MIND THE GAP…

Pcc 146

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- OH behavior modification
- To refer or not refer
- DI evaluation

PRINCIPLES IN PREVENTION OF PERIODONTAL DISEASES: CONSENSUS REPORT OF GROUP 1 OF THE 11TH EUROPEAN WORKSHOP ON PERIODONTOLOGY ON EFFECTIVE PREVENTION OF PERIODONTAL AND PERI-IMPLANT DISEASES. (J CLIN PERIO 2015)

- an appropriate periodontal diagnosis is needed before submission of individuals to professional preventive measures and determines the selection of the type of preventive care;
- preventive measures are not sufficient for treatment of periodontitis;
- **repeated and individualized oral hygiene instruction and professional mechanical plaque (and calculus) removal are important components of preventive programs;**
- **behavioural interventions to improve individual oral hygiene need to set specific Goals, incorporate Planning and Self monitoring**;
- brief interventions for risk factor control are key components of primary and secondary periodontal prevention;
- the Ask, Advise, Refer) approach is the minimum standard to be used in dental settings for all subjects consuming tobacco;
- validated periodontal risk assessment tools stratify patients in terms of risk of disease progression and tooth loss.

MOTIVATIONAL INTERVIEW

- Motivational interviewing in improving oral health: a systematic review of randomized controlled trials. J Perio 2014
- Motivational Interviewing As an Adjunct to Periodontal Therapy-A Systematic Review. Front Psychol 2017

TO REFER OR NOT TO REFER

- When does Sc/Rp stop and Surgery begin?
- The 5mm PD dilemma

- What do we know ???
- What do we teach ???
- What are the recommendations ??

WHAT DO WE KNOW ???

COBB ET AL, 2003

- Pts that were referred in 2000 had greater loos of teeth , more severe perio dz and required ext of more tth.

1. Less education wrt perio dx, issues etc
2. Younger practitioners have higher rate of debt → holding more pts in their practice

Less experienced and less well trained dentists treating more perio pts for financial reasons.

DARBY ET AL, 2005

- Majority of 285 GP confident to treat g-itis and mild p-itis.
- 61.9% confident to dx Aggressive p-itis.
- 36.3% not confident to treat Advance p-itis.
- 51.6% not confident to treat Aggressive p-itis.

LANNING ET AL, 2007

- 38% of GP did CL
- 21% GP did Pocket reduction pricedures

- Type of procedures based on:
  - year of graduation
  - CE related to perio
  - # of RDH perio week
  - # of perio pt in the practice
  - % or referrals for Non sx tx
- Females refer more pt/month to a periodontist
- 2 GPs together refer 2x more than solo an group practices
- The more the RDH the more the referrals
- Pt characteristics: GP may refer older pt and less educated
- Reason NOT to refer: lack of COMMUNICATION

WHAT DO WE TEACH????

WHAT DO WE TEACH????

- Periodontal Exam
- Diagnosis of periodontal dz
- Etiology
- Prognosis
- Treatment (OHI, phase I, re-eval, perio maintenance)
- Anything that is deeper than 5 mm (PD) needs a perio consult
- If you can't resolve the "issue" with just Sc/Rp …..refer….

HOW EFFECTIVE IS SC/RP???

PD	Non sx	OFD
1-3mm	86%	86%
4-6mm	43%	76%
>6mm	32%	50%

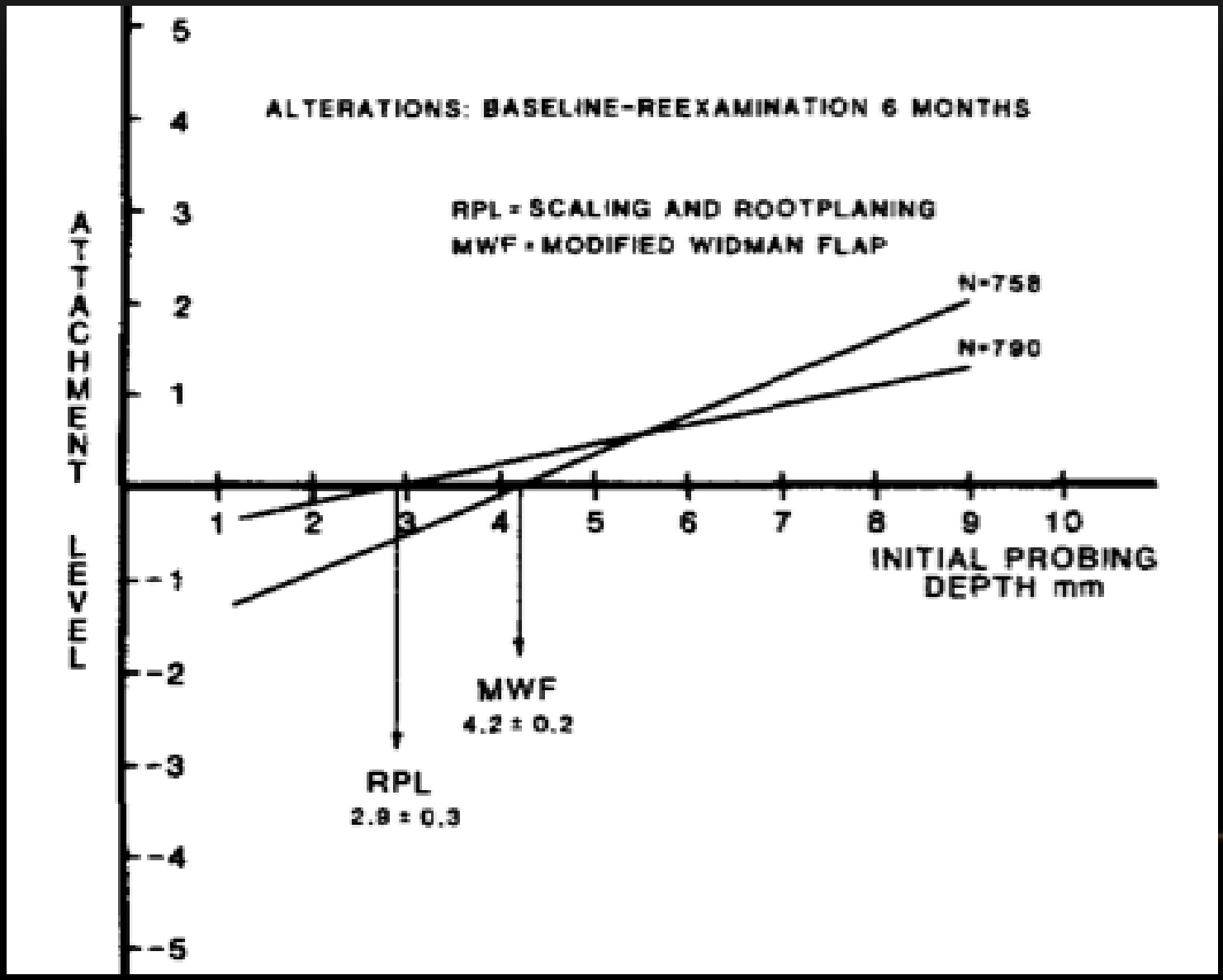
Caffesse et al 1986

HOW MUCH CLINICAL IMPROVEMENT CAN WE EXPECT WITH SC/RP?

Initial PD	*Attach. Gain*	*Dec. PD*
4-6 mm	*0.23 mm*	*0.96 mm*
≥7 mm	*0.91 mm*	*2.2 mm*

Morrison et al., 1980

CRITICAL PROBING DEPTH



Lindhe et al, 1982

PERIO MAINTENANCE PHASE

PREDISPOSING FACTORS FOR DISEASE PROGRESSION (L. J. A. HEITZ-MAYFIELD, 2005)

- Smoking
- Diabetic status
- Stress
- Systemic dz that affects neutrophil function
- Psychological factors/stress
- Radiotherapy
- Age
- Gender
- Race/ethnicity/ Socio-economic status
- Plaque/compliance

BLEEDING ON PROBING (LANG ET AL, 1986)

- Pockets with a probing depth of > 5 mm had a significantly higher incidence of BOP.
- Patients with 16% or more BOP sites had a higher chance of loosing attachment.
- Pockets with an incidence of BOP of 4/4 had a **30%** chance of loosing attachment. This chance decreased to **14%** with BOP of 3/4, **6%** with BOP of 2/4, 3%, with BOP of 1/4 and **1.5%** with BOP of 0/4.

THE "WATCH" METHOD

- Compromised rs/pt
- G-ized vs loc dz
- Anteriors vs posteriors
- Will deeper sites progress

GUIDELINES

ADA/AAP

ADA (2007)

- PATIENT INVOLVEMENT
- CONSULTATION AND REFERRAL
- POSSIBLE REFERRAL SITUATIONS OR CONDITIONS
  - Level of training and experience of the dentist
  - Dentist's areas of interest
  - Extensiveness of the problem
  - Complexity of the treatment
  - Medical complications
  - Patient load
  - Availability of special equipment and instruments
  - Staff capabilities and training
  - Patient desires
  - Behavioral concerns
  - Desire to share responsibility for patient care
  - Geographic proximity of the specialist or consulting dentist

ADA
COMMUNICATION: GP-SP

- Name and address of the patient
- Scheduled appointment date and time with the specialist or consulting dentist
- Reason for the referral/diagnosis
- General background information about the patient which may affect the
- referral
- Authorization or release of records
- Medical and dental information, which may include:
- - Medical consultations and specific problems - Contributory dental history
  - Diagnostic casts
  - Radiographic or digital images
- Future treatment needs beyond the referral
- Urgency of the situation, if an emergency
- Information already provided to patient

ADA
COMMUNICATION:GP-PT

An assessment of the patient's ability to understand and follow instructions

An explanation of the reason for the recommended referral to the patient, patient's parent or legal guardian as appropriate

An explanation of which area of dentistry or specialty is chosen and why

If possible, making a specific appointment with the specialist or consulting dentist

If known and if requested by the patient, providing information about the specialist or consulting dentist's fee for the consultation or evaluation

Giving instructions that will assist the patient's introduction to the specialist or consulting dentist, i.e., preoperative instructions, educational pamphlets or a map with directions

ADA
COMMUNICATION: SP-PT

- Oral and/or written summary of the appointment
- Proposed additional and alternative treatment
- Details regarding the coordination of future treatment
- Follow-up appointments, if needed, and a return to the referring dentist for completion of other treatments and/or maintenance
- Consequences of no treatment
- Details of fees and payment options

ADA
COMMUNICATION: SP-GP

- Initial report from specialist or consulting dentist indicating the preliminary diagnosis and anticipated treatment
- Progress reports as necessary, if treatment is extended over a considerable period of time
- Final report, including factors that may alter the future course of therapy or affect the relationship between the referring dentist and the patient.
- Diagnostic quality copies or duplicates of radiographic or digital images taken by specialist or consulting dentist
- Return of any pertinent documents or forms provided by the referring dentist

AAP (2006)

LEVEL 1: PATIENTS WHO MAY BENEFIT FROM COMANAGEMENT BY THE REFERRING DENTIST AND THE PERIODONTIST

Any patient with periodontal inflammation/infection and the following systemic conditions:

- Diabetes
  Pregnancy
  Cardiovascular disease Chronic respiratory disease

Any patient who is a candidate for the following therapies who might be exposed to risk from periodontal infection, including but not limited to the following treatments:

- Cancer therapy/ Cardiovascular surgery/ Joint-replacement surgery /Organ transplantation

AAP

LEVEL 2: PATIENTS WHO WOULD LIKELY BENEFIT FROM COMANAGEMENT BY THE REFERRING DENTIST AND THE PERIODONTIST

Any patient with periodontitis who demonstrates at reevaluation or any dental examination one or more of the following risk factors/indicators* known to contribute to the progression of periodontal diseases:

Periodontal Risk Factors/Indicators

- Early onset of periodontal diseases (prior to the age of 35 years)
- Unresolved inflammation at any site (e.g., bleed- ing upon probing, pus, and/or redness)
- Pocket depths ≥ 5 mm
  Vertical bone defects
  Radiographic evidence of progressive bone loss
  Progressive tooth mobility
  Progressive attachment loss
  Anatomic gingival deformities
  Exposed root surfaces
  A deteriorating risk profile

AAP

LEVEL 3: PATIENTS WHO SHOULD BE TREATED BY A PERIODONTIST

Any patient with:

- Severe chronic periodontitis
  Furcation involvement
  Vertical/angular bony defect(s)
- Aggressive periodontitis (formerly known as juvenile, early-onset, or rapidly progressive periodontitis)
- Periodontal abscess and other acute periodontal conditions
- Significant root surface exposure and/or progressive gingival recession
- Peri-implant disease
- Any patient with periodontal diseases, regardless of severity, whom the referring dentist prefers not to treat.

Medical or Behavioral Risk Factors/Indicators

- Smoking/tobacco use
  Diabetes
  Osteoporosis/osteopenia
  Drug-induced gingival conditions (e.g., phenytoins, calcium channel blockers, immunosuppressants, and long-term systemic steroids)
  Compromised immune system, either acquired or drug induced
  A deteriorating risk profile


Dental Implants

CRITERIA OF SUCCESS

- ✓ No mobility
- ✓ No rx apical radiolucency
- ✓ No >0.2mm bone loss annually after first year of loading
- ✓ No pain/ infection/ paresthesia/ violation of IAN canal.

- ✓ Continuous prosthetic stability

	Implant Quality Scale Group	Clinical Conditions
I	Success (optimum health)	No pain or tenderness upon function 0 mobility <2 mm radiographic bone loss from initial surgery No history of exudates
II	Satisfactory Survival	No pain on function 0 mobillity 2-4 mm radiographic bone loss No history of exudates
III	Compromised Survival	May have sensitivity on function 0 mobility >4 mm rx BL (less than 1⁄2 of implant) Probing depth > 7mm May have history of exudates
IV	Failure (clinical or absolute failure)	Pain on function Mobility Radiographic bone loss > 1⁄2 length of implant Uncontrolled exudates No longer in mouth

ASSESSMENT

- Examination of dental implants and peri-implant tissues and recording of results
  - Probing depths
  - Bleeding on probing
  - Examination of prosthesis/ abutment components
  - Evaluation of implant stability
  - Occlusal examination
  - Other signs and symptoms of disease activity- i.e. pain, suppuration

TO PROBE OR NOT TO PROBE

SOFT TISSUE EVALUATION

Healthy Peri-Implant Tissue:

- Healthy color, texture, & size
- Contour defined by implant/ restoration shape
- Evidence of attached gingiva

Diseased Peri-Implant Tissue:

- Red, purple, cyanotic
- Glossy, fibrotic
- Enlarged, cratered
- BOP
- Exudate or suppuration

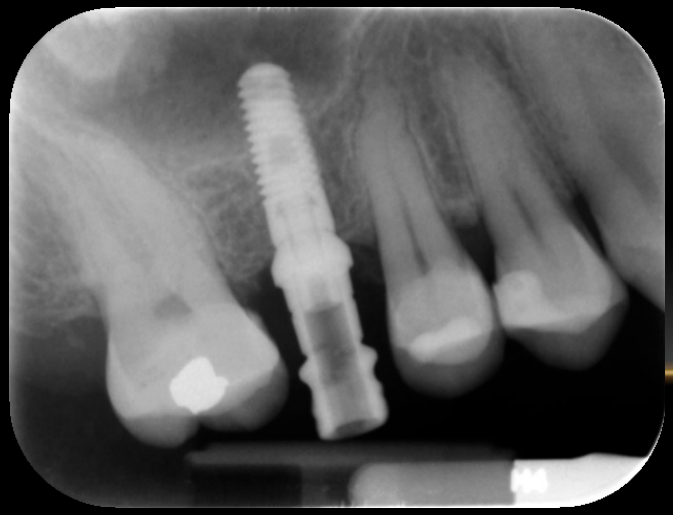
RX EVALUATION

- Annual rx assesment
- The threads should be distinctly visible
- Monitor bone remodeling/loss (M-D)
- Eval the seating of the associated parts

RX EVALUATION

- Baseline with prosthetic delivery
- 6-8 months later; compare to baseline
- 1 year

- If no changes at 1 year, next radiograph in 3 years unless symptomatic
  If changes, radiograph every 6-8 months until stable for 2 consecutive exams.



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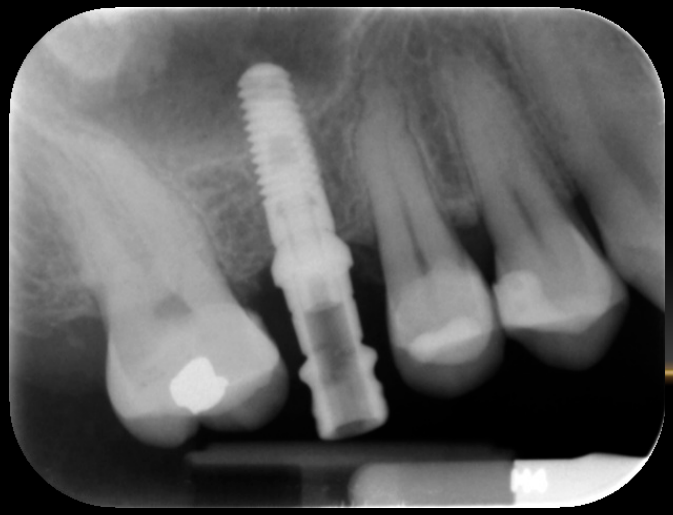
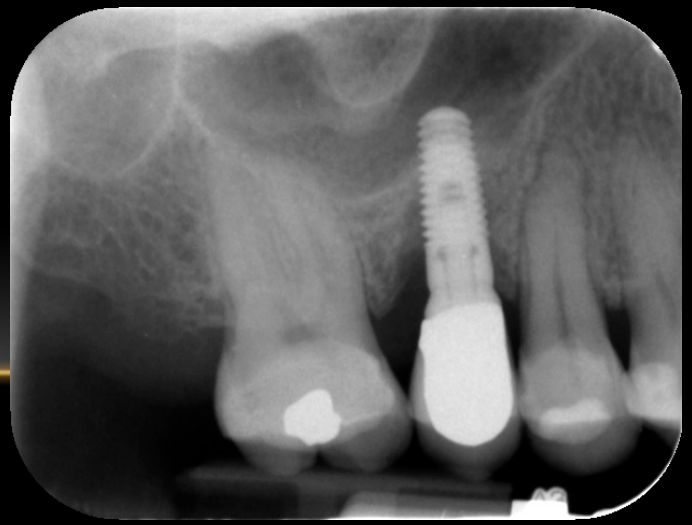




MOBILITY

- Place instrument under embrasures and apply gentle pressure
- Assume prosthetic or component mobility first
- Refer to restorative dentist

OCCLUSION

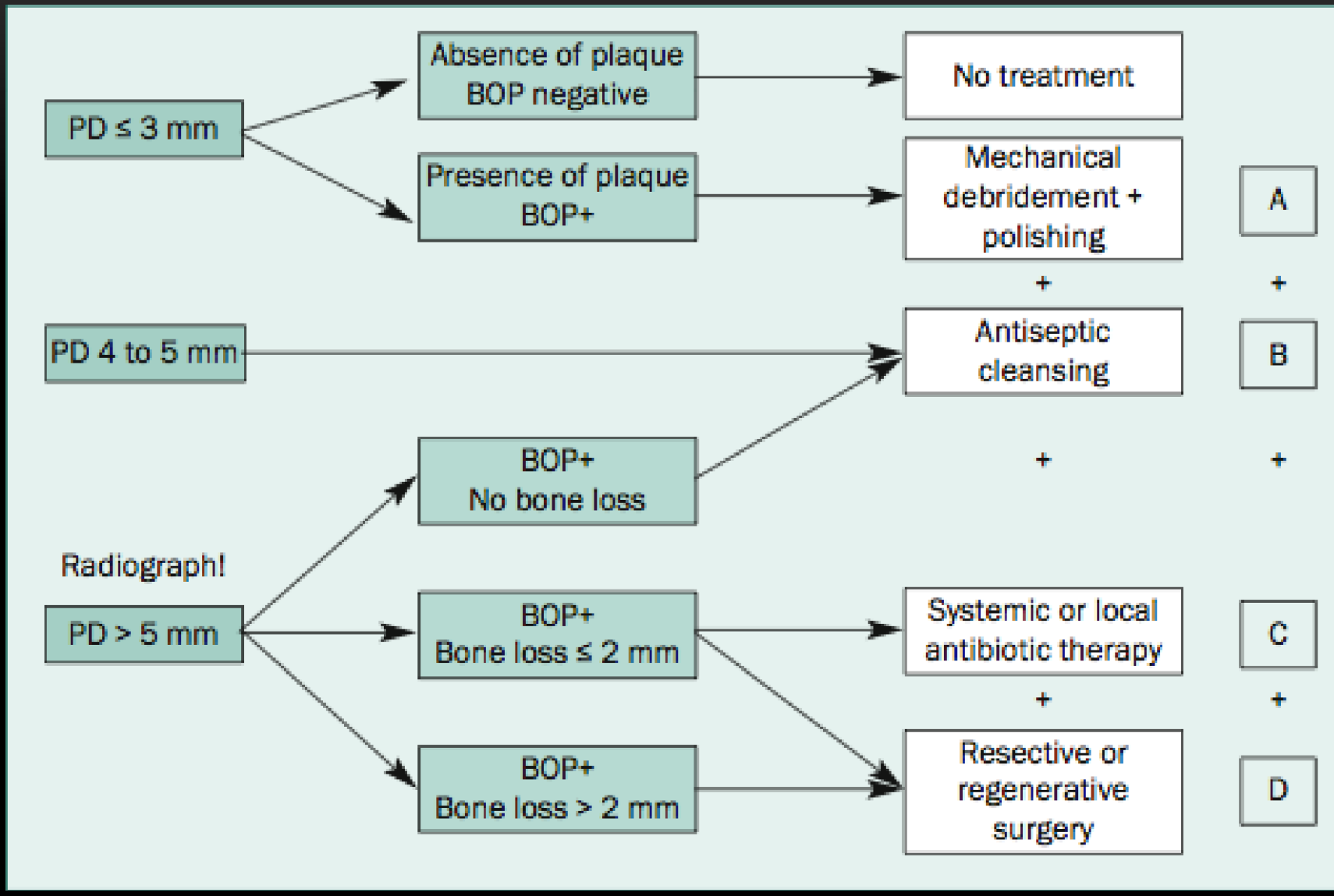
- Occlusal checks twice a year at maintenance appointments
- Easy to correct when detected early
- Difficult to correct after major damage

Overload: Situation in which the masticatory forces applied to the implant exceed the capacity of the bone-implant interface, implant or componetry to withstand it.

Fatigue fracture: Structural failure caused by repetitive stresses, which caused a slowly propagating crack to cross the material.

PERI-IMPLANT DZ….

peri-mucositis vs peri-impantitis


PD ≤ 3 mm
Absence of plaque
BOP negative
No treatment
Presence of plaque
BOP+
Mechanical debridement + polishing
A
+
+
PD 4 to 5 mm
Antiseptic cleansing
B
+
+
BOP+
No bone loss
Radiograph!
PD > 5 mm
BOP+
Bone loss ≤ 2 mm
Systemic or local antibiotic therapy
C
+
+
BOP+
Bone loss > 2 mm
Resective or regenerative surgery
D

TIMING OF THE REFERRAL

- At initial visit?
- pre-prosthetic sx
- After phase I
- Surgical procedures (extractions, ridge preservation, ridge augmentation, implants etc)
- Maintenance phase

FOOD FOR THOUGHT!

- Communication is key!!!
- Standardization is important
- Education
- Find your comfort zone along with what will benefit your pt
- Don't hesitate to ask for advice/help
- Find a good "partner in crime"!

Questions ?


SOMETIMES I FEEL THAT I HAVE THE WORST JOB IN THE WORLD!
YA...RIGHT!