PERI-IMPLANT MUCOSITIS
• Inflammation confined to soft tissues
• No bone loss (after initial remodeling)
• Plaque biofilm
• Reversible
• Can progress to Peri-implantitis
• Incidence of 30-60% of implant patients

• BOP and/or suppuration
• ≥4 mm Probing
• No radiographic bone loss beyond remodeling.4,5

*9-14 yr outcomes assessments = 48% implants affected

Periimplantitis
• Inflammatory process
• Soft tissue inflammation
• Progressive bone loss beyond remodeling
• Bacterial insult + host response
• Similar to periodontal lesions
• BOP and/or suppuration
• ≥4 mm Probing
• Any degree of detectable bone loss following the initial bone remodeling after placement
• Incidence: 6%-36% of implants

Etiology:
• Peri-implantitis
• Bacterial insult overwhelming host response
• Bacterial species associated with Periodontitis and Peri-implantitis similar
• Gram negative anaerobes

What do we know
• No exact definition of Peri-implantitis
• No perfect understanding of root cause
• Inflammatory
• Hard and soft tissue, progressive
• Similar to periodontitis
• Risk indicators

Risk factors:
• Previous Periodontal Disease
• Poor plaque control/inability to clean
• Residual cement
• Smoking
• Genetic factors
• Diabetes
• Occlusal overload
  • -bruxism
  • -malocclusion
• Rheumatoid arthritis, inflammatory diseases
• Excessive EtOH
• CT diseases
• Osteopenia
• Osteoporosis
• Osteomalacia
• Osteogenesis imperfecta
• Bisphosphonates

Diagnostic Parameters:
• Probing
• Bleeding
• Suppuration
• Mobility
• Radiographs
• Pain
• Percussion
• Keratinized gingiva
• Crestal bone loss

Clinical implications:
• Peri-implant mucositis can be successfully treated early non-surgically
• Non-surgical therapy less effective for peri-implantitis
• Numerous surgical treatment modalities for peri-implantitis
Surgical periimplantitis components

- **Tissue reflection**
- **Degranulation**
- **Remove all HA coating?**
- **Surface detoxification**
- **Bone graft + Membrane**
- **Out of function 12 weeks**
- **Do not touch implant**

ADA treatment codes

- **D6100**: Implant Removal
- **D6101**: Debridement of peri-implant defect and cleaning of exposed implant surfaces (flap entry + closure).
- **D6102**: Debridement and osseous contouring of a peri-implant defect; includes cleaning of exposed implant surfaces (flap entry + closure)
- **D6103**: bone graft for repair of peri-implant defect – not including flap entry and closure or, when indicated, placement of a barrier membrane (D4266) or biologic materials (D4265) to aid in osseous regeneration.

*Barrier membrane (D4266) or biologic material (D4265) separately*
MAINTENANCE
- 1. Presence of plaque/calculus
- 2. Clinical appearance of peri-implant tissues
- 3. Radiographic appearances of implant and periimplant structures
- 4. Occlusal status, stability of prostheses and implants
- 5. Probing depths
- 6. Presence of exudate or bleeding on probing
- 7. Maintenance interval

PROBINGS:
- 9 months post implant placement
- Every 6 months
- Plastic-coated probes?

After successful treatment, tailor program to patient needs
- Examination, reevaluation, diagnosis of problems
- *PROBE IMPLANTS
- Factors of success include:
  - Motivation
  - Oral Hygiene education
  - Instrumentation (enough time for appt)
- Treat infected sites immediately Determine interval based upon:
- -Risk factors
- -Systemic health
- -Home care effectiveness
- -Motivation
- -Local factors
- Do not let insurance dictate maintenance protocol
- If patients NEED to be seen every 3 or 2 months, then they MUST come that often

Maintenance Factors:
- Biofilm removal
- Abutment length, location, angulation
- Prosthetic design
- Anatomical limitations
- Keratinized gingiva

HOME CARE AIDES
- Toothbrushes
- Tufted brushes
- Floss
- Interdental brushes
- Antimicrobials
- Oral irrigators
- Tongue Scrapers

Antimicrobials
- Chlorhexidine
- Phenolic compounds
• Cetylpyridium Chloride
• Sodium Hypochlorite (dilute) rinse
  Dilution of regular Clorox bleach
• Mix 2 teaspoon bleach + 8oz water.
• Rinse 30 sec and spit out
• *for pts intolerant of CHX, CPC, Listerine