

Patient: JM

Diagnosis: Generalized severe periodontitis

Differential Diagnosis: Localized juvenile periodontitis, generalized moderate periodontitis, gingivitis, periodontal abscess, medication-influenced gingival overgrowth, etc.

Medical history: The patient is a 35-year-old, healthy Caucasian female, who formerly smoked but quit 5 years ago. She does not take any medication and reported no known drug allergies.

Dental history: The patient has had amalgam restorations, tooth extractions, and periodontal treatment. Due to financial restriction, she has had sporadic dental care since scaling and root planing was performed 3 years ago.

Chief complaint: The chief complaint was “My teeth are getting loose, and I want to do something to keep them now.”

Signs and symptoms:

Extraoral and intraoral exams revealed that there were no abnormalities noted, except popping sounds on the temporomandibular joints bilaterally. The patient reported brushing twice a day with a soft-toothbrush and flossing once a day. Her oral hygiene was considered ‘fair to poor,’ indicated by moderate to severe amounts of plaque and calculus. Missing teeth included teeth #1, #2, #3, and #19. Periodontal exam demonstrated that there were multiple periodontal pockets (6~8 mm) throughout the mouth, with generalized bleeding upon probing. Also, tooth mobility and significant bone loss (30% to 90%) were remarkable. The gingiva appeared bluish red, slightly swollen, soft, and shiny. The interdental papillae were generally blunted and non-resilient.

Etiology: The primary etiology is bacterial plaque, and significant contributing factors include smoking history and host susceptibility to periodontal disease.

Usual methods of diagnosis:

- Medical/dental history review
- Periodontal exam, including oral hygiene assessment, periodontal probing, and mobility test, clinical observation, etc.

- Radiographic exam
- IL-1 genotype test (Periodontal Susceptibility Test, Strumann USA, Waldham, MA)
- Microbial test

Usual dental treatment

- Oral hygiene instruction
- Mechanical debridement (scaling and root planing) non-surgically or surgically
- Periodontal chemotherapy (systemic and local) using systemic antibiotics, antimicrobial mouthrinses, local drug delivery, host modulators, etc.
- Periodontal maintenance: Maintenance interval will be determined based on disease severity, genetic test results, and response to treatment