SECTION IV

Dental Hygiene Diagnosis and Care Planning

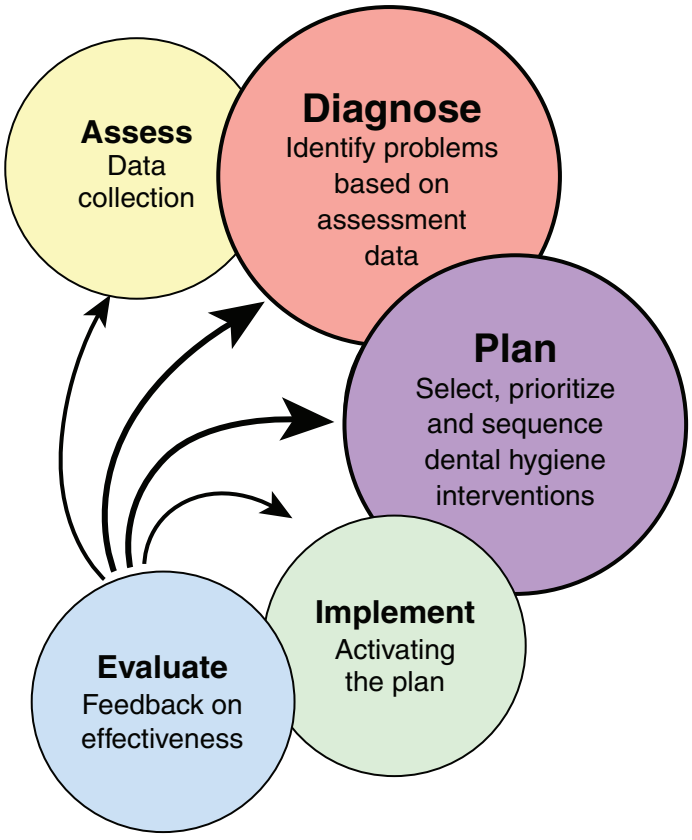

FIGURE IV-1 DH Process of Care: Diagnosis and Planning.

INTRODUCTION

After the initial assessment is completed as described in Section III, the data are assembled, sequenced, and analyzed in preparation for planning strategies that help the patient acquire and maintain oral health. A formal written care plan is necessary for educating the patient, securing informed consent for treatment, and communicating with other oral care team members.

THE DENTAL HYGIENE PROCESS OF CARE

Figure IV-1 shows the position of diagnosis and care planning in the total Dental Hygiene Process of Care.

I. DIAGNOSE

The diagnosis segment of the Dental Hygiene Process of Care is related to analyzing the assessment data that has been collected. The dental hygiene diagnosis identifies those patient needs for which the dental hygienist will provide interventions. Interventions within the scope of dental hygiene practice are implemented to solve the problems identified by the diagnostic statements. Dental diagnoses, on the other hand, are directed at those particular diseases and conditions for which the dentist will provide treatment.

- Dental hygiene diagnosis statements focus attention on the behavioral aspects as well as deviations from normal oral health.
- Chartings, radiographs, histories, and all recorded patient data are analyzed together.
- Each diagnostic statement identifies with a significant oral hygiene problem of the patient. Examples of diagnostic statements are shown in Table 22-2 (page ____).
- A blueprint care plan, such as that designed in Figure 22-1 (page ____), clarifies thinking toward preparation of diagnostic statements.

II. PLAN

The third component of the Dental Hygiene Process of Care is to develop a plan for patient care. Protocols and purposes for developing a written care plan are described in this section.

- The dental hygiene care plan selects interventions that are based on analysis of assessment data that has been consolidated into diagnostic statements that define patient needs.
- The care plan is developed to conform to and be integrated with the total treatment plan of the patient.
- The overall objectives of the dental health care team focus on the oral health of the patient. The ultimate goal will be the control of oral diseases.

ETHICAL APPLICATIONS

Professional ethics is part of every component in the provider/patient relationship between the dental hygienist and the patient. The potential for an ethical situation arises anytime a dental hygienist interacts with a patient, with members of the dental team, or with individuals involved in the special needs of the patient, such as family, caregivers, or members of specialty practices. A dental hygienist who provides ethical patient care:

- Is cognizant of the respect each patient deserves.
- Maintains communication among all parties responsible for dental and dental hygiene treatment.
- Attains a knowledge of current standards of care through continuing education coursework and reading professional journal articles about new research.
- Is aware of ethical issues such as conflict of interest while treating patients, the legal scope of one's duties, and dealing with impaired colleagues
- Possesses the ability to assess and justify the reporting of unacceptable practices.

The basic concepts in healthcare law apply to all dental hygiene professionals. The dental hygiene practice acts of each state or province govern the scope of duties and the criteria for licensure. Professional liability, standard of care, informed consent, privacy information, and malpractice are other concerns that affect the daily duties and rights of both the patient and the dental hygienist. Selected legal concepts and suggestions for application are described in **Table IV-1**.

TABLE IV-1 LEGAL AND ETHICAL CONCEPTS

LEGAL CONCEPT	EXPLANATION	APPLICATION
Professional Liability	A licensed professional is legally accountable for all actions; bound by the law.	Scope and duties of the dental hygienist are defined in each state's Dental Hygiene Practice Act.
Scope of Practice	A dental hygienist is legally bound to provide care within the dental hygiene scope of practice.	Adherence to dental hygiene licensure requirements and performance of functions defined as legal within in each state's Dental Hygiene Practice Act.
Standard of Care	A professional uses the ordinary and reasonable skill that is commonly used by other reputable dental hygienists when caring for patients; involves prudent judgment and use of all available resources.	Evaluating the patient's charting and examination data before determining which radiographs are needed according to individualized maintenance intervals.
Informed Consent	Voluntary affirmation by a patient to allow examination or treatment by authorized dental personnel.	Involves the ongoing process of communicating and educating a patient about oral health options, not only a printed form to sign.
Negligence/Malpractice	Failure to perform professional duties according to the accepted standard of care.	Patient must show that the dental hygienist has a "duty" to the patient, was "derelict" and breached that duty, there was evidence of "direct cause," and that "damages" resulted. Not performing circumferential probing and informing/referring a patient when periodontal concerns exist can be considered negligence.

CHAPTER 21

Planning for Dental Hygiene Care

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Chapter Outline

In the dental hygiene process of care described in Chapter 1 and illustrated in Figure IV-1, assessment data are used to formulate the dental hygiene diagnosis. Then, using an evidence-based approach, a dental hygiene care plan and appointment sequence can be formalized. Terms and key words used in conjunction with these steps are defined in **Box 21-1**.

ASSESSMENT FINDINGS

Assessment includes the gathering of details regarding the health status of the patient, followed by analysis and synthesis of the data. The application of clinical judgment and critical thinking skills are necessary to arrive at a den-

BOX 21-1

Key Words

KEY WORDS AND ABBREVIATIONS: Planning for Dental Hygiene Care

ADLs (Activities of Daily Living): a measure of the ability to carry out the basic tasks needed for self-care.
- **IADLs (Instrumental Activities of Daily Living):** a measure of the ability to perform more of the complex tasks necessary to function in our society; tasks that require a combination of physical and cognitive ability.

Anticipatory guidance: patient education and oral hygiene instructions that anticipate potential oral and systemic health problems associated with risk factors identified during patient assessment.

ASA: American Society of Anesthesiologists; originally developed the ASA Classifications to determine modifications necessary to provide general anesthetic to patients during surgical procedures.

Assessment: the critical analysis and evaluation or judgment of a particular condition, situation, or other subject of appraisal.

Chief complaint: the patient's concern as stated during the initial health history preparation; may be the reason for seeking professional care; a complaint such as pain or discomfort may require emergency dental diagnosis.

Compromised therapy: initial therapy and continued periodontal maintenance provided as the therapeutic end point in cases where the severity and extent of the disease or the age and health of the patient preclude optimal results of periodontal therapy.

Definitive care: complete care; end point at which all treatment required at the time has been completed.

Diagnose: to identify or recognize a disease or problem.

Diagnosis: a statement of the problem; a concise technical description of the cause, nature, or manifestations of a condition, situation, or problem; identification of a disease or deviation from normal condition by recognition of characteristic signs and symptoms.
- **Dental hygiene diagnosis:** identification of an existing or potential oral health problem that a dental hygienist is qualified and licensed to treat.
- **Differential diagnosis:** identification of which one of several diseases or conditions may be producing the symptoms.

Evidence-based care: providing oral care based on relevant, scientifically sound research.

OSCAR: a mnemonic that stands for **O**ral, **S**ystemic, **C**apability, **A**utonomy, and **R**eality. Developed by the American Academy of Oral Medicine to provide a convenient, systematic approach to identifying dental, medical/pharmacologic, functional, ethical, and fiscal factors that need to be evaluated and weighed when planning treatment for geriatric individuals or those with disabilities.

Prognosis: prediction of outcome; a forecast of the probable course and outcome of a disease and the prospects of recovery as expected by the nature of the specific condition and the symptoms of the case.
- **Dental hygiene prognosis:** a judgment regarding the results (outcomes) expected to be achieved from oral treatment provided by a dental hygienist.

Risk factor: an attribute or exposure that increases the probability of disease, such as an aspect of personal behavior, environmental exposure, or an inherited characteristic associated with health-related conditions.
- **Modifiable risk factor:** a determinant that can be modified by intervention, thereby reducing the probability of disease.

tal hygiene diagnosis. Assessment procedures are described in detail in Chapters 6 through 20.

I. THE CHIEF COMPLAINT

The patient's statement regarding the reason for seeking dental and dental hygiene care is considered when planning. If a patient has a significant concern, such as pain, this need is addressed prior to initiating dental hygiene treatment.

II. RISK FACTORS

Whether or not the patient presents for dental hygiene care with current oral disease, several risk factors can be noted that increase the patient's potential for diminished oral health status. When a patient presents for dental hygiene care exhibiting one or more risk factors, it is essential to develop a care plan that provides anticipatory guidance through preventive education and counseling.

A. Risk Factors for Periodontal Infections or Poor Response to Periodontal Therapy[1–8]

- Behavioral factors (inadequate biofilm removal, diet, noncompliance with dental hygiene recommendations)
- Tobacco use
- Systemic conditions (diabetes, decreased immune factors, osteoporosis, osteopenia)
- Hormonal considerations (pregnancy, menopause)
- Nutritional status

- Iatrogenic factors(overhangs, open contacts, residual calculus)
- Genetic factors

B. Periodontal Disease as a Risk Factor for Systemic Conditions[9–14]

Current research suggests that the presence of periodontal infection is a contributing factor to a variety of systemic conditions.

- Infective endocarditis
- Cardiovascular disease (CVD) and atherosclerosis
- Diabetes mellitus
- Respiratory disease
- Adverse pregnancy outcomes

C. Risk Factors for Dental Caries[15]

- Behavioral factors (inadequate biofilm removal)
- Dietary factors (frequent use of cariogenic foods/beverages)
- Low fluoride
- Tooth morphology and position (deep occlusal pits and fissures, exposed root surfaces, rotated positioning)
- Xerostomia
- Personal and family history of dental caries/restorative dentistry
- Developmental factors (modifications of dental enamel)
- Genetic factors (immune response)

C. Risk Factors for Oral Cancer[16,17]

- Tobocco use
- Alcohol use
- Sun exposure (lips and face)

III. PATIENTS OVERALL HEALTH STATUS

A. Physical Status

The extent of the patient's medical, physical, and psychological risk determines modifications necessary during treatment. Patient positioning, sequence and timing of treatments, and prevention of medical complications need consideration.

The American Society of Anesthesiologists' (ASA) Classification System[18] **(Table 21-1)** and the OSCAR Planning Guide[19] **(Table 21-2)** are two examples of systematic approaches used to help determine modifications necessary when providing patient care.

B. Tobacco Use

The patient's use of tobacco will affect oral status and dental hygiene treatment outcomes. Information on planning dental hygiene interventions for the patient who uses tobacco is found on pages __ to __.

IV. ORAL HEALTHCARE KNOWLEDGE LEVEL OF THE PATIENT

Before planning individualized patient care, an attempt is made to assess the patient's oral health knowledge level. From that baseline, planned educational interventions can build on current knowledge rather than provide information too far above or below the patient's current understanding.

V. THE PATIENT'S SELF-CARE ABILITY

The patient's ability to manipulate a toothbrush and floss and to comply with suggested oral care regimens will determine the success of planned interventions. Patients with disabilities or physical limitations will require modification to ensure adequate daily dental biofilm removal.

An Activities of Daily Living (ADL)[20] classification level, described in **Table 21-3**, can provide a guide to determine whether adaptive aids or caregiver training for personal oral care procedures in necessary.

VI. DOCUMENTATION OF ASSESSMENT DATA

Complete and accurate records are essential. When not computerized data are recorded in ink. Standardized abbreviations are used to document all findings. Misunderstandings can lead to legal involvement.

THE PERIODONTAL DIAGNOSIS

Planning for the number and length of appointments in a treatment sequence will be determined by the patient's periodontal diagnosis.

I. CURRENT PERIODONTAL STATUS

A description of past and current periodontal conditions, as well as risk factors that affect the progress of disease, determine a patient's current periodontal status.

II. CASE TYPE

For purpose of determining the sequences and number of appointments required for initial nonsurgical periodontal therapy, it is useful to divide the periodontal diagnosis into case types as described in Table 14-1 (page __).

III. CLASSIFICATION OF PERIODONTAL DISEASE

The classification of periodontal diseases is shown in Table 14-2 on pages __ and __. The extent, severity, and

TABLE 21-1 ASA* PHYSICAL STATUS CLASSIFICATION SYSTEM

ASA CLASSIFICATION		EXAMPLES OF PHYSICAL OR PSYCHOSOCIAL MANIFESTATIONS	DENTAL HYGIENE TREATMENT CONSIDERATIONS
ASA I	Without systemic disease; a normal, healthy patient with little or no dental anxiety	Able to walk one flight of stairs with no distress ADL/IADL level = 0	No modifications necessary
ASA II	Mild systemic disease or extreme dental anxiety	Must stop after walking one flight of stairs because of distress Well-controlled chronic conditions Upper respiratory infections Healthy pregnant woman Allergies ADL/IADL level = 1	Minimal risk; minor modifications to treatment and/or patient education may be necessary
ASA III	Systemic disease that limits activity but is not incapacitating	Must stop en route walking one flight of stairs Chronic cardiovascular conditions Controlled insulin-dependent diabetes Chronic pulmonary diseases Elevated blood pressure ADL/IADL level = 2 or 3	Elective treatment is not contraindicated, but serious consideration of treatment and/or patient/caregiver education modifications may be necessary
ASA IV	Incapacitating disease that is a constant threat to life	Unable to walk up one flight of stairs Unstable cardiovascular conditions Extremely elevated blood pressure Uncontrolled epilepsy Uncontrolled insulin-dependent diabetes	Conservative, noninvasive management of emergency dental conditions; more complex dental intervention may require hospitalization during treatment; caregiver training for daily oral care may be necessary
ASA V	Patient is moribund and not expected to survive	End-stage renal, hepatic, infectious disease, or terminal cancer	Only palliative treatment is delivered; caregiver training for daily oral care may be necessary.

*American Society of Anesthesiologists
Adapted from: Malamed, S. F.: *Medical Emergencies in the Dental Office,* 5th ed. St. Louis, Mosby, 2000, pp. 41–44.

TABLE 21-2 TREATMENT PLANNING WITH OSCAR

A systematic approach to identifying factors to evaluate when planning dental hygiene care.

ISSUE	FACTORS OF CONCERN
Oral	Teeth, restorations, prostheses, periodontium, pulpal status, oral mucosa, occlusion, saliva, tongue, alveolar bone
Systemic	Normative age changes, medical diagnoses, pharmacologic agents, interdisciplinary communication
Capability	Functional ability, self-care, caregivers, oral hygiene, transportation to appointments, mobility within the dental office
Autonomy	Decision-making ability, dependence on alternative or supplemental decision makers
Reality	Prioritization of oral health, financial ability or limitations, significance of anticipated life span

Reprinted with permission from: The American Academy of Oral Medicine (Ship, J.A. and Mohammad, A.R., eds.): *The Clinician's Guide to Oral Health in Geriatric Patients* (Monograph). Baltimore, American Academy of Oral Medicine, 1999, p. 21.

TABLE 21-3 MEASURES OF PATIENT FUNCTIONING*

EXAMPLES OF ACTIVITIES OF DAILY LIVING (ADLs)	EXAMPLES OF INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADLs)	LEVELS
Brushing	*Maintaining self-care regimens*	***Level 0***
Flossing	*Ability to make and keep dental appointments*	Ability to perform the task without assistance
Applying interdental aids	Writing	***Level 1***
Feeding	Cooking	Ability to perform the task with some human assistance; may need a device or mechanical aid but or still independent
Ambulation (Walking)	Shopping	***Level 2***
Bathing	Climbing stairs	Ability to perform the task with partial assistance
Continence	Managing medication	***Level 3***
Communication	Reading	Requires full assistance to perform the task; totally dependent
Dressing	Cleaning	
Toileting	Using telephone	
Transfer (from bed to toilet)		
Grooming		

*This scale provides a simple means of summarizing a person's ability to carry out the basic tasks needed for self-care.
Modified with permission from: Resnick, B.: Care of the Older Patient, in Nettina, S.M., ed.: *The Lippincott Manual of Nursing Practice,* 7th ed, Philadelphia, Lippincott Williams & Wilkins, 2001, pp. 167–168.

chronic or aggressive nature of the patient's periodontal disease can be characterized.

IV. PARAMETERS OF CARE

Clinical diagnosis, therapeutic goals, treatment considerations, and outcomes assessment for periodontal disease are outlined in the periodontal Parameters of Care.[21] Planning considerations are graded by the severity of infection. Examples are listed in **Table 21-4**.

THE DENTAL HYGIENE DIAGNOSIS

I. BASIS FOR DIAGNOSIS

A. Patient interview data (chief complaint, identification of oral problems, and comprehensive personal/social, medical, and dental health histories)
B. Physical assessment data (vital signs, extraoral and intraoral tissue examination, and dental and periodontal chartings)
C. Treatment or education needs that may be addressed by providing oral care services within the dental hygienists legal scope of practice
D. Treatment needs that may be addressed by consultation with another licensed healthcare professional

II. DIAGNOSTIC STATEMENTS

A. Provide the basis for planning interventions that are within the scope of dental hygiene practice
B. Reflect expected outcomes of dental hygiene interventions
C. Identify patient responses that are changeable by dental hygiene interventions
D. Exclude diagnoses that require treatments legally defined as dental practice

III. DIAGNOSTIC MODELS[22–26]

Medical and dental models of diagnosis classify diagnostic statements according to disease processes. In contrast, dental hygiene models have been developed more like nursing models that encompass a broader focus. These models:

- Address health functioning and behaviors
- Describe actual or potential health problems that dental hygienists are educated and licensed to treat

The dental hygiene diagnosis models, described in **Table 21-5**, give direction and a scientific basis from which to determine dental hygiene interventions and formulate patient care plans.

THE DENTAL HYGIENE PROGNOSIS

Prognosis means a look ahead to an anticipated outcome or end point. The dental hygiene prognosis is a statement of the possible outcomes that can be expected from the dental hygiene intervention selected for an individual patient.

I. CRITERIA FOR VARIOUS PROGNOSES

Prognosis is expressed in general terms for either an individual tooth or for the overall prognosis for the patient's teeth. The criteria for various prognoses are listed in **Box 21-2**.

TABLE 21-4 PARAMETERS OF CARE

CLINICAL DIAGNOSIS	THERAPEUTIC GOALS	TREATMENT CONSIDERATIONS	
Biofilm-Induced Gingivitis	• To establish gingival health through elimination of etiologic factors	***Dental Treatment Plan*** • The dental treatment plan may indicate surgical correction of gingival deformities.	***Dental Hygiene Care Plan*** • Customized patient education • Supra- and subgingival debridement • Antimicrobial agents, and correction of biofilm-retentive factors
Chronic Periodontitis • With slight to moderate loss of periodontal support.	• To arrest progression of disease and prevent recurrence • To preserve health, comfort, and function.	***Dental Treatment Plan*** • If resolution of the condition does not occur, consider periodontal surgery.	***Dental Hygiene Care Plan*** • Elimination and control of systemic risk factors • Biofilm control • Supra- and subgingival scaling and root planing • Adjunctive antimicrobial agents • Elimination of contributing local factors
Chronic Periodontitis • With advanced loss of periodontal support.	• To alter or eliminate microbial etiology and contributing risk factors • To arrest the progression of disease	***Dental Treatment Plan*** • May include regeneration of periodontal attachment following the completion and evaluation of initial therapy	***Dental Hygiene Care Plan*** • Initial therapy as described above ***Compromised Therapy*** • Severity/extent of disease, or the age/health of the patient preclude optimal results • Initial therapy and continued periodontal maintenance become the endpoint
Periodontal Maintenance	• To minimize the recurrence and progression of the disease • To reduce the incidence of tooth loss		***Dental Hygiene Care Plan*** • Comparison of clinical data to previous baseline measurements • Assessment of personal oral hygiene status and compliance with maintenance intervals • Oral hygiene reinstruction or modification • Counseling on control of risk factors
Acute Periodontal Diseases Includes • Gingival abscess • Periodontal abscess • Necrotizing diseases • Herpetic gingivostomatitis • Pericoronitis • Periodontal-endodontic lesions	• To eliminate acute signs and symptoms of the condition as soon as possible	***Dental Treatment Plan*** • Treatment considerations depend on the presenting condition	***Dental Hygiene Care Plan*** • Collaborate with the attending dentist to prioritize treatment for the immediate need

(continued)

TABLE 21-4 PARAMETERS OF CARE (continued)

CLINICAL DIAGNOSIS	THERAPEUTIC GOALS	TREATMENT CONSIDERATIONS	
Aggressive Periodontitis	• To alter or eliminate microbial etiology and contributing risk factors • To arrest or slow the progression of the disease	***Dental Treatment Plan may include:*** • General medical evaluation and consultation • Microbial identification • Antibiotic sensitivity testing • Alternative antimicrobial agents or delivery systems • Evaluation/counseling of family members	***Dental Hygiene Care Plan*** • Care parameters planned for chronic periodontitis
Mucogingival Conditions • Deviations from normal anatomic relationship between gingival margin and mucogingival junction	• To maintain and restore function and esthetics	***Dental Treatment Plan*** • May include surgical treatment	***The Dental Hygiene Care Plan*** • Careful comparison of baseline and follow-up findings, control of inflammation through biofilm control, scaling and root planing, and/or antimicrobial agents

Reprinted with permission from: American Academy of Periodontology: Parameters of Care, *J. Periodontol., 71,* pp. 849–869, May (Supplement), 2000.

TABLE 21-5 DIAGNOSTIC MODELS USED IN PLANNING DENTAL HYGIENE CARE

MODEL NAME	DIAGNOSTIC STATEMENTS
Dental Hygiene Diagnostic Model[22,23]	Developed by following six steps that form the process of diagnostic decision making: (1) Initial review (2) Hypothesis formation (3) Inquiry strategy (4) Problem synthesis (5) Diagnostic decision making (6) Learning from the process Recorded in patient treatment records using the notation "DHDX" and accompanied by a treatment plan or treatment goal statement
The Human Needs Model[24]	Based on whether specific criteria defining eight human needs are met or unmet by the patient's current oral health status Written by outlining goals to be obtained for resolving each observed deficit
The Dental Hygiene Process Model[25]	Identify patient's problem in terms of response rather than need and state the possible etiology Classified into several categories, which include general systemic, soft tissue, periodontal, oral hygiene, and dental categories Written by stating the problem and the etiologic factor joined by the phrase "related to"
The Oral Health-Related Quality of Life (OHRQL) Model[26]	Diagnostic statements for individuals/populations are based on the assessment of domains related to health/preclinical disease; biological/physiological disease; and the broad-based sequelae to disease, such as symptom status, function status, health perceptions, and overall quality of life Dental hygiene actions are formulated for each domain, incorporating a multidisciplinary approach to care

BOX 21-2 Criteria for Various Prognoses

Prognosis is assigned by the presence of one or more of the following factors.

Good	■ Adequate control of etiologic factors ■ Adequate patient self-care ability ■ Adequate periodontal support
Fair	■ Adequate control of etiologic factors ■ Adequate patient self-care ability ■ Less than 25% attachment loss ■ Class I or less furcation involvement
Poor	■ Greater than 50% attachment loss with Class II furcation ■ Patient self-care difficult due to location and depth of furcation
Questionable	■ Greater than 50% attachment loss with poor crown-to-root ratio ■ Poor root form ■ Inaccessible Class II furcation or Class III furcation ■ Greater than 2+ mobility ■ Significant root proximity
Hopeless	■ Inadequate attachment to maintain the tooth

Modified with permission from: McGuire, M.K.: Prognosis vs Outcome: Predicting Tooth Survival, *Compend. Contin. Educ. Dent., 21,* 217, March, 2000.

II. FACTORS THAT DETERMINE PROGNOSIS

- Assessment data regarding current disease status
- The patient's risk factors
- The patient's commitment to personal care and preventive regimens.
- Interventions with the potential to reverse a patient's oral problem
- Treatment alternatives selected
- Evidence from the scientific literature

III. EXPECTED OUTCOMES

Some examples of potential outcomes from dental hygiene interventions planned in a three-part care plan are listed below.

A. Gingival/Periodontal

- Reduced dental biofilm
- No bleeding on probing
- Reduced probing depths
- No further loss in attachment level
- Decrease or no change in mobility
- Resolution of erythematous tissue
- Reduced swelling and edema

B. Dental Caries

- No new demineralized areas
- Demineralized areas resolved
- No new carious lesions
- Reduced intake of cariogenic foods/beverages
- Dental sealants placed
- Increased fluoride use

C. Prevention

- Elimination of iatrogenic factors (calculus, restoration overhangs)
- Increased percentage of biofilm-free areas
- Patient demonstration of recommended oral care procedures
- Compliance with daily care recommendations
- Compliance with recommended maintenance care interval
- Tobacco-free status achieved
- Modification/stabilization of systemic risk factors

CONSIDERATIONS FOR PROVIDING CARE

I. ROLE OF THE PATIENT

A. Purpose

The willingness and/or ability of the patient to participate in planned oral health behaviors will be the key to reaching goals set during planning.

B. Procedure

1. Determine the patient's level of understanding of dental diseases, risk factors, and oral health behaviors.

2. Determine the patient's physical ability to manipulate recommended oral care aids.
3. Determine lifestyle factors that impact the patient's ability to comply with oral health recommendations.
4. Educate patients regarding the importance of their role in setting oral health goals and complying with recommendations.

II. TISSUE CONDITIONING

Preparation or conditioning of the gingival tissue for scaling can be of particular significance when there is spongy, soft tissue that bleeds on slight provocation, and when the area is generally septic from dental biofilm and debris accumulation.

A. Purpose

Anticipated outcomes of a tissue conditioning program include:

1. Gingival healing
   - tissues become less edematous
   - bleeding is minimized
   - scaling procedures are facilitated
2. Reduced bacterial accumulation
   - less likelihood that bacteremias will be produced during scaling
   - reduced contamination in the aerosols produced
3. Learning by the patient
   While conditioning the tissue for scaling, the patient can:
   - practice oral health behaviors
   - experience the benefits of a clean mouth
   - from lifetime habits for continued maintenance

B. Procedure

- Initiate a pretreatment program of daily biofilm removal.
- Recommend daily use of an antibacterial rinse after thorough brushing and flossing before going to bed.
- Select affected quadrants for scaling only after patient cooperation has been demonstrated.

III. PREPROCEDURAL ANTIMICROBIAL RINSING

A. Purpose

Preprocedural removal of dental biofilm will lower the bacterial count in aerosols and decrease the potential for bacteremia.

B. Procedure

- The first choice is patient brushing and flossing.
- Vigorous rinsing with an antibacterial mouthwash is beneficial.[27]
- Forcing the fluid between the teeth for 1 to 2 minutes can remove loose debris and surface bacteria approximately 1 mm below the gingival margin.[28]
- Even rinsing with water will have some effect on bacteria; however, chlorhexidine rinses have the most substantivity.[29]

IV. PAIN AND ANXIETY CONTROL

A. Purpose

- Control of discomfort during treatment procedure.
- More consistent patient compliance with recommended interventions and need to return for additional scheduled appointments.

B. Procedure

1. Quadrant selection
   Treat the patient areas of discomfort first, unless tissue conditioning is required. Treat either the quadrant with the fewest teeth or the least severe periodontal infection first to:
   - make the first scaling less complicated
   - help orient an anxious patient to clinical procedures
2. Anesthesia
   The need for anesthesia is determined by:
   - the patient's previous pain control experiences
   - severity of the periodontal infection
   - depth of pockets
   - consistency and distribution of calculus
   - potential patient discomfort during scaling
   - sensitivity of the patient's tissues

When two quadrants are to be treated at the same appointment, it will minimize patient posttreatment discomfort to select a maxillary and mandibular quadrant on the same side.

V. MAINTENANCE DURING DENTAL THERAPY

A. Purpose

When restorative, prosthetic, or orthodontic, treatment extends over a period of time, periodic appointments with the dental hygienist are needed for monitoring the continued success of the patient's self-care.

B. Procedure

Dental hygiene care provided during extended dental therapy follows the dental hygiene process of care and includes:

- gingival tissue assessment
- probing to determine bleeding
- biofilm check with disclosing agent
- reinforcement of daily oral care measures

Everyday Ethics

Victoria, the dental hygienist, is discussing the assessment findings for her patient, Mr. Rush, with the rest of the dental team. Mr. Rush has stated that he has already been told at his general dental practice that he has extensive active periodontal disease. He was referred to this practice because he wants all of the most compromised teeth extracted and dental implants placed.

Mr. Rush has a number of risk factors, such as poorly controlled diabetes and smoking. Because his dental insurance is running out in 3 months, everyone is in a rush to get the treatment started, and the potential for a poor prognosis has not been discussed. In fact, Victoria's concerns about the patient's risk factors are being pushed aside.

Question for Consideration

1. What is Victoria's obligation (duty) to make sure that Mr. Rush understands how his risk factors compromise the prognosis of his treatment plan?
2. What action can Victoria take if her concerns continue to be ignored and treatment progresses without interventions that address the risk factors involved in Mr. Rush's case?
3. How should Victoria proceed to obtain informed consent from Mr. Rush and ensure that his rights to optimal care are maintained?

- scaling and root planning to remove calculus
- additional instruction for care of new prostheses
- motivational encouragement

VI. FOUR-HANDED DENTAL HYGIENE

A. Purpose

Planning patient care while practicing with a dental assistant increase the dental hygienist's efficiency through the use of:

- flexible scheduling.[30]
- two treatment chairs in an overlapping time frame.
- assistance with patient management.

B. Procedure

A well-trained dental hygiene assistant can be delegated such duties as:

- patient reception and seating
- medical history update prior to confirmation by the dental hygienist
- radiographs (following individual state certification guidelines)
- reinforcement of oral hygiene instruction
- assistance during sealant placement and ultrasonic scaling
- cleanup/disinfection of the treatment room in preparation for the next patient

EVIDENCE-BASED SELECTION OF DENTAL HYGIENE PROTOCOLS

Dental hygiene interventions are planned using scientific evidence of efficacy and efficiency. Scientific evidence from dental and medical literature can improve opportunities for achieving successful outcomes from dental hygiene treatment. The patient can benefit if the dental hygienist has developed skills in accessing and evaluating the scientific literature.

THE DENTAL HYGIENE CARE PLAN

Chapter 22 outlines specific procedures for preparation of a written dental hygiene care plan.

Factors to Teach The Patient

- A clear explanation of how assessment data are used in planning dental hygiene care.
- The importance of using scientific evidence of success in the selection of patient-specific therapeutic and preventive interventions.
- Why disease control measures are learned before and in conjunction with scaling.
- Facts of oral disease prevention and oral health promotion relevant to the patient's current level of healthcare knowledge and individual risk factors.
- The long-term positive effects of comprehensive continuing care.

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