

PERI-IMPLANTITIS

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INTRODUCTION

Peri-implantitis is an inflammatory process that affects the tissues around an osseointegrated implant and results in the loss of supporting bone.



Fig. 86.20 Poor esthetics resulting from gingival recession and exposure of the crown margins, implant collars, and threads of several maxillary and mandibular implants supporting full-arch, fixed partial dentures. Notice the thin labial tissues and erythema, especially around the mandibular implant sites.



Fig. 86.21 Periapical radiograph showing bone loss around implant in the anterior mandible.



Fig. 86.22 Moderately advanced bone loss around an implant with the typical circumferential trough type of bony defect. (From Garg AK. *Implant Dentistry: A Practical Approach*. 2nd ed. St. Louis: Mosby; 2010.)



Fig. 86.23 Severe horizontal and vertical bone loss around several mandibular implants.

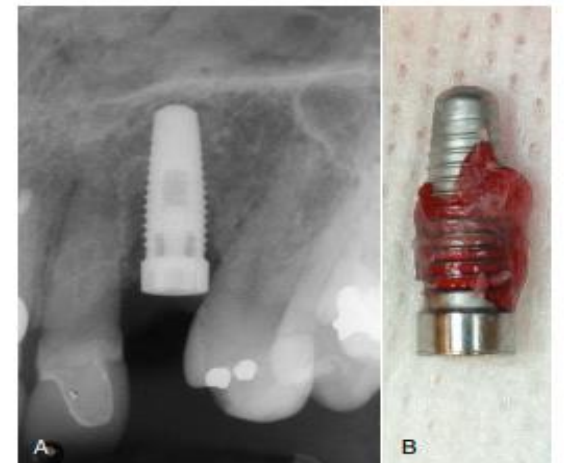


Fig. 86.24 (A) Radiograph of an early failed implant caused by lack of osseointegration. In addition to the crestal bone loss, notice the radiolucency along the sides of the implant. (B) Photograph of the failed (nonintegrated) implant (shown in A) that was easily removed along with surrounding connective tissue.

PREVALENCE:

Peri-implantitis affected 10% of implants and 20% of patients during the 5 to 10 years after placement.

RISK FACTORS

A review by Lindhe and Meyle from the Consensus Report of the Sixth European Workshop on Periodontology concluded that risk indicators for peri-implantitis included

- (1) poor oral hygiene,
- (2) a history of periodontitis,
- (3) diabetes,
- (4) cigarette smoking,
- (5) alcohol consumption, and
- (6) implant surface
- (7) including excess and retained cement.
- (8) metallosis

RISK FACTORS 1 TO 4 HAVE BEEN RECOGNIZED AND REPORTED IN THE LITERATURE. THE REPORT SUGGESTS THAT ALTHOUGH DATA FOR RISK FACTORS 5 AND 6 ARE LIMITED, THEY APPEAR TO BE RELEVANT TO PERI-IMPLANTITIS.

Pre -disposing factors

aggressive bacteria,
excessive mechanical stress, and
corrosion

CLASSIFICATION

EARLY

MODERATE

ADVANCED

Schwartz et al

Spikermann et al

Zhang et al

found older classification systems.

Table 1 Classification of peri-implantitis

Early	PD \geq 4 mm (bleeding and/or suppuration on probing*) Bone loss < 25% of the implant length [†]
Moderate	PD \geq 6 mm (bleeding and/or suppuration on probing*) Bone loss 25% to 50% of the implant length [†]
Advanced	PD \geq 8 mm (bleeding and/or suppuration on probing*) Bone loss > 50% of the implant length [†]

EXAMINATION

Clinically.....

Peri implant probing- carefully....

Radiographically....

lopa

Computerised analysis

SIGNS

changes in probing depth

radiographic evidence of bone destruction,

suppuration,

calculus buildup,

swelling,

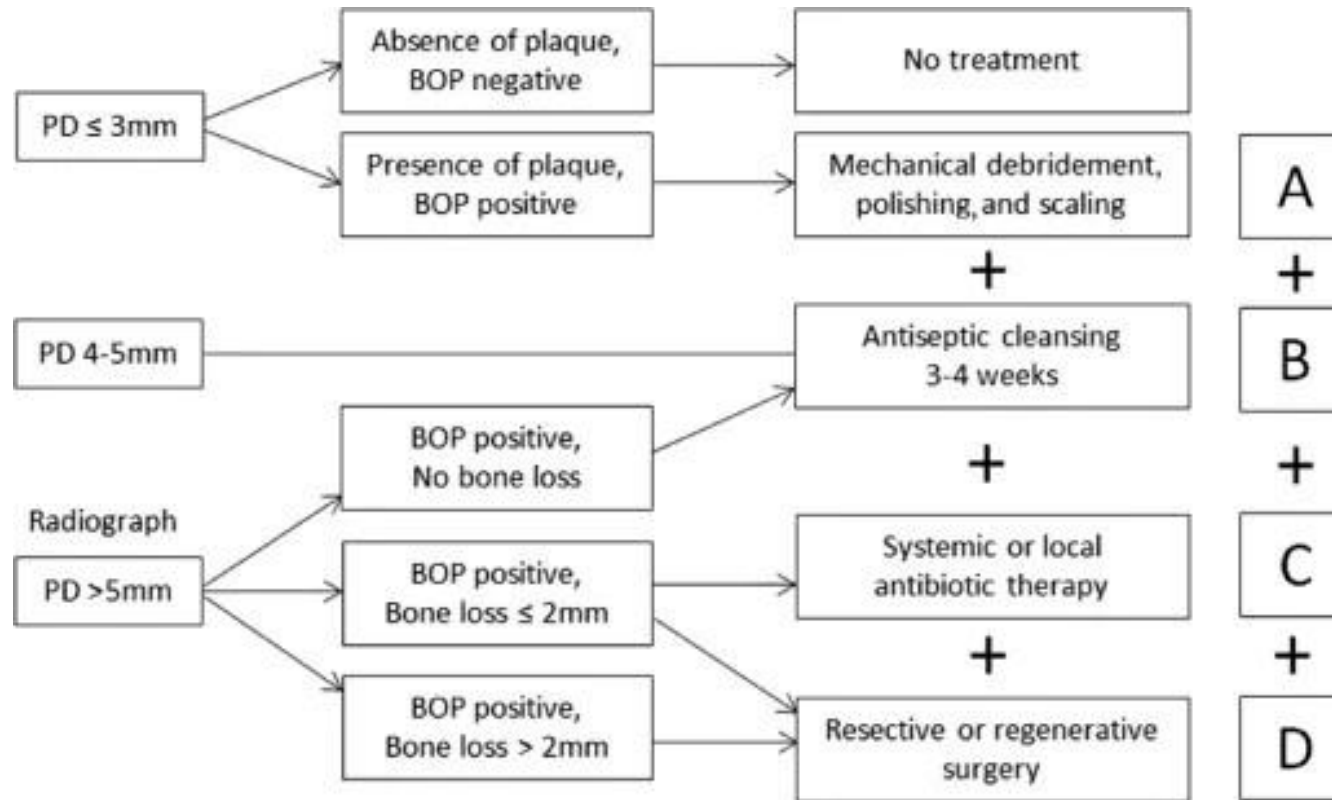
color changes,

Bleeding....

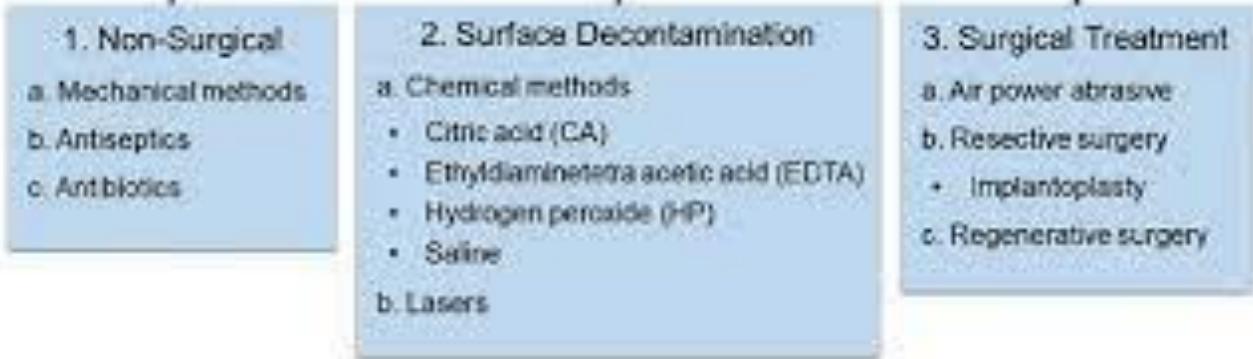
Management

- ❑ Patient education about the causes, pathogenesis, and prevention of peri-implant diseases, along with oral hygiene instruction.
- ❑ The treatment of peri-implantitis includes nonsurgical and surgical interventions, which can be combined with the adjunctive use of antimicrobials.
- ❑ Nonsurgical interventions include antimicrobial rinse and irrigation, local antibiotics, ultrasonic debridement, mechanical debridement with air-abrasive devices, and laser therapy.
- ❑ Surgical treatment includes full-thickness flap elevation for access, followed by degranulation, surface debridement by laser or mechanical instruments, surface decontamination with laser or antimicrobials, and bone augmentation.

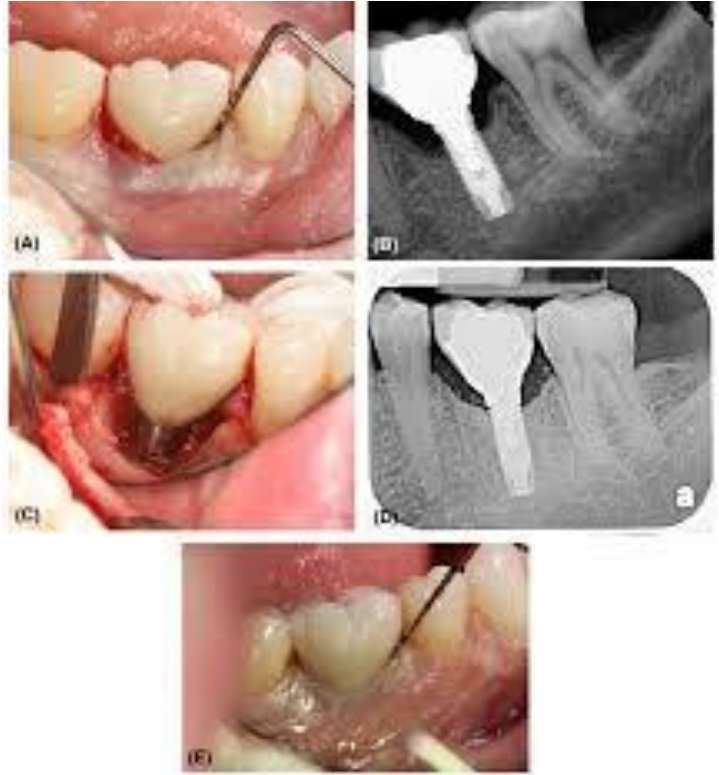
Protocol...



Treatment of Peri-implantitis Diseases



எப்படி புதுசு புதுசா யோசிக்குறாங்க...



Recurrence

- ❑ Recurrence of peri-implantitis appears to be high (up to 100%) after 1 or more years of treatment and retreatment may be necessary.
- ❑ Surgical access appears to be necessary to arrest peri-implant bone loss.
- ❑ Surgical treatment can result in gingival recession and compromised esthetics.
- ❑ At sites with high esthetic demands, definitive treatment of peri-implantitis can include the removal of the implant, grafting of the site, and placement of another implant.

PERI- IMPLANT MUCOSITIS

Peri-implant mucositis is a term used to describe a reversible inflammatory reaction in the mucosa adjacent to an implant without evidence of bone loss.

The reported prevalence of this disease (bleeding on probing and no bone loss) was reported to be about **79% of subjects and 50% of the implants.**

IRREVERSIBLE



Thank you...

