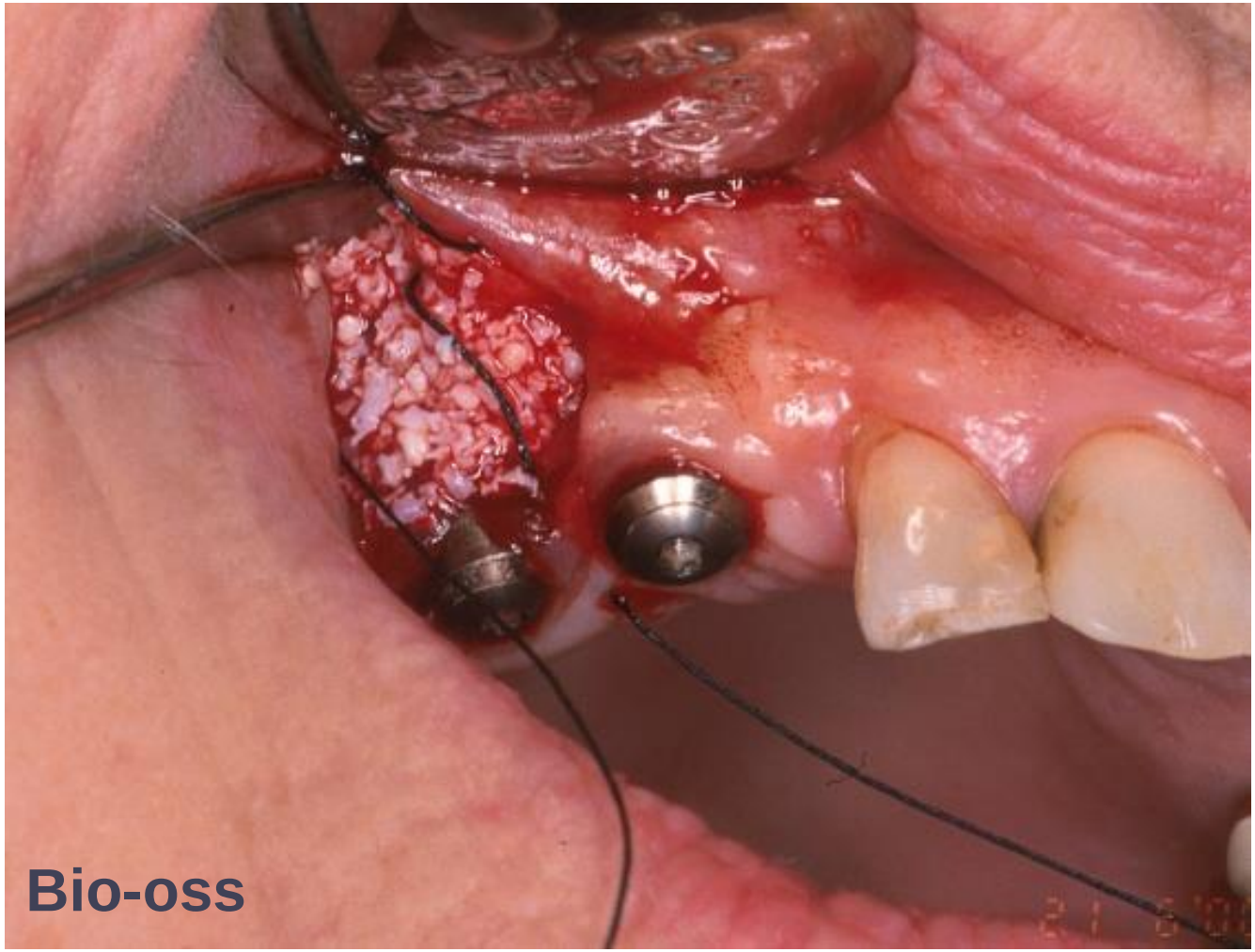

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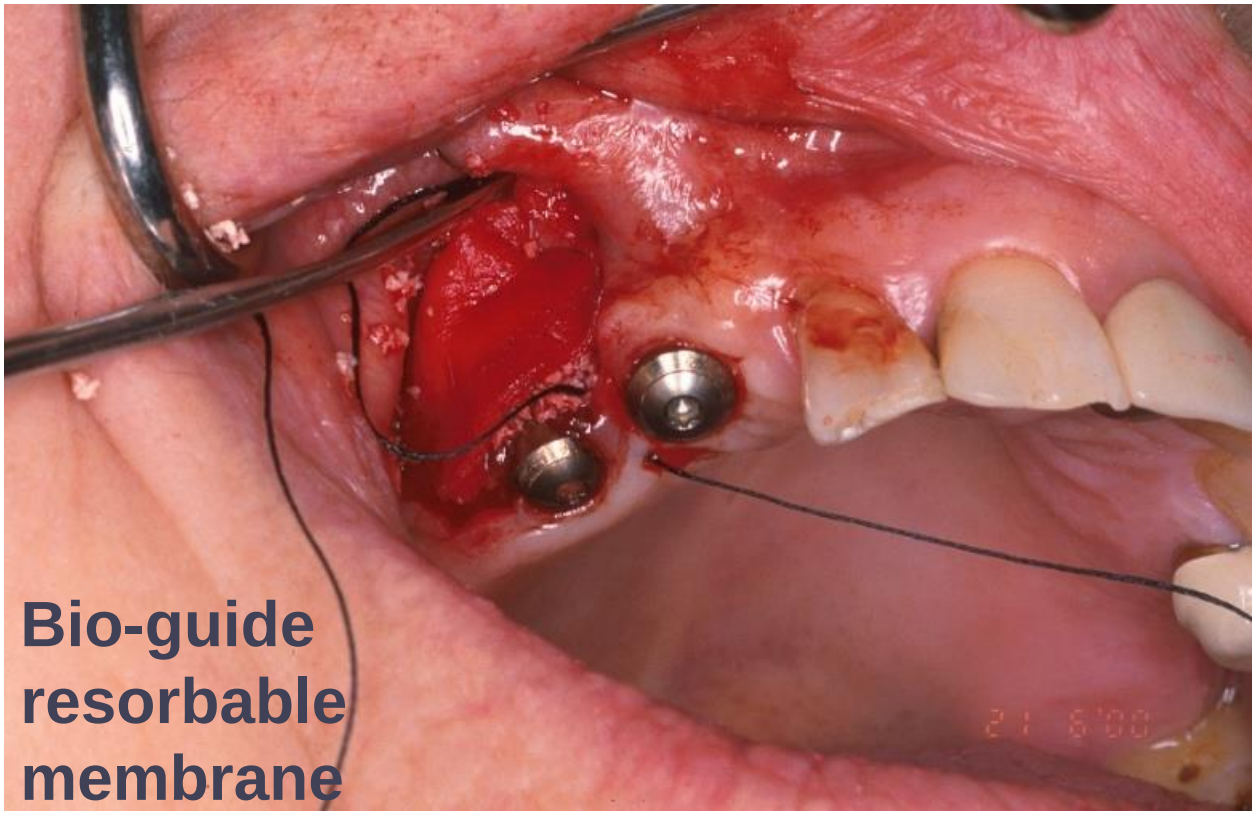

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