Dental Hygiene Diagnosis and Treatment Planning:
The Role of the Dental Hygienist in Comprehensive Patient Care

Presented by:
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Objectives
- Explain the components of the dental hygiene process of care
- Differentiate between the periodontal diagnosis and the dental hygiene diagnosis
- Explain how the patient’s periodontal diagnosis and prognosis are determined
- Describe the evidence-based approach to treatment planning
- Explain how periodontal case types aid in treatment planning

Objectives
- Describe how the dental hygiene treatment plan fits into the master treatment plan for a patient
- Formulate comprehensive, evidence-based treatment plans for patients with varying periodontal diagnoses
- Identify situations which may require modifications to a treatment plan
- Describe the treatment guidelines for periodontally involved patients
- Explain the components of patient case presentation, including obtaining informed consent

Clinical Decision Making
Dentist and RDH use information gathered during the clinical periodontal assessment to identify treatment strategies that meet the patient’s needs
- Dental Team’s Role
  - Dentist’s responsibility to arrive at a periodontal diagnosis
  - HOWEVER it is both the dentist and RDH responsibility to plan the NSPT
- Patient’s Role
  - Dental healthcare providers have an obligation to encourage patients to fully participate in treatment decisions and goals.
- On-going process

Steps in Treatment Planning
1. Assigning a Correct Periodontal Diagnosis

Diagnostic Questions
1. Does the clinical assessment indicate health or inflammatory disease in the periodontium?
- Signs of periodontal disease: features of a disease that can be observed or measure by a clinician
- Symptoms of periodontal disease: features noted by the patient
Signs of Inflammation in the Periodontium

<table>
<thead>
<tr>
<th>Overt Signs</th>
<th>Hidden Signs</th>
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<tbody>
<tr>
<td>Color change in gingiva</td>
<td>Bone loss</td>
</tr>
<tr>
<td>Contour change in gingiva</td>
<td>Exudate (purulence)</td>
</tr>
<tr>
<td>Change in consistency in gingiva</td>
<td>Bleeding on probing</td>
</tr>
</tbody>
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Diagnostic Questions

2. If the clinical assessment indicates inflammatory disease, is the disease gingivitis or periodontitis?
   - Attachment Loss
   - Radiographs

Diagnostic Questions

3. If the patient has gingivitis, what type of gingivitis?
3. If the patient has periodontitis, what type of periodontitis?
   - Refer to 1999 AAP Classification of Periodontal Diseases and Conditions

DH Process of Care

- Assessment
- Diagnosis and Prognosis
- Treatment plan
- Implementation
- Evaluation
- Maintenance

Assessment

- Data collection
  - MDHX, oral (charting, EOIOE) and CPE exam, radiographs, etc.
- Identification
  - Patient’s condition
  - Risk factors
- Formulate DH diagnosis & prognosis
  - Requires application of professional judgment and critical thinking

Dental Hygiene Diagnosis and Prognosis

- Relates to problems/solutions addressed within scope of dental hygiene practice
- Link oral health problems to etiologies/risk factors
- Provides basis for planning intervention
- Identify expected outcomes and patient responses
- Excludes diagnoses requiring treatment legally defined as dental practice
Periodontal Diagnosis and Prognosis

• Diagnosis
  • Identification of disease or condition
  • Based on:
    • Assessment findings
    • Recognition of periodontal disease classifications

• Prognosis
  • Prediction regarding outcome of disease
  • Consider influencing factors

Periodontal Diagnosis

• Use correct classification
  • Plaque-induced gingivitis, chronic periodontitis, etc.

• Include descriptive modifiers
  • Localized, generalized
  • Slight, moderate, severe

• Supplemental description

Descriptive Modifiers

<table>
<thead>
<tr>
<th>Disease severity</th>
<th>Modifiers</th>
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<tbody>
<tr>
<td>Slight</td>
<td>1-2 mm CAL</td>
</tr>
<tr>
<td>Moderate</td>
<td>3-4 mm CAL</td>
</tr>
<tr>
<td>Severe</td>
<td>&gt;5 mm CAL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disease extent</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>&lt;30% site involvement</td>
</tr>
<tr>
<td>Generalized</td>
<td>&gt;30% site involvement</td>
</tr>
</tbody>
</table>

Periodontal Prognosis

• Prediction of outcome
  • Short-term 2-5 years
  • Long-term 5-10 years

• Descriptions
  • Good = maintain indefinitely with treatment
  • Fair = may worsen in future
  • Guarded = treatment efforts may not succeed
  • Poor = teeth expected to be lost even with treatment, hopeless

Periodontal Prognosis

• 2 components of the periodontal prognosis
  • Overall case prognosis
  • Individual tooth prognosis

• What factors influence each of these components?

Activity

• Groups of 4
  • Develop case studies
    • Medical history
    • Local and systemic risk factors
    • Periodontal findings
    • Radiographs (provided)
  • Share with class
Treatment Plan

- Evidence-based
  - Patient need
  - Scientific literature
  - Includes patient education

- Sequential outline
  - Comprehensive plan
  - Dental hygiene plan

IMPORTANT......

- Include the PATIENT in treatment plan development!!

- ALWAYS REMEMBER-the patient is a real person, not just a set of teeth!

Comprehensive Treatment Plan

- Assessment and preliminary therapy (preliminary phase)
- Non-surgical periodontal therapy (phase I)
- Surgical therapy (phase II)
- Restorative therapy (phase III)
- Periodontal Maintenance (phase IV)

Direct participation by RDH

- Assessment
- NS Periodontal Therapy – phase 1
- Periodontal Maintenance – phase 4

Considerations When Developing a Treatment Plan

- Individual patient’s needs/desires
- Health
- Age
- Treatment tolerance
  - Physical, emotional
  - Sensitivity (pain management)
- Number of teeth present

Considerations When Developing a Treatment Plan

- Extent of disease
- Amount of calculus
- Restorative needs
- Barriers to care
  - What are some examples of barriers to care?
DH “Periodontal” Treatment Plan

• Assess patient periodontal status
  • Health vs. disease

• Health
  • Patient education
  • Prophylaxis
  • Fluoride

• Disease
  • Patient education
  • Periodontal debridement
  • Re-evaluation
    • Maintenance interval, re-treat, adjunctive therapy, or referral

General Guidelines for Treatment of Periodontal Disease

• Length and # appointments varies

• Must include re-evaluation appointment

• Periodontal Maintenance

General Guidelines

• Anxious patient
  • Scale least complicated area first (fewest teeth, least severe, etc.) to build rapport

• Minimize treatment discomfort
  • Local anesthesia, analgesia
  • Plan one quadrant at a time or half mouth (max/mand same side)

Gingivitis

• Active/Initial Therapy and Re-evaluation
  • Active/Initial Therapy (1 appointment)
    • MDHx
    • PHP/Patient education
    • Full mouth scaling/debridement with ultrasonics, hand instruments
    • Antimicrobial irrigation or rinse
    • Post-op instruction

Gingivitis

• Re-evaluation (4-6 weeks)
  • MDHx
  • Patient education
  • Assess healing
    • Gingival contour, color, etc.
    • Re-probe
    • Fine scale
    • Selective polishing (if no inflammation)
    • Fluoride
    • Determine re-treat or recare interval

Periodontitis

• Active/Initial therapy and Re-evaluation
  • Active/Initial therapy (2 or 4 appointments)
    • MDHx and vital signs
    • Patient education
    • Scaling/debridement with ultrasonics, hand instruments
      • Quadrant or half mouth
      • Local Anesthesia
    • Antimicrobial irrigation or rinse
    • Post-op instructions
Periodontitis

- Re-evaluation (4-6 weeks)
  - MDHx
  - Patient education
  - Assess healing
    - Gingival contour, color, etc.
  - Re-probe
    - Fine scale
    - Selective polishing (if no inflammation)
    - Fluoride
    - Determine re-treat, adjunctive therapy, surgery, maintenance interval

Insurance Treatment Codes

- Codes for insurance reimbursement
  - 1110 - prophylaxis (health)
  - 4341 - periodontal debridement by quadrant (sometimes referred to as SRP) 4 or more teeth in a quadrant
  - 4342 - periodontal debridement of 1-3 teeth
  - 4910 - periodontal maintenance, after active therapy
    - Use 1110 for re-eval, then 4910 for maintenance
    - Once a 4910, always a 4910
  - 4355 - FM debridement to enable comprehensive periodontal exam

Activity

- Determine periodontal diagnosis and prognosis
  - Identify risk factors

- Write out specific DH treatment plan for each appointment, including re-evaluation
  - Specific patient education
  - Instrument sequence
  - Post-operative instructions

  - Share with class

Case Presentation

- Process of presenting assessment data and treatment options to patient
  - Benefits and risks of treatment
  - Risks of non-treatment

  - All options
    - Treatment alternatives
    - No treatment

Informed Consent

- What is informed consent?

- What are the specific elements of informed consent?

- Why would written consent be better than verbal consent?

Ethics

- Failure or delay in communicating findings or treatment options is unethical

- Performing procedures without consent is unethical and illegal
Activity

- Based on your group’s case study:
  - Explain your findings and recommendations to the dentist
  - Explain your findings and recommendations to the patient
  - Include rationale for your treatment recommendations

Ethical Scenario

- What are some of the ethical considerations in this scenario?
- How would you respond to the patient in such a situation?
- How would you respond to the dentist in such a situation?