



## **American Dental Hygienists' Association Position Paper on the Oral Prophylaxis**

**Approved by the ADHA Board of Trustees April 29, 1998**

The American Dental Hygienists' Association takes the following positions regarding the oral prophylaxis:

There is evidence that supragingival (above the gumline) scaling alone can be detrimental to the total health of an individual. There is no evidence that supragingival scaling and coronal polishing have any therapeutic value.

The oral prophylaxis should consist of supragingival and subgingival (below the gumline) removal of plaque, calculus, and stain.

Only a licensed dental hygienist or dentist is qualified to determine the need for and perform the oral prophylaxis.

The dental hygiene process (assessment, diagnosis, planning, implementation, evaluation) should be employed when delivering the oral prophylaxis.

Insurance codes should be revised to more accurately reflect current delivery of dental hygiene services.

### **Background**

The profession of dental hygiene had its modern beginnings in the early 1900s when Dr. Alfred C. Fones determined that properly trained individuals could provide oral health education and prophylactic care to patients (Motley 1983). Since that time, the focus of dental hygiene services has been, and remains to be, the oral prophylaxis. Included in this area are therapeutic scaling and root planing, and periodontal maintenance care.

There are a number of existing definitions for "oral prophylaxis" (see Appendix A). A common element in these definitions is the removal of deposits from the tooth surfaces. Most of these definitions only address deposit removal from coronal tooth surfaces and the clinical crowns of the teeth (supragingival). The American Academy of Periodontology presents the most comprehensive definition of the oral prophylaxis as the "removal of plaque, calculus and stain from exposed and unexposed surfaces of the teeth by scaling and polishing as a preventive measure for the control of local irritational factors." Darby and Walsh (1993) suggest that the components of the routine prophylaxis should include, but not be limited to, patient/client education, supra- and subgingival scaling, and polishing as appropriate.

Though many existing definitions of the prophylaxis address removal of deposits above the gumline, in reality, very few patients require only supragingival deposit removal. The National Institute of Dental Research (NIDR) reports that close to 90% of individuals

examined in a study exhibited some calculus while 23% had supragingival calculus (Brown, Brunelle, Kingman 1996). Sixty-seven percent (67%) of the NIDR study participants had some subgingival calculus with or without accompanying supragingival calculus. Additionally, the prevalence rate of calculus was found to be 74% in persons aged 13-17 and over 90% in all older age groups. Most notably, only 10% of specific sites examined had only supragingival calculus.

Current definitions indicate that the oral prophylaxis is performed on patients/clients with normal, healthy mouths to maintain health and prevent the initiation of dental diseases. However, according to the same NIDR study, over 90% of persons 13 or older experienced some form of periodontal disease. This shows, again, that the reality is most Americans do not have disease-free mouths. It should be emphasized that, though calculus is not the cause of periodontal diseases, conditions can be exacerbated by its presence. The real cause of these diseases is bacterial plaque. Like calculus, bacterial plaque is present above and below the gumline. However, the most virulent plaque is found below the gumline. In order to obtain any therapeutic value, it is necessary to remove subgingival plaque and calculus.

When periodontal disease is present, removal of deposits on the teeth is no longer a preventive service. In the presence of periodontal disease, periodontal debridement (therapeutic scaling and/or root planing, also known as nonsurgical periodontal therapy) is indicated. Often the administration of local anesthesia is required for pain control at this level of care. These procedures can be the definitive treatment for gingivitis or early periodontal disease, or can be a pre-surgical treatment when disease is more advanced. Once periodontal therapy, either surgical or nonsurgical, is complete, supportive periodontal maintenance care is implemented. This includes continuing care visits where the patient's oral health is monitored and debridement procedures are performed to prevent the return to a disease state. Other components of nonsurgical periodontal therapy and supportive periodontal maintenance care could include subgingival antimicrobial irrigation and treatment for dentinal hypersensitivity.

The range of dental hygiene professional services includes all three levels of care: the preventive oral prophylaxis, therapeutic scaling and root planing, and supportive periodontal maintenance care. This clearly indicates the need for dental hygienists to have assessment skills before providing any service to the patient/client. Dental hygienists receive extensive education in this area as mandated by the Accreditation Standards for Dental Hygiene Education Programs. As stated in Standard 5.3.4, "the curriculum *must* include content designed to prepare the student to assess, plan, implement, and evaluate dental hygiene services as an integral member of the health team" (Commission on Dental Accreditation 1992a). It is important to recognize that dental hygiene education also includes an average of 600 hours of supervised preclinical and clinical education (Commission on Dental Accreditation 1992b).

Oral health care delivered by the dental hygienist directly involves the teeth and their supporting structures (the periodontium). Therefore, the dental hygienist is in an ideal position to collect and assess data on the periodontal tissues, recognize periodontal disease, collaborate with the dentist and patient/client to determine a treatment plan, discuss findings with the patient/client and participate in all levels of care for periodontal disease (Darby and Walsh 1993).

The dental hygiene process of care is an important component of dental hygiene practice. The ADHA policy 18-96 describes the dental hygiene process of care as

Assessment: The systematic collection and analysis of data in order to identify clients needs.

(In the Dental Hygiene Process, client may refer to individuals, families, groups or communities as defined in the \_ADHA Framework for Theory Development\_.)

Diagnosis: The identification of client strengths and oral health problems that dental hygiene interventions can improve.

Planning: The establishment of realistic goals and the selection of dental hygiene interventions that can move the client closer to optimal health.

Implementation: The act of carrying out the dental hygiene plan of care.

Evaluation: The measurement of the extent of which the client has achieved the goals as specified in the plan. Judgement to continue, discontinue, or modify the dental hygiene plan of care.

Periodontal disease has recently become a renewed focus for dental researchers because of the possible links to other conditions such as cardiovascular disease (Loesche 1994, Herzberg and Meyer 1996, Loesche et al 1998), low birth weight infants and premature births (Slavkin 1997). These studies are increasing the awareness of the link between oral health and total health. Because dental hygienists provide treatment for periodontal disease, they can contribute to a patient's/client's overall health. Dental hygienists provide a valuable service to the public when their skills are appropriately utilized. Not only do they provide therapy and education to patients/clients, but they can be instrumental in detecting oral symptoms for other diseases such as diabetes, HIV/AIDS and oral cancer.

Another issue of importance is the use of untrained personnel to perform coronal polishing procedures (including rubber cup and air polishing). Polishing procedures are considered cosmetic in nature and have no therapeutic value (Woodall 1993; Walsh 1995). With regard to the pedodontic oral prophylaxis, it is false to assume that coronal polishing alone constitutes preventive oral health care. As previously cited, three quarters of children aged 13-17 have calculus (Brown, Brunelle, Kingman 1996). Additionally, in this study the prevalence of gingival bleeding was highest among individuals 13-17 years of age. It is negligent practice for a dental hygienist or dentist to provide, supervise or charge for the delivery of stand-alone polishing services while having patients/clients believe that they are receiving a thorough oral prophylaxis. When performed by untrained personnel, polishing procedures can have harmful effects and may produce morphological changes in the teeth, removal of the outer layer of enamel containing protective fluoride, and damage to restorative materials. For a more complete discussion of polishing procedures, refer to the 1997 \_ADHA Position Paper on Polishing Procedures\_.

### **Insurance Issues**

Insurance coverage for dental hygiene services does not accurately reflect dental hygiene practice. The American Dental Association (ADA) \_Current Dental Terminology\_, second edition (CDT-2) insurance code 01110 states that the adult prophylaxis is "performed on transitional or permanent dentition which includes scaling and polishing procedures to remove coronal plaque, calculus and stains." It is intended for use on the patient/client without periodontal disease. As previously mentioned, the 1996 study by Brown, Brunelle, Kingman indicates there is limited need for the adult prophylaxis code 01110 due to the limited number of patients who have only supragingival calculus. It is unreasonable to

expect that this code corresponds to the needs of most patients/clients since a small percentage of patients fit into this "healthy" category. A major finding of the study is that moderate periodontal disease is common among adult Americans. Thirty percent (30%) of individuals ages 25-34 exhibited periodontal disease and this percentage increased to over 80% in individuals 65 or older. More advanced disease was reported in 20% of persons under 45 years of age. In those over 45 years old, the percentage increased until over 40% of those over 65 exhibited advanced disease.

The ADA CDT-2 code 04910 applies only to those patients/clients who have had active periodontal therapy and are now in the maintenance phase. There is a large pool of patients/clients who do not fit into any of the existing code categories for preventive or nonsurgical periodontal services (See Appendix B). There is no accommodation in the existing codes for the large number of patients/clients who present with early to moderate periodontal disease, supra- and subgingival deposits, but have yet to receive active periodontal therapy and do not require quadrant scaling. Because the codes do not include this situation, the propensity for insurance fraud exists. Patients/clients who require the 04910 code are frequently seen on a three or four month interval rather than every six months. Insurance companies often refuse coverage for patients who require more than the "customary" two oral prophylaxis appointments per year. In order to accommodate these patients/clients, practitioners alternate the 04910 and 01110 codes to obtain coverage for these individuals. Using the 01110 code for periodontal maintenance is incorrect and may constitute insurance fraud. It is ADHA's position that the existing insurance codes be revised. A solution to this problem could be establishment of a series of codes that correspond to the American Academy of Periodontology's classification of periodontal diseases.

According to the US Department of Health and Human Services (1990), "health promotion and disease prevention comprise perhaps our best opportunity to reduce the ever-increasing portion of our resources that we spend to treat preventable illness and functional impairment." Insurance companies have long supported preventive health services. Comprehensive dental hygiene care results in the prevention of disease and subsequent expensive treatment. Preventive services provided by dental hygienists should be sufficiently covered by insurance companies to motivate patients/clients to obtain preventive care on a regular basis. This will result in savings to both the public and the insurance companies as we know dental diseases to be nearly 100% preventable.

### **Legislative and Practice Issues**

Currently, the removal of calculus deposits is limited by statutory law or administrative rules to dental hygienists and dentists. The ADA insurance code manual states that removal of supragingival plaque and calculus is an adult prophylaxis. The earlier discussion distinguishing between the oral prophylaxis and periodontal therapy is an important one because of the attempts by some state legislatures and dental boards to change the state laws and rules to allow unlicensed, untrained personnel to perform the "oral prophylaxis". As previously mentioned, very few patients exhibit the conditions that warrant the type of services that correspond to the ADA CDT-2 classification of adult prophylaxis (01110). It is essential that each patient/client be assessed for their individual needs prior to being treated. Untrained or unlicensed personnel are not qualified to perform this assessment.

Another consideration when distinguishing between the oral prophylaxis and periodontal therapy is that periodontal disease can be either generalized or localized. In other words, a patient/client could have a few areas with disease and an otherwise healthy periodontium. It is questionable that an untrained or unlicensed individual will be able to determine which

areas need the oral prophylaxis and which need therapeutic scaling and root planing. The oral prophylaxis is an integral part of comprehensive dental hygiene care. The dental hygienist must enact the dental hygiene process of care (assessment, diagnosis, planning, implementation, and evaluation) in the context of delivering a thorough oral prophylaxis. Therefore, the oral prophylaxis should not be provided by anyone other than a licensed dental hygienist or dentist who has the ability to employ all components of the dental hygiene process. By allowing unlicensed and untrained personnel to perform dental hygiene services, the public is at risk for poor oral health care.

### **Conclusion**

Dental hygienists are licensed preventive oral health professionals educated to perform educational, clinical, and therapeutic services to the public. Central to dental hygiene practice is the oral prophylaxis that includes removal of supra- and subgingival deposits from the tooth surfaces in order to restore and maintain oral health. Dental hygiene is a profession of complex competencies requiring the practitioner to apply knowledge and skills in making decisions about patient care. The dental hygienist receives extensive education and must pass a national cognitive examination and a state or regional clinical board in order to become licensed. In most states, dental hygienists must meet mandatory continuing education requirements for relicensure. Allowing unlicensed individuals to perform dental hygiene services is placing the health of the public at risk.

The insurance codes for dental hygiene services do not accurately reflect delivery of dental hygiene services. Fraudulent insurance claims and inadequate coverage for patients/clients' are problems inherent in the existing ADA CDT-2 code structure. Additionally, inadequate coverage may lead to patients/clients choosing to forego needed care because their policy will not cover additional therapeutic services. Ultimately, this leads to increased cost for more extensive treatment due to the lack of maintenance care. Reevaluation and restructuring of the current insurance codes is necessary in order to insure that patients/clients receive the comprehensive care they need. Restructuring the ADA CDT-2 codes will assist the oral health care provider to meet the needs of the patient/client while reducing cost to insurance companies.

### **Appendix A**

Existing Definitions for Oral Prophylaxis\*

The removal of plaque, calculus, and stains from the exposed and unexposed surfaces of the teeth by scaling and polishing as a preventive measure for the control of local irritants (American Academy of Periodontology, 1992).

The oral prophylaxis means those specific treatment procedures aimed at removing local irritants to the gingiva, including complete calculus removal with bacterial debridement (Wilkins 1994).

A series of procedures whereby calculus and other accretions are removed from the clinical crowns of the teeth, and the clinical crowns are polished (Zwemer 1993).

\* This is not a comprehensive list of definitions for oral prophylaxis. ADHA acknowledges there may be other existing definitions.

## **Appendix B**

### Insurance Codes Relating to Preventive and Nonsurgical Periodontal Services

01110 prophylaxis--adult A dental prophylaxis performed on transitional or permanent dentition which includes scaling and polishing procedures to remove coronal plaque, calculus and stains. Some patients may require more than one appointment or one extended appointment to complete a prophylaxis. Document need for additional time or appointments.

01120-prophylaxis--child Refers to routine dental prophylaxis performed on primary or transitional dentition only.

04341--periodontal scaling and root planing, per quadrant This procedure involves instrumentation of the crown and root surfaces of the teeth to remove plaque and calculus from these surfaces. It is indicated for patients with periodontal disease and is therapeutic, not prophylactic in nature. Root planing is the definitive procedure designed for the removal of cementum and dentin that is rough, and/or permeated by calculus or contaminated with toxins or microorganisms. Some soft tissue removal occurs. This procedure may be used as a definitive treatment in some stages of periodontal disease and as a part of pre-surgical procedures in others.

04355--full mouth debridement to enable comprehensive periodontal evaluation and diagnosis The removal of subgingival and/or supragingival plaque and calculus that obstructs the ability to perform an oral evaluation. This is a preliminary procedure and does not preclude the need for other procedures.

04910--periodontal maintenance procedures (following active therapy) This procedure is for patients who have completed periodontal treatment (surgical and adjunctive periodontal therapies exclusive of 04355) and includes removal of the bacterial flora from crevicular and pocket areas, scaling and polishing of the teeth, and a review of the patient's plaque control efficiency. Typically, an interval of three months between appointments results in an effective treatment schedule, but this can vary depending on the clinical judgment of the dentist. When new or recurring periodontal disease appears, additional diagnostic and treatment procedures must be considered. Periodic maintenance treatment following periodontal therapy is not synonymous with a prophylaxis.

Source: American Dental Association *\_Current Dental Terminology\_*, Second Edition, 1 995.

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