Oral Health Policies

Policy on Oral Health Care Programs for Infants, Children, and Adolescents

Originating Committee
Dental Care Programs Committee

Review Council
Council on Clinical Affairs

Adopted
1972

Reaffirmed
1999

Revised
1976, 1992, 1995, 2002

Purpose

Unless oral care is included in the design and provision of health care programs for individuals as well as communities, comprehensive health care cannot be achieved.

Background

Oral health can have a significant impact on overall health and well-being. Major themes of the US Surgeon General's Report on Oral Health in America[1] include:

1. "Oral health means much more than healthy teeth."
2. "Oral health is integral to general health."

Policy statement

The American Academy of Pediatric Dentistry (AAPD) emphasizes the importance of prevention, diagnosis, and treatment necessary to restore and maintain the oral health of infants, children, and adolescents. Comprehensive health care cannot be achieved unless dental care is a strong priority in all health service programs.

References

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Policy on the Dental Home

Originating Council
Council on Clinical Affairs

Review Council
Council on Clinical Affairs

Adopted
2001

Revised
2004

Purpose

The American Academy of Pediatric Dentistry (AAPD) supports the concept of a "dental home" for all infants, children, adolescents, and persons with special health care needs. The dental home is inclusive of all aspects of oral health that result from the interaction of the patient, parents, nondental professionals, and dental professionals. Establishment of the dental home is initiated by the identification and interaction of these individuals, resulting in a heightened awareness of all issues impacting the patient's oral health. This concept is derived from the American Academy of Pediatrics' (AAP) definition of a "medical home" which states pediatric primary health care is best delivered where comprehensive, continuously accessible, family-centered, coordinated, compassionate, and culturally effective care is available and delivered or supervised by qualified child health specialists. [1-4]

Methods

This policy is based on a review of the current dental and medical literature related to the establishment of a dental home. A MEDLINE search was conducted using the terms "dental home", "medical home in pediatrics", and "infant oral health care". Expert opinions and best current practices were relied upon when clinical evidence was not available.

Background

The AAP issued a policy statement defining the medical home in 1992.[5] Since that time, it has been shown that health care provided to patients in a medical home environment is more effective and less costly in comparison to emergency care facilities or hospitals.[4-6] Strong clinical evidence exists for the efficacy of early professional dental care complemented with caries-risk assessment, anticipatory guidance, and periodic supervision. The establishment of a dental home may follow the medical home model as a cost-effective and higher quality health care alternative to emergency care situations.

Children who have a dental home are more likely to receive appropriate preventive and routine oral health care. Referral by the primary care physician or health provider has been recommended, based on risk assessment, as early as 6 months of age, 6 months after the first tooth erupts, and no later than 12 months of age.[7-9] Furthermore, subsequent periodicity of reappointment is based upon risk assessment. This provides time-critical opportunities to implement preventive health practices and reduce the child's risk of preventable dental/oral disease.[10]

Policy statement

1. The AAPD encourages parents and other care providers to help every child establish a dental home by 12 months of age.
2. The AAPD recognizes a dental home should provide:[11]
   a. comprehensive oral health care including acute care and preventive services in accordance with AAPD periodicity schedules[12];
   b. comprehensive assessment for oral diseases and conditions;
   c. individualized preventive dental health program based upon a caries-risk assessment[13] and a periodontal disease risk assessment[14];
   d. anticipatory guidance about growth and development issues (ie, teething, digit or pacifier habits);
   e. plan for acute dental trauma;
   f. information about proper care of the child's teeth and gingivae. This would include the prevention, diagnosis, and treatment of disease of the supporting and surrounding tissues and the maintenance of health, function, and esthetics of those structures and tissues;
   g. dietary counseling;
   h. referrals to dental specialists when care cannot directly be provided within the dental home;
   i. education regarding future referral to a dentist knowledgeable and comfortable with adult oral health issues for continuing oral health care; referral at an age determined by patient, parent, and pediatric dentist.
3. The AAPD advocates interaction with early intervention programs, schools, early childhood education and child care programs, members of the medical and dental communities, and other public and private community agencies to ensure awareness of age-specific oral health issues.

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Policy on Child Identification Programs

Originating Council
Council on Clinical Affairs

Adopted
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD), recognizing the role that dental records play in forensic identification, encourages dental practitioners and administrators of child identification programs to implement simple practices that can aid in identification of unknown infants, children, and adolescents. The AAPD recommends that parents establish a "dental home," where clinical data is gathered, stored, and updated routinely and can be made available to assist in identification of missing and/or abducted persons.

Methods

This policy is based on a review of the current dental, medical, and public literature, review of the American Dental Association's (ADA) position on child identification programs, and interviews with forensic odontologists, pathologists, and law enforcement agencies. Often, the literature on dentistry's role in forensic identification of children was based on retrospective case studies and reports in the press. Manuals on forensics,[1,2] utilized by the American Academy of Forensic Science and the American Society of Forensic Odontology, demonstrate the vital role of dentistry in identification of missing and unknown persons.

Background

More than 800,000 children in America are reported missing each year.[3] Since the passage of the Missing Children Act in 1982 and the creation of the National Crime Information Center, the dental profession has provided much of the information used to compare missing persons with the unidentified living and dead.[4] Numerous cases are published in which law enforcement agencies called upon dentistry to provide information that proved vital to the identification process.[5,6] Data found in dental records used for identification purposes has included dental radiographs, facial photographs, study casts, dental histories with up-to-date documentation of teeth present, distinguishing features of oral structures, restorative history documenting restored surfaces and materials used, and bite registrations. In the 1980s, an identification button to be bonded on the buccal surface of the molars was developed, but it never gained widespread acceptance.

Nondental sources of distinguishing information currently include fingerprints, photographs, DNA from blood, saliva, and other tissue, and physical descriptions.[7] Some of these nondental sources have practical limitations. Few children have fingerprint records. DNA sampling, while being state of the art, can be protracted and costly. Dentistry can provide data without many of these limitations.

Many programs have been developed and sponsored by community groups that use various child identification methods. Examples are:

1. Child Identification Program (CHIPS), sponsored by the Masons. This program gathers blood samples to use for DNA fingerprinting.[8]
2. The National Child Identification Program, sponsored by the American Football Coaches Association with the Optimist International and Clear Channel Int. They use an identification card which includes fingerprints, a physical description, photographs, and the physician's office address/telephone number. Recognized in 2001 by US Congressional Resolution 100, they have a stated goal of making records for 60 million children.[3]
3. New England Kids Identification System (K.I.D.S.) sponsored by the Massachusetts Free Masons and the Massachusetts Dental Society, which incorporated dental bite registrations into the CHIPS events.[9]

In 1985, the ADA adopted a resolution that stated "The ADA encourages dental societies, related dental organizations, and the membership to participate in efforts designed to assist in identifying missing and/or deceased individuals through dental records and other appropriate mechanisms."[10]

Policy statement

The AAPD recognizes the importance of dentistry's role in the provision of data for identification of missing and/or deceased children. Any community identification program should include a dental component documenting the child's dental home[11] and encouraging consistent dental visits. The first dental visit should be within 6 months of the eruption of the first primary tooth and no later than 12 months of age.[12] A detailed dental record, updated at recall appointments, economically establishes an excellent database of confidential, state-of-the-art child identification information that can be retrieved easily, stored safely, and updated properly. The dental record may contain a thorough description of the oral cavity documenting all anomalies, a record of restorative care delivered including materials used, appropriate dental radiographs,[13] photographs, study casts, and bite registration.

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Policy on Mandatory School-entrance Oral Health Examinations

Originating Council
Council on Clinical Affairs

Adopted
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) encourages policy makers, public health and education officials, and the dental community to recognize that poor oral health can affect a child's ability to learn. An oral examination prior to matriculation into school could improve school readiness by providing a timely opportunity for diagnosis and treatment of oral conditions.

Methods

This policy is based on a review of current dental and medical literature, including the US Surgeon General's report "Oral Health in America",[1] as well as policies and guidelines established by stakeholders in the health and education of our nation's children. Data is not available to determine the effectiveness of various approaches by states that currently encourage school-entry dental examinations.

Background

Professional care is necessary to maintain oral health.[1] The AAPD "emphasizes the importance of very early professional intervention and the continuity of care based on the individualized needs of the child."[2] The American Academy of Pediatrics recommends that, beginning at age 3, a child's comprehensive health assessment should include attention to problems that might influence school achievement.[3] General health examinations prior to school entrance are mandated by many states. Integration of general health and oral health care programs is lacking.[1] Only 3 states and Washington, DC require a dental examination prior to school matriculation. In the United States, many children have not received a professional oral health assessment prior to entering kindergarten.[1] While laws may not guarantee that every child will be examined by a dentist, they do increase the likelihood of this happening.

Caries is the most common chronic disease of childhood.[1] Caries and gingivitis can be prevented and eradicated, but not everyone is aware of the measures necessary to do so. More than one third of the population of the United States does not benefit from community water fluoridation.[1,4] Because the use of fluoride contributes to the prevention, inhibition, and reversal of caries,[5,6] early determination of a child's systemic and topical fluoride exposure is important. A "dental home" provides the necessary diagnostic, preventive, and therapeutic practices, as well as ongoing risk assessment and education, to improve and maintain the oral health of infants, children, and adolescents.[7,8] To maximize effectiveness, the dental home should be established within 6 months of eruption of a child's first tooth and no later than his/her first birthday.[9]

The public's lack of awareness of the importance of oral health is a major barrier to dental care.[1] Oral health is integral to general health. Oral conditions can interfere with eating and adequate nutritional intake, speaking, self-esteem, and daily activities.[10] Children with early childhood caries may be severely underweight because of associated pain and the disinclination to eat. Nutritional deficiencies during childhood can impact cognitive development.[10,11] Rampant caries is one of the factors causing insufficient development in children who have no other medical problems.[12] Unrecognized disease and postponed care result in exacerbated problems, which lead to more extensive and costly treatment needs. Early recognition and intervention could result in savings of health care dollars for individuals, community health care programs, and third-party payors.

The National Association of State Boards of Education recognizes "health and success in school are interrelated. Schools cannot achieve their primary mission of education if students and staff are not healthy and fit physically, mentally, and socially."[13] Children with dental pain may be irritable, withdrawn, or unable to concentrate. Pain can affect test performance as well as school attendance.[10] In 1996, students aged 5 to 17 missed an average of 3.1 days/100 students due to acute dental problems.[10] When these problems are treated and children no longer are experiencing pain, their learning and school attendance improve.[10]

According to the US Surgeon General, "a national public health plan for oral health does not exist."[14] Profiles on state and local populations, although rarely available, are necessary for planning oral health care programs. Descriptions of requirements for oral health examinations (oral health indicators), implementation/enforcement of regulations, and administrative disposition of collected data vary both among and within states that encourage dental examinations prior to school matriculation.

Policy statement

Early detection and management of oral conditions can improve a child's oral health, general health and well-being, and

school readiness. Recognizing the relationship between oral health and education, the AAPD supports legislation mandating a comprehensive oral health examination by a qualified dentist for every student prior to matriculation into school. The examination should be performed in sufficient detail to command respect and with appropriate consideration to provide an educational experience for both the child and the parent/guardian. Because a child's risk for developing dental disease changes, and oral diseases are cumulative and progressive, the AAPD also supports such legislation to include subsequent comprehensive oral examinations at periodic intervals throughout the educational process. In addition, the AAPD encourages state and local public health and education officials, along with other stakeholders, such as health care providers and dental/medical organizations, to document oral health needs, work toward improved oral health and school readiness for all children, and address related issues such as barriers to oral health care. The AAPD recognizes that, without appropriate follow-up care, requiring oral health examinations is insufficient to ensure school readiness. Thus, the AAPD encourages local leaders to establish a referral system to help parents/guardians obtain needed oral health care for their children. The AAPD opposes regulations that would prevent a child from attending school due to noncompliance with mandated examinations.

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Policy on Emergency Oral Care for Infants, Children, and Adolescents

Originating Committee
Policy and Review Committee

Review Council
Council on Clinical Affairs

Adopted
1976

Reaffirmed
1996

Revised
1993, 2000, 2003

The American Dental Association's Principles of Ethics and Code of Professional Conduct state that emergency care is an essential duty of every dentist.[1]

A dentist who accepts an infant, child, or adolescent as a patient of record shall make reasonable arrangements for emergency oral/dental care, along with providing instructions to the parent/guardian for accessing emergency care. When consulted in an emergency by patients not of record, the dentist should make reasonable arrangements for emergency care.

References

1. American Dental Association. *Principles of Ethics and Code of Professional Conduct.* Available at: http://www.ada.org/prof/prac/law/code/index.asp.

Policy on Use of a Caries-risk Assessment Tool (CAT) for Infants, Children, and Adolescents

Originating Council
Council on Clinical Affairs

Adopted
2002

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that caries-risk assessment is an essential element of contemporary clinical care for infants, children, and adolescents.

Background

Over the past 15 years, strategies for managing dental caries increasingly have emphasized the concept of risk assessment.[1-5] However, a practical tool for assessing caries risk in infants, children, and adolescents has been lacking. While assessment of caries risk undoubtedly will benefit from emerging science and technologies, the AAPD believes that sufficient evidence exists to support the creation of a framework for classifying caries risk in infants, children, and adolescents based on a set of physical, environmental, and general health factors.[6-8]

The table on page 27 represents a first step toward incorporating available evidence into a concise, practical tool to assist both dental and nondental health care providers in assessing levels of risk for caries development in infants, children, and adolescents. The AAPD intends this to be a dynamic instrument that will be evaluated and revised periodically as new evidence warrants.

Clinicians using this tool should:

1. be able to visualize adequately a child's teeth and mouth and have access to a reliable historian for nonclinical data elements;
2. assess all 3 components of caries risk–clinical conditions, environmental characteristics, and general health conditions;
3. be familiar with footnotes that clarify use of individual factors in this instrument;
4. understand that each child's ultimate risk classification is determined by the highest risk category where a risk indicator exists (ie, the presence of a single risk indicator in any area of the "high-risk" category is sufficient to classify a child as being at "high risk;" the presence of at least 1 "moderate-risk" indicator and no "high-risk" indicators results in a "moderate-risk" classification; and a child designated as "low risk" would have no "moderate-risk" or "high-risk" indicators).

Users of the AAPD caries-risk assessment tool (CAT) must understand the following caveats:

1. CAT provides a means of classifying dental caries risk at a point in time and, therefore, should be applied periodically to assess changes in an individual's risk status.
2. CAT is intended to be used when clinical guidelines call for caries-risk assessment. Decisions regarding clinical management of caries, however, are left to qualified dentists (ideally, the dentist responsible for the child's "dental home").
3. CAT can be used by both dental and nondental personnel. It does *not* render a diagnosis. However, clinicians using CAT must be familiar with the clinical presentation of dental caries and factors related to caries initiation and progression.
4. Since clinicians with various levels of skill working in a variety of settings will use this instrument, advanced technologies, such as radiographic assessment and microbiologic testing (shaded areas), have been included but are not essential for using this tool.

Policy statement

The AAPD:

1. encourages both dental and nondental health care providers to use CAT in the care of infants, children, and adolescents;
2. encourages dentists to use advanced technologies such as radiographic assessment and microbiologic testing with CAT when assessing an individual's caries risk;
3. recognizes the need to evaluate CAT periodically and revise the tool as new science and technologies warrant.

References

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AAPD Caries-risk Assessment Tool (CAT)

Caries-risk indicators	Low risk	Moderate risk	High risk
Clinical conditions			
	• No carious teeth in past 24 months	• Carious teeth in the past 24 months	• Carious teeth in the past 12 months
	• No enamel demineralization (enamel caries "white-spot lesions")	• 1 area of enamel demineralization (enamel caries "white-spot lesions")	• More than 1 area of enamel demineralization (enamel caries "white-spot lesions")
	• No visible plaque; no gingivitis	• Gingivitis*	• Visible plaque on anterior (front) teeth
			• Radiographic enamel caries
			• High titers of mutans streptococci
			• Wearing dental or orthodontic appliances†
			• Enamel hypoplasia‡
Environmental characteristics			
	• Optimal systemic and topical fluoride exposure§	• Suboptimal systemic fluoride exposure with optimal topical exposure§	• Suboptimal topical fluoride exposure§
	• Consumption of simple sugars or foods strongly associated with caries initiation primarily at mealtimes‖	• Occasional (ie, 1-2) between-meal exposures to simple sugars or foods strongly associated with caries	• Frequent (ie, 3 or more) between-meal exposures to simple sugars or foods strongly associated with caries
	• High caregiver socioeconomic status¶	• Midlevel caregiver socioeconomic status (ie, eligible for school lunch program or SCHIP)	• Low-level caregiver socioeconomic status (ie, eligible for Medicaid)
	• Regular use of dental care in an established dental home	• Irregular use of dental services	• No usual source of dental care
			• Active caries present in the mother
General health conditions			
			• Children with special health care needs#
			• Conditions impairing saliva composition/flow**

*Although microbial organisms responsible for gingivitis may be different than those primarily implicated in dental caries, the presence of gingivitis is an indicator of poor or infrequent oral hygiene practices and has been associated with caries progression.

†Orthodontic appliances include both fixed and removable appliances, space maintainers, and other devices that remain in the mouth continuously or for prolonged time intervals and which may trap food and plaque, prevent oral hygiene, compromise access of tooth surfaces to fluoride, or otherwise create an environment supporting dental caries initiation.

‡Tooth anatomy and hypoplastic defects, such as poorly formed enamel, developmental pits, and deep pits, may predispose a child to develop dental caries.

§Optimal systemic and topical fluoride exposure is based on the American Dental Association/American Academy of Pediatrics guidelines for exposure from fluoride drinking water and/or supplementation[4] and use of a fluoride dentifrice.

‖Examples of sources of simple sugars include carbonated beverages, cookies, cake, candy, cereal, potato chips, French fries, corn chips, pretzels, breads, juices, and fruits. Clinicians using caries-risk assessment should investigate individual exposures to sugars known to be involved in caries initiation.

¶National surveys have demonstrated that children in low-income and moderate-income households are more likely to have dental caries and more decayed or filled primary teeth than children from more affluent households. Also, within income levels, minority children are more likely to have caries. Thus, sociodemographic status should be viewed as an initial indicator of risk that may be offset by the absence of other risk indicators.

#Children with special health care needs are those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.[9]

**Alteration in salivary flow can be the result of congenital or acquired conditions, surgery, radiation, medication, or age-related changes in salivary function. Any condition, treatment, or process known or reported to alter saliva flow should be considered an indication of risk unless proven otherwise.

Policy on Use of Fluoride

Originating Committee
Liaison with Other Groups Committee

Review Council
Council on Clinical Affairs

Adopted
1967

Reaffirmed
1977

Revised
1978, 1995, 2000, 2001, 2003

Purpose

The American Academy of Pediatric Dentistry (AAPD), affirming that fluoride is a safe and effective adjunct in reducing the risk of caries and reversing enamel demineralization, encourages public health officials, health care providers, and parents/caregivers to optimize fluoride exposure.

Methods

The current literature on systemic and topical fluoride, as well as information from the American Dental Association (ADA) 2002 House of Delegates, was reviewed.

Background

The adjustment of the fluoride level in community water supplies to optimal concentration is the most beneficial and inexpensive method of reducing the occurrence of caries.[1] Alternate means of fluoride administration are less beneficial, but are effective and economical. Epidemiologic data within the last half-century indicate reductions in caries of 55% to 60%, without significant dental fluorosis, when domestic water supplies are fluoridated at an optimal level. The costs of health care are of critical concern to the profession of dentistry, and evidence accumulated from long-term use of fluorides has demonstrated that the cost of oral health care for children can be reduced by as much as 50%.[2] These savings in health dollars accrue to private individuals, group purchasers, and government care programs. An even higher caries reduction can be obtained if the proper use of fluorides is combined with other dietary, oral hygiene, and preventive measures,[3-5] as prescribed by a dentist familiar with the child's oral health and family history.

A large body of literature supports the incorporation of optimal fluoride levels in drinking water supplies. When fluoridation of drinking water is impossible, effective systemic fluoridation can be achieved through the intake of daily fluoride supplements. Before supplements are prescribed, it is essential to review all dietary sources of fluoride (eg, all drinking water sources, consumed beverages, prepared food, toothpaste) to determine the patient's true exposure to fluoride.[1,6-8] Significant cariostatic benefits can be achieved by the use of fluoride-containing preparations such as toothpastes, gels, and rinses, especially in areas without water fluoridation.[9] Topical fluoride-containing products must be used with caution in young children to prevent ingestion of excessive amounts of fluoride.[10]

A number of clinical trials have confirmed the anticaries effect of a 5% neutral sodium fluoride varnish.[11,12] Fluoride varnishes can prevent or reverse enamel demineralization. In children with moderate to high caries risk, fluoride varnishes[11,12] and fluoride-releasing restorative and bonding materials[13] have been shown to be beneficial and are best utilized as part of a comprehensive preventive program in the "dental home".[14,15]

Policy statement

1. The AAPD endorses and encourages the adjustment of fluoride content of domestic community water supplies where feasible.
2. Whenever water fluoridation is not feasible, the AAPD endorses the supplementation of a child's diet with fluoride according to the dose schedule approved by the American Dental Association Council on Scientific Affairs (see Dietary Fluoride Supplementation Schedule under Clinical Guideline on Fluoride Therapy[8]).
3. Efforts will be made by the AAPD and its members to inform medical peers of the potential hazard of enamel fluorosis when fluoride supplements are given in excess of the recommended amounts.
4. The AAPD will exert efforts to foster continued research on dental fluorosis.
5. The AAPD does not support the use of prenatal fluoride supplements.
6. The AAPD recommends an individualized patient caries-risk assessment to determine the use of fluoride-containing products as specified in the Policy on Use of a Caries-risk Assessment Tool (CAT) for Infants, Children and Adolescents[16] and Clinical Guideline on Fluoride Therapy.[8]
7. The AAPD encourages the continued research on safe and effective fluoride products, including restorative materials.

8. The AAPD supports the delegation of fluoride application to auxiliary dental personnel, or other trained allied health professionals, by prescription or order of a qualified dentist, after a comprehensive oral examination has been performed.
9. The AAPD endorses ADA 2002 House of Delegates Resolution 67H to encourage labeling of bottled water with the fluoride concentration and company contact information.[17] The resolution also supports including information with each home water treatment system on the system's effects on fluoride levels.

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Policy on Alternative Restorative Treatment (ART)

Originating Council
Council on Clinical Affairs

Review Council
Council on Clinical Affairs

Adopted
2001

Revised
2004

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that unique clinical circumstances can result in challenges in restorative care for infants, children, adolescents, and persons with special health care needs. When circumstances do not permit traditional cavity preparation and/or placement of traditional dental restorations, use of an alternative restorative treatment (ART)[1] may be beneficial.

Methods

This policy is based upon a review of current dental literature. A MEDLINE search was performed using key words "dental caries", "atraumatic restorative treatment", and "glass ionomer cement".

Background

Alternative restorative treatment, formerly known as atraumatic restorative treatment, is defined as "a dental caries treatment procedure involving the removal of soft, demineralized tooth tissue using hand instrument alone, followed by restoration of the tooth with an adhesive restorative material, routinely glass ionomer".[2] This technique may be modified by the use of rotary instruments. It has been endorsed by the World Health Organization and the International Association for Dental Research as a means of restoring and preventing caries. ART may be used to restore and prevent caries in young patients, uncooperative patients, or patients with special health care needs or when traditional cavity preparation and/or placement of traditional dental restorations are not feasible.

Success rates for ART restorations depend on the material used, training of the operator, and extent of caries.[3-7] Glass ionomer cement is the material of choice for ART because of its bonding to enamel and dentin, fluoride release, and ease of use.[8,9] Resin-modified glass ionomer material has been shown to have a higher success rate than low-viscosity glass ionomer cements due to increased strength and greater resistance to loss.[5,8,10] ART has the greatest success when applied to single surface or small 2 surface restorations. Inadequate cavity preparation with subsequent lack of retention and insufficient bulk can lead to failure.[5] Use of a slow-speed rotary instrument may be indicated to enhance cavity preparation and restorative retention. Follow-up care with topical fluorides and oral hygiene instruction improve the treatment outcome of high caries-risk dental populations.

Policy statement

The AAPD recognizes ART as an acceptable treatment for the management of caries when traditional cavity preparation and/or placement of traditional dental restorations are not possible.

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Policy on Early Childhood Caries (ECC): Classifications, Consequences, and Preventive Strategies

Originating Group
A collaborative effort of the American Academy of Pediatric Dentistry and the American Academy of Pediatrics

Review Council
Council on Clinical Affairs

Adopted
1978

Revised
1993, 1996, 2001, 2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes early childhood caries (ECC; formerly termed baby bottle tooth decay) as a significant public health problem.[1] The AAPD encourages oral health care providers and caregivers to implement simple preventive practices that can decrease a child's risks of developing this devastating disease.

Methods

This policy is based on a review of the current pediatric dental, medical, and public health literature related to ECC, including the proceedings of the 1997 Conference on Early Childhood Caries, Bethesda, Md.[1]

The literature includes studies that used sound scientific methodology, were reported in refereed journals, and are accepted by the dental profession as state of the art in caries causes and prevention. The literature on the consequences of ECC is based on both prospective and retrospective clinical studies that followed accepted clinical protocols.

Background

ECC is defined as "the presence of 1 or more decayed (noncavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces" in any primary tooth in a child 71 months of age or younger.[2,3] In children younger than 3 years of age, any sign of smooth-surface caries is indicative of severe early childhood caries (S-ECC). From ages 3 through 5, 1 or more cavitated, missing (due to caries), or filled smooth surfaces in primary maxillary anterior teeth or a decayed, missing, or filled score of ≥4 (age 3),≥5 (age 4), or ≥6 (age 5) surfaces constitutes S-ECC.[4]

Carious lesions are produced from the interaction of 3 variables: (1) cariogenic microorganisms (mutans streptococci); (2) fermentable carbohydrates (sucrose); and (3) teeth (nonshedding tooth surfaces).[5] Given the proper time, these variables induce incipient carious lesions that continue to progress.[5] Frequent consumption of liquids containing fermentable carbohydrates (eg, juice, milk, formula, soda) increases the risk of caries due to prolonged contact between sugars in the consumed liquid and cariogenic bacteria on the susceptible teeth.[6] Frequent bottle feeding at night, breast-feeding on demand, and extended and repetitive use of a no-spill training cup are associated with, but not consistently implicated in, ECC. The major reservoir from which infants acquire mutans streptococci is their mother's saliva.[5,7] The success of the transmission and resultant colonization of maternal mutans streptococci depends largely on the magnitude of the innoculum.[8] Infants and toddlers whose mothers have high levels of mutans streptococci, a result of untreated caries, are at greater risk of acquiring the organism than children whose mothers have low levels. Consequently, it has been shown that suppressing maternal reservoirs of mutans streptococci via dental rehabilitation and antimicrobial treatments can prevent or delay infant inoculation.[9]

Consequences of ECC include a higher risk of new carious lesions in both the primary and permanent dentitons,[10-15] hospitalizations and emergency room visits,[16-19] increased treatment costs and time,[20,21] insufficient physical development (especially in height/weight),[22,23] loss of school days and increased days with restricted activity,[24-26] diminished ability to learn,[24,27-30] and diminished oral health-related quality of life.[31-34]

Policy statement

The AAPD recognizes a distinctive pattern of caries, known as ECC, associated with frequent or prolonged consumption of liquids containing fermentable carbohydrates. To decrease the risks of this potentially devastating pattern of caries, the AAPD discourages inappropriate feeding practices of infants and toddlers and encourages appropriate preventive measures. These include:

1. Infants should not be put to sleep with a bottle. Ad libitum nocturnal breast-feeding should be avoided after the first primary tooth begins to erupt.

2. Parents should be encouraged to have infants drink from a cup as they approach their first birthday. Infants should be weaned from the bottle at 12 to 14 months of age.
3. Repetitive consumption of any liquid containing fermentable carbohydrates from a bottle or no-spill training cup should be avoided.
4. Oral hygiene measures should be implemented by the time of eruption of the first primary tooth.
5. An oral health consultation visit within 6 months of eruption of the first tooth and no later than 12 months of age is recommended to educate parents and provide anticipatory guidance for prevention of dental disease.
6. An attempt should be made to assess and decrease the mother's/primary caregiver's mutans streptococci levels to decrease the transmission of cariogenic bacteria and lessen the infant's or child's risk of developing ECC.

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Policy on Early Childhood Caries (ECC): Unique Challenges and Treatment Options

Originating Council
Council on Clinical Affairs

Review Council
Council on Clinical Affairs

Adopted
2000

Revised
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD), to promote appropriate, quality oral health care for infants and children with early childhood caries (ECC), must educate the health community and society about the unique challenges and treatment options of this disease. This policy will not attempt to duplicate information found in the AAPD's Clinical Guideline on Infant Oral Health Care.[1]

Methods

The proceedings of the Conference on Early Childhood Caries held in Bethesda, Md in October, 1997 were reviewed. A MEDLINE search was conducted using the terms "early childhood caries", "nursing caries", and "bottle caries".

Background

ECC is defined as "the presence of 1 or more decayed (noncavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces" in any primary tooth in a child 71 months of age or younger.[2] In children younger than 3 years of age, any sign of smooth-surface caries is indicative of severe early childhood caries (S-ECC). From ages 3 through 5, 1 or more cavitated, missing (due to caries), or filled smooth surfaces in primary maxillary anterior teeth, or a decayed, missing, or filled score of $\geq$4 (age 3), $\geq$5 (age 4), or $\geq$6 (age 5) surfaces constitutes S-ECC.[2]

ECC, a serious public health problem, is prevalent in low socioeconomic groups but also is found in the general population. It can be a particularly virulent form of caries, beginning soon after dental eruption, developing on smooth surfaces, progressing rapidly, and having a lasting detrimental impact on the dentition. Children experiencing caries as infants or toddlers have a much greater probability of subsequent caries in both the primary and permanent dentitions.[3,4] Not only does ECC affect teeth, but consequences of this disease may lead to more widespread health issues.[5] Infants with ECC grow at a slower pace than caries-free infants. Some young children with ECC may be severely underweight because of associated pain and the disinclination to eat.

Prevention of ECC begins with intervention in the prenatal and perinatal periods.[6] Women should be advised to optimize nutrition during the third trimester and the infant's first year, when enamel is undergoing maturation. Enamel hypoplasia is common in children with low birthweight or systemic illness in the neonatal period.[7,8] There is considerable presumptive evidence that malnutrition/undernutrition during the perinatal period causes hypoplasia.[9] A consistent association exists between clinical hypoplasia and ECC.[7,10] Cariogenic bacteria (specifically mutans streptococci) may be transmitted to the child; decreasing the mother's/primary caregiver's mutans streptococci levels may decrease the child's risk of developing ECC.[5,11-13]

Frequent bottle feeding at night, breast-feeding upon demand, and extended and repetitive use of a no-spill training cup are associated with, but not consistently implicated in, ECC.[14] Because poor feeding practices alone will not cause caries, previously used terms such as "baby bottle tooth decay," "bottle mouth," and "nursing decay" are misleading. ECC is a term that better reflects the multifactorial etiologic process.

When very young children have not been the beneficiaries of adequate preventive care and, subsequently, develop ECC, therapeutic intervention should be provided by a practitioner with the training, experience, and expertise to manage both the child and the disease process. Because of the aggressive nature of ECC, treatment should be definitive yet specific for each individual patient. Conventional restorative approaches may not arrest the disease.[15] Areas of decalcification and hypoplasia can rapidly develop cavitation. The use of anticariogenic agents may reduce the risk of development and progression of caries. Alternative restorative treatment (ART) techniques, using materials such as glass ionomers that release fluoride, hold promise as both preventive and therapeutic approaches.[15] Aggressive therapy, including the placement of stainless steel crowns, may be necessary to arrest the carious process. Stainless steel crowns decrease the number of tooth surfaces at risk for new or secondary caries and are less likely than other restorations to require retreatment.[16,17] Low levels of compliance with follow-up

care and a high recidivism rate of children requiring additional treatment can also influence a practitioner's decision for more aggressive restorative approaches to ECC.

The extent of the disease process as well as the patient's developmental level and comprehension skills affect the practitioner's behavior management approaches. To perform treatment effectively and efficiently while instilling a positive dental attitude, the practitioner caring for a child with ECC often must employ advanced behavior management techniques. These may include medical immobilization and/or sedation or general anesthesia. The success of restorations may be influenced by the child's response to the chosen behavior management technique. Although general anesthesia may provide optimal conditions to perform restorative procedures, it can add significantly to the cost of care. General anesthesia, under certain circumstances, may offer a cost-saving alternative to sedation for children with ECC.[18]

Policy statement

The AAPD recognizes the unique and virulent nature of ECC. Dentists who diagnose ECC should either provide therapy or refer the patient to an appropriately trained individual for treatment. Immediate intervention is necessary to prevent further dental destruction, as well as more widespread health problems. Because children who experience ECC are at greater risk for subsequent caries development, aggressive preventive and therapeutic measures such as ART, regimented applications of topical fluoride, and full crown coverage often are necessary. The dental care provider must assess the patient's developmental level and comprehension skills, as well as the extent of the disease process, to determine the need for advanced behavior management techniques such as medical immobilization, sedation, or general anesthesia.

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Policy on Dietary Recommendations for Infants, Children, and Adolescents

Originating Committee
Clinical Affairs Committee

Review Council
Council on Clinical Affairs

Adopted
1993

Revised
1999, 2002

Purpose

Dietary choices affect oral health as well as general health and well being. The American Academy of Pediatric Dentistry (AAPD) recognizes its role in promoting balanced, low caries-risk diets for infants, children, adolescents, and persons with special health care needs.

Background

Dental caries and its sequelae are among the most prevalent health problems facing American infants, children, and adolescents. Frequent ingestion of sugars and other carbohydrates and prolonged contact of these substances with teeth are particular risk factors in the development of dental caries. Increased consumption of soft drinks and snack foods also may negatively impact overall health by displacing food with higher nutritional value. The Surgeon General warns of severe increase in the incidence of overweight children and adolescents in the United States. The prevalence of overweight adolescents has nearly tripled in the past 2 decades.[1]

"Risk factors for heart disease and Type II diabetes occur with increased frequency in overweight children and adolescents."[1] To help the public make choices for a healthy diet, the US Department of Agriculture and the Department of Health and Human Services published Dietary Guidelines for Americans. These guidelines include eating a variety of foods; balancing foods eaten with physical activity to maintain a healthy weight; choosing a diet with plenty of vegetables, fruits and grains and low in fat, saturated fat, and cholesterol; and using sugars, salt, and sodium in moderation.[2]

Policy statement

The AAPD, in its efforts to promote optimal health for infants, children, and adolescents, recommends:

1. Pediatric dentists should educate the public about the association between frequent consumption of carbohydrates and dental caries and encourage monitoring the presence and relative amount of carbohydrates as listed on food labels.
2. Pediatric dentists should provide dietary counseling in conjunction with other preventive services for their patients.
3. School health education programs and food services should promote balanced, low caries-risk diets.
4. Research, education, and appropriate legislation to promote diverse and balanced diets should be supported.

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Policy on Beverage Vending Machines in Schools

Originating Council
Council on Clinical Affairs

Adopted
2002

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that targeted marketing to and easy access to sweetened, acidulated carbonated, and noncarbonated beverages by children and adolescents may result in their increased consumption which, in turn, may contribute to increased caries risk and negatively influence overall nutrition and health.

Background

There has been a reduction in untreated dental caries among certain demographic levels of children and adolescents in recent years.[1] However, frequent consumption of sugars in any beverage can be a significant factor in the child and adolescent diet that contributes to the initiation and progression of dental caries.[2] Additionally, the acids present in these beverages can have a greater deleterious effect (erosion) on enamel than the acids generated by oral flora from the sugars present in the drinks.[3] Many soft drinks* also contain significant amounts of caffeine which, if consumed regularly, may lead to increased, even habitual, usage.[4]

Increased consumption of soft drinks may have a negative impact on children's and adolescents' overall nutrition by displacing foods with higher nutritional value.[5] As teens have increased their consumption of soft drinks, their consumption of milk has decreased by 40%, which may contribute to a decrease in bone density, subsequent increase in fractures, and future risk of osteoporosis.[6] Increased ingestion of sweetened drinks also has been linked to the increased incidence of childhood obesity.[7]

Many beverage products are targeted specifically and aggressively at the child and adolescent market. Vending machines containing these beverages are readily accessible to children and adolescents in schools. In exchange for money to the individual school or districts, "pouring rights contracts" give beverage companies exclusive rights to sell their products at school events and place vending machines on school property, along with other measures that increase student exposure to the beverages.[8-10]

Policy statement

The AAPD:

1. encourages collaboration with other dental and medical organizations, education officials, parent and consumer groups, and corporations to increase public awareness of the effects of frequent and/or inappropriate intake of sweetened carbonated and noncarbonated drinks on infant, child, and adolescent oral health, nutrition, and general health;
2. opposes any arrangements that may decrease access to healthy beverage choices for children and adolescents;
3. encourages school officials and parent groups to consider the importance of maintaining healthy choices in vending machines in schools and encouraging the promotion of beverages of high nutritional value; cans should be preferred over bottles of soft drinks since they cannot be recapped for convenient later consumption throughout the day; bottled water always should be available at the same place that soft drinks are offered;
4. promotes educating and informing the public about the importance of good oral hygiene and nutritional habits as they pertain to soft drink consumption.

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*For the purposes of this statement, the term soft drink refers to such beverages as sodas, fruit juices and sports drinks

Policy on Oral Habits

Originating Council
Council on Clinical Affairs

Review Council
Council on Clinical Affairs

Adopted
2000

Revised
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that an infant's, child's, or adolescent's well-being can be affected by oral habits and encourages health practitioners to take an individualized approach in the management of these habits.

Methods

This policy was based on a MEDLINE search using the keywords "oral habits", "bruxism", "tongue thrusting", and "self-injurious habits".

Background

Oral habit behaviors include, among others, digit sucking, pacifier sucking, lip sucking and biting, nail-biting, bruxism, self-injurious habits, mouth breathing, and tongue thrust. Nonnutritive sucking behaviors (eg, finger or pacifier sucking) are considered normal in infants and young children and usually are associated with their need to satisfy the urge for contact and security.

Because persistent nonnutritive sucking habits may result in long-term problems, professional evaluation has been recommended for children beyond the age of 3 years, with subsequent intervention to cease the habit initiated if indicated.[1]

Bruxism, defined as the habitual, nonfunctional, forceful contact between occlusal tooth surfaces, can occur while awake or asleep. The etiology is multifactoral and has been reported to include central factors (eg, emotional stress,[2] parasomnias,[3] traumatic brain injury,[4] neurologic disabilities[5]) and morphologic factors (eg, malocclusion,[6] muscle recruitment[7]). Reported complications include dental attrition, headaches, temporomandibular joint dysfunction, and soreness of the masticatory muscles.[3] Preliminary evidence suggests that juvenile bruxism is a self-limiting condition that does not progress to adult bruxism.[8] The spectrum of bruxism management ranges from patient/parent education, occlusal splints, and psychological techniques to medications.[4,9,10]

Tongue thrusting, an abnormal tongue position and deviation from the normal swallowing pattern, and mouth breathing may be associated with anterior open bite, abnormal speech, and anterior protrusion of the maxillary incisors.[11] Management may consist of simple habit control, myofunctional therapy, habit appliances, orthodontics, and possible surgery.[12,13]

Self-injurious or self-mutilating behavior, repetitive acts that result in physical damage to the individual, is extremely rare in the normal child.[14] However, such behavior has been associated with mental retardation, psychiatric disorders, developmental disabilities, and some syndromes.[15] The spectrum of treatment options for developmentally disabled individuals includes pharmacologic management, behavior modification, and physical restraint.[15] Reported dental treatment modalities include, among others, lip-bumper and occlusal bite appliances, protective padding, and possible extractions.[14] Some habits, such as lip licking and lip pulling, are relatively benign habits in relation to an effect on the dentition.[14] More severe lip and tongue biting habits may be associated with profound neurodisability due to severe brain damage.[16] Management options include monitoring the lesion, odontoplasty, providing a bite-opening appliance, or extracting the teeth.[16]

Oral habits are associated with dentoalveolar and/or skeletal deformation in some patients. The amount of dentoalveolar-skeletal deformation is related to the frequency, duration, direction, and intensity of certain habits and should be assessed by the dentist. Changes that can occur to the dentoalveolar structures may include anterior or posterior open bite, interference of normal tooth position and eruption, alteration of bone growth, and cross bites. The dentist can provide the patient and parent/guardian with information regarding consequences of a habit. Treatment modalities to control habits may include patient/parent counseling, behavior modification techniques, myofunctional therapy, and appliance therapy.

Policy statement

1. The AAPD supports the individualized approach for each child in evaluating oral habits.
2. Where appropriate, the AAPD encourages treatment of oral habits to prevent or intercept possible malocclusion or skeletal dysplasia from occurring.
3. The AAPD supports intervention for bruxism when the habit is of sufficient persistence, duration, or intensity to damage the permanent teeth or cause other complications which affect the child's well-being.

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Policy on Tobacco Use

Originating Council
Council on Clinical Affairs

Review Council
Council on Clinical Affairs

Adopted
2000

Revised
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD), in order to reduce pain, disability, and death caused by nicotine addiction, recommends routine screening for tobacco use, treating tobacco dependence, preventing tobacco use among children and adolescents, and educating the public on the enormous health and societal costs of tobacco.

Methods

This policy revision is based upon a review of the most current publications and Web sites of numerous health care organizations.

Background

Tobacco use, principally cigarette smoking, remains the leading preventable cause of disease and premature death in the United States and imposes substantial health-related and economic costs to society.[1-5] Approximately one third of all tobacco users in this country will die prematurely because of their dependence on tobacco and their addiction to nicotine.[1] Significant oral, dental, and systemic health consequences associated with all forms of tobacco use (ie, cigarettes, cigars, smokeless [spit] tobacco, pipes) are well documented in the literature. Such consequences include oral cancer, periodontal disease, cardiovascular disease, pulmonary diseases, and lung cancer.[5-9] Smoking during pregnancy is associated with adverse outcomes, including low birth-weight, intrauterine growth retardation, and infant morbidity and mortality, as well as negative consequences for child health and development.[1,5,10-12] Recent studies have concluded exposure to environmental tobacco smoke (ETS; eg, second-hand or sidestream smoke and passive smoking) also presents serious health hazards including cancer and heart disease in healthy nonsmokers.[2,4,5,13,14] Infants and children exposed to ETS have higher rates of lower respiratory illness, middle ear infections, asthma, and caries in the primary dentition and are at increased risk for sudden infant death syndrome (SIDS).[2,4,5,12-16]

Smoking and smokeless tobacco use almost always are initiated and established in adolescence. The earlier that children and adolescents begin using tobacco, the more likely they will become highly addicted and continue using as adults.[2] If current tobacco use patterns continue in the United States, an estimated 5 million persons now under the age of 18 will die prematurely from a tobacco-related illness.[2,5] Each year in the United States, tobacco kills more citizens than alcohol, cocaine, heroin, homicide, suicide, car accidents, fire, and autoimmune deficiency syndrome (AIDS) combined.[2]

Policy statement

The AAPD opposes the use of all forms of tobacco including cigarettes, pipes, cigars, and smokeless tobacco and alternative nicotine delivery systems (ANDS), such as tobacco lozenges, nicotine water, nicotine lollipops, or "heated tobacco" cigarette substitutes.[1] The AAPD supports national, state, and local legislation that would eliminate tobacco advertising and promotions that appeal to or influence children, adolescents, or special groups. The AAPD supports prevention efforts through merchant education and enforcement of state and local laws prohibiting tobacco sales to minors. As ETS is a "known human carcinogen" and there is no evidence to date of a "safe" exposure level to second-hand smoke,[13] the AAPD also supports the enactment and enforcement of state and local clean indoor air and/or smoke-free policies or ordinances prohibiting smoking in public places.

Furthermore, the AAPD encourages its members to:

1. promote and establish policies that ensure dental offices, clinics, and/or health care facilities, including property grounds, are tobacco free;
2. serve as role models by not using tobacco and urging staff members who use tobacco to stop;
3. routinely examine patients for oral signs of tobacco use;
4. determine and document tobacco use by patients and smoking status of their parents, guardians, and caregivers;
5. educate patients, parents, and guardians on the serious health consequences of tobacco use and exposure to ETS in the home;
6. provide both prevention and cessation services using evidence-based interventions identified as "best practice" for treating tobacco use and nicotine addiction;

7. work to ensure all insurance plans include "best practice" tobacco cessation counseling and pharmacotherapeutic treatments as benefits in health packages;
8. work with school boards to increase tobacco-free environments for all school facilities, property, vehicles, and school events;
9. work on the national level and within their state and community to organize and support antitobacco campaigns and to prevent the initiation of tobacco use among children and adolescents, eliminate cigarette sales from vending machines, and increase excise tax on tobacco products to reduce demand;
10. organize and support efforts to pass national, state, and local legislation prohibiting smoking in businesses such as day-care centers where children routinely visit and other establishments where adolescents frequently are employed;
11. establish and support education/training activities and prevention/cessation services throughout the community;
12. recognize the US Public Health Service Clinical Practice Guideline "Treating Tobacco Use and Dependence"[1] as a valuable resource.

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Policy on Intraoral and Perioral Piercing

Originating Council
Council on Clinical Affairs

Review Council
Council on Clinical Affairs

Adopted
2000

Revised
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes the importance of educating the public and health professionals on the health implications of oral and perioral piercings.

Methods

This policy was based on a MEDLINE search using keywords "body piercing" and "oral piercing" and relevant articles from the dental and medical literature.

Background

The use of intraoral jewelry and piercings of oral and perioral tissues have been gaining popularity among adolescents and young adults. Oral piercings involving the tongue, lips, cheeks, and uvula have been associated with pathological conditions including pain, infection, scar formation, tooth fractures, metal hypersensitivity reactions, localized periodontal disease, speech impediment, and nerve damage.[1-11] Life-threatening complications associated with oral piercings have been reported, including bleeding, edema, and airway obstruction.[12-13] Unregulated piercing parlors and techniques have been identified by the National Institutes of Health as a possible vector for disease transmission (ie, hepatitis, tetanus, tuberculosis) and as a cause of bacterial endocarditis in susceptible patients.[1]

Policy statement

The AAPD strongly opposes the practice of piercing intraoral and perioral tissues and use of jewelry on intraoral and perioral tissues due to the potential for pathological conditions and sequelae associated with these practices.

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Policy on Adolescent Oral Health

Originating Committee
Clinical Affairs Committee – Adolescent Oral Health Subcommittee

Review Council
Council on Clinical Affairs

Adopted
1994

Reaffirmed
1999

Revised
2001

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes adolescence as the age of the onset of puberty. This stage of growth and development necessitates treatment considerations that are not always present in the oral health care for children.

Background

Adolescence is a period of life marked by dramatic physiologic and emotional change. Today's adolescent faces a variety of health challenges related to the impact of maturation, an evolving role in society, and a developing sense of self. Adolescent oral health concerns include dental caries, missing permanent teeth, periodontal disease, and malocclusion. Developmental and behavioral changes affect oral health differently in adolescents when taking into consideration such aspects as lifestyle habits, self-esteem, and routine preventive care.[1-3]

Policy statement

The AAPD recommends professional care, including preventive oral health care, restorative treatment, fluoride therapy, sealants, and dietary counseling. In addition, periodontal health, malocclusion, temporomandibular function, third molar development, and missing permanent teeth should be assessed.

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Policy on Prevention of Sports-related Orofacial Injuries

Originating Committee
Clinical Affairs Committee

Review Council
Council on Clinical Affairs

Adopted
1991

Revised
1995, 1999, 2002

Purpose

The American Academy of Pediatric Dentistry (AAPD) is concerned about the prevalence of sports-related injuries in our nation's youth. Increased competitiveness has resulted in an alarming number of dental and facial injuries which, combined, represent a high percentage of the total injuries experienced in youth sports.[1,2]

Background

All sporting activities have an associated risk of orofacial injuries due to falls, collisions, and contact with hard surfaces. The administrators of youth, high school, and college football, lacrosse, and ice hockey have demonstrated that dental and facial injuries can be reduced significantly by introducing mandatory protective equipment. Popular sports such as baseball, basketball, soccer, field hockey, softball, wrestling, volleyball, and gymnastics lag far behind in injury protection for girls and boys. Youths participating in leisure activities such as skateboarding, inline or roller skating, and bicycling also benefit from appropriate protective equipment.[3,4]

Mouthguards help distribute the forces of impact, thereby reducing risk of severe orofacial injury and concussion.[5] Any mouthguard that is used will be effective only if it is fitted properly and worn properly.[5]

Three types of mouthguards are available: stock or preformed (ready-to-wear); mouth formed; and custom fitted (made on a cast from an oral impression taken by a qualified health professional). Without question, the custom-fitted appliance is most protective and is also the preference of surveyed athletes. When this is not available, the mouth-formed mouthguard is preferable to the stock or preformed mouthguard.[6-8]

Policy statement

The AAPD recommends:

1. dentists play an active role in educating the public in the use of protective equipment for sporting activities, both organized and informal, not only to prevent injuries but also to reduce health care costs;
2. continuation of preventive practices instituted in youth, high school and college football, lacrosse and ice hockey;
3. for youth participating in organized baseball and softball activities, an American Society of Testing Materials (ASTM)-certified face protector be required (according to the playing rules of the sport);
4. mandating the use of properly fitted mouthguards in other organized sporting activities with risk of orofacial injury;
5. prior to initiating practices for a sporting season, coaches/administrators of organized sports consult a dentist with expertise in orofacial injuries for recommendations for immediate management of sports-related injuries (eg, avulsed teeth);
6. continuation of research in development of a comfortable, efficacious, and cost-effective sports mouthguard to facilitate more widespread use of this proven protective device;
7. the International Academy of Sports Dentistry be recognized as a valuable resource for the professions and public.

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Policy on Dental Bleaching for Child and Adolescent Patients

Originating Council
Council on Clinical Affairs

Adopted
2004

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that the desire for dental whitening in pediatric and adolescent patients has increased. This policy is intended to help professionals and patients make informed decisions about the indications, efficacy, and safety of bleaching primary and young permanent teeth and incorporate such care into a comprehensive treatment plan.

Methods

This policy is based on a review of the current dental and medical literature related to dental bleaching. A MEDLINE search was conducted using the terms "dental bleaching", "dental whitening", and "tooth bleaching". Expert opinions and best current practices also were relied upon for this policy.

Background

Through news stories and advertisements, the public has become more aware of advances in cosmetic dentistry. Both the variety and availability of bleaching products on the market have increased. Consequently, parents and the news media request information on dental whitening for children and adolescents with increasing frequency.

Clinical indications for dental whitening for individual teeth may include discoloration resulting from a traumatic injury (ie, calcific metamorphosis, darkening with devitalization), irregularities in enamel coloration of a permanent tooth due to trauma or infection of the related primary tooth, or intrinsic discoloration/staining (eg, fluorosis, tetracycline staining).[1-8] A negative self-image due to a discolored tooth or teeth can have serious consequences on adolescents and could be considered an appropriate indication for bleaching.[9] Due to the difference in the thickness of enamel of primary and permanent teeth, tooth coloration within a dental arch may vary significantly during the mixed dentition. Full arch cosmetic bleaching during this developmental stage, however, would result in mismatched dental appearance once the child is in the permanent dentition.

Dental whitening may be accomplished by using either professional or at-home bleaching modalities. Advantages of in-office whitening include:

1. an initial professional examination to help identify causes of discoloration and clinical concerns with treatment (eg, existing restorations, side effects);
2. professional control, including use of accelerants (eg, lights, lasers) and soft-tissue protection;
3. patient compliance;
4. rapid results;
5. stability of results.

The pretreatment professional assessment helps identify pulp pathology that may be associated with a single discolored tooth. This examination also identifies restorations that are faulty or would not be affected by the bleaching process, and the associated costs for replacing such restorations to maximize esthetic results.[1,4,6,10-13] By using photographs and/or a shade guide, the dentist can document the effectiveness of treatment. As well as providing in-office bleaching procedures, a dentist may fabricate custom trays for at-home use of a bleaching product. Custom trays ensure intimate fit and greater efficiency of bleaching agents. Over-the-counter products for at-home use include bleaching gels, whitening strips, and brush-on agents. Their main advantages include patient convenience and lower associated costs.

Peroxide-containing whiteners or bleaching agents improve the appearance by changing the tooth's intrinsic color. The professional-use products usually range from 10% carbamide peroxide (equivalent to about 3% hydrogen peroxide) to 38% carbamide peroxide. Carbamide peroxide is the most commonly used active ingredient in dentist-dispensed home-use tooth-bleaching products.[10] These agents sometimes are used sequentially. In-office bleaching products require isolation with a rubber dam or a protective gel to shield the gingival soft tissues. Home-use bleaching products contain lower concentrations of hydrogen peroxide or carbamide peroxide.[1-3,14-16] Many whitening toothpastes contain polishing or chemical agents to improve tooth appearance by removing surface stains through gentle polishing, chemically chelating, or other nonbleaching action.[10]

Side effects from bleaching vital and nonvital teeth have been documented. It should be noted that most of the research on bleaching has been performed on adult patients, with only a small amount of published bleaching research using child or adolescent patients.[1-3,14-16] The more common side effects associated with bleaching vital teeth are tooth sensitivity and tissue irritation. Sensitivity affects 8% to 66% of patients and often occurs during the early stages of treatment.[4,9,11,17-21] Tissue irritation, in most cases, results from an ill-fitting tray rather than the bleaching agents and

no longer occurs once a more accurately fitted tray is used. Both sensitivity and tissue irritation usually are temporary and cease with the discontinuance of treatment.[4,11,22] Another side effect associated with bleaching vital teeth is increased marginal leakage of an existing restoration.[4,11,22] The more common side effects from internal bleaching of nonvital teeth are external root resorption[12,23-26] and ankylosis. With external bleaching of nonvital teeth, the most common side effect is increased marginal leakage of an existing restoration.[26-30] One of the degradation byproducts of hydrogen peroxide or carbamide peroxide results in a hydroxyl-free radical. This byproduct has been associated with periodontal tissue damage and root resorption. Due to the concern of the hydroxyl free radical[31-36] and the potential side effects of dental bleaching, minimizing exposure at the lowest effective concentration of hydrogen peroxide or carbamide peroxide is recommended.

Current literature and clinical studies support the use of sodium perborate mixed with water for bleaching nonvital teeth.[13,37] In the past, sodium perborate has been mixed with hydrogen peroxide for this technique. Studies have shown higher incidences of root resorption when mixed with hydrogen peroxide.[12,38-41] In addition to the discontinued use of hydrogen peroxide, there is also discontinued use of heating any mixture of sodium perborate.[42]

Policy statement

The AAPD encourages:

1. the judicious use of bleaching for vital and nonvital teeth;
2. patients to consult their dentists to determine appropriate methods for and the timing of dental whitening within the context of an individualized, comprehensive, and sequenced treatment plan;
3. dental professionals and consumers to consider side effects when contemplating dental bleaching for child and adolescent patients;
4. further research of dental whitening agents in children.

The AAPD discourages full-arch cosmetic bleaching for patients in the mixed dentition.

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Policy on Minimizing Occupational Health Hazards Associated With Nitrous Oxide

Originating Committee
Clinical Affairs Committee

Review Council
Council on Clinical Affairs

Adopted
1987

Revised
1993, 1996, 2000, 2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) recommends that exposure to ambient nitrous oxide be minimized to reduce occupational health hazards associated with nitrous oxide.

Methods

This document is based on current dental, medical, and public health literature regarding the potential risks of ambient nitrous oxide exposure. Guidelines and recommendations from the National Institute for Occupational Safety and Health (NIOSH) were reviewed also.[1-2]

Background

Epidemiologic studies provide strong evidence that there are increased general health problems and reproductive difficulties among dental personnel chronically exposed to significant levels of ambient nitrous oxide.[3-7] Nitrous oxide acts by oxidizing vitamin B_{12} from the active, reduced cobalamin to the inactive form. In turn, this inactivates the enzyme methionine synthetase, which requires both the active cobalamin and folate as cofactors. The inactivation of methionine synthetase decreases DNA production, thereby interfering with cell proliferation.[8]

While nitrous oxide has been linked epidemiologically to reproductive, hematologic, immunologic, neurologic, hepatic, and renal disorders, symptoms are time and dose dependent. Neurologic symptoms are reported most frequently in cases of chronic (recreational) abuse. Absolute occupational effects are still uncertain.[9] Epidemiologic conclusions have been challenged.[10] Adverse reproductive outcomes are linked to B_{12} deficient individuals and those exposed to "high nitrous oxide levels".[9] A maximum permissible level of ambient nitrous oxide in the dental environment has not been determined.[9-14]

Collection of ambient nitrous oxide involves 2 separate mechanisms. The first, the scavenging system, is part of the nitrous oxide delivery system. It begins at the nitrous oxide tanks and terminates at the expiratory valve in the mask. Canadian studies in hospital settings have shown that frequent and regular inspection and maintenance of the nitrous oxide delivery system, together with the use of a scavenging system, can reduce ambient nitrous oxide significantly.[15] In the dental environment, patient behaviors such as talking, crying, and moving have been shown to result in significant increases in baseline ambient nitrous oxide levels despite the use of the mask-type scavenging systems.[17] By using a well-fitted mask and an appropriate amount of suction via the scavenging system, the increased pressure on the patient's face by the mask will reduce leakage.[18] NIOSH has recommended an oral evacuation rate of 45 L/min for maximizing scavenger effectiveness. However, scavenging at this rate has been shown to reduce the level of pyschosedation achieved with nitrous oxide inhalation.[19]

The second mechanism, the "exhaust system," collects escaped nitrous oxide and includes 2 entities. First, an appropriate nonrecirculating ventilation system is recommended by NIOSH to provide continuous rapid air exchange. It is important to vent waste gases outside of the building and away from fresh air intakes.[2] Second, a high-volume aspirator, placed near or within 20 cm of the patient's mouth, has been shown to reduce significantly ambient nitrous oxide levels in the dental environment.[20-22] Diligent use of these 2 mechanisms in the pediatric dental environment has allowed for the reduction of ambient nitrous oxide to the levels recommended by NIOSH.[23]

Policy statement

The AAPD recommends that dentists and dental auxiliaries minimize their exposure to nitrous oxide by maintaining the lowest practical levels in the dental environment. Adherence to the recommendations below can help minimize occupational exposure to nitrous oxide:

1. Scavenging systems must be used when nitrous oxide is employed.
2. Exhaust systems that adequately vent scavenged air and gases to the outside of the building and away from fresh air intake vents should be employed.
3. Careful, regular surveillance and maintenance of the nitrous oxide/oxygen delivery equipment must be practiced.
4. Mask size should be such as to ensure proper fit for each patient.
5. Nitrous oxide discharge from the oral cavity of the patient should be minimized during dental procedures.

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Policy on the Use of Deep Sedation and General Anesthesia in the Pediatric Dental Office

Originating Council
Ad Hoc Committee on Sedation and Anesthesia

Review Council
Committee on Sedation and Anesthesia

Adopted
1999

Revised
2004

Purpose

The American Academy of Pediatric Dentistry (AAPD), as the advocate for oral health in infants, children, adolescents, and persons with special health care needs, recognizes that there exists a patient population for whom routine dental care using nonpharmacologic behavior management techniques is not a viable approach. It also recognizes that a population of patients, because of their need for extensive treatment, acute situational anxiety, uncooperative age-appropriate behavior, immature cognitive functioning, disabilities, or medical conditions, would benefit from deep sedation or general anesthesia.[1]

Background

Pediatric dentists have long sought to provide dental care to their young and disabled patients in a manner which will promote excellence in quality of care and concurrently induce a positive attitude in the patient toward dental treatment. Behavior management techniques have allowed most children to receive treatment in the dental office with minimal discomfort and without expressed fear. Sedation has provided others with the ability to accept treatment.

However, some children and developmentally disabled patients require general anesthesia to receive comprehensive dental care in a safe and humane fashion. Many pediatric dentists (and others who treat children) have sought to provide for the administration of general anesthesia by properly trained individuals in their offices or other facilities (eg, outpatient care clinics) outside of the traditional hospital setting.

In 1998, the AAPD established its Clincial Guideline on the Elective Use of Minimal, Moderate, Deep Sedation and General Anesthesia in Pediatric Dental Patients, which have been reviewed and revised.[1] These revised guidelines reflect the current understanding of appropriate monitoring needs and, further, provide definitions and characteristics of 3 levels of sedation (minimal, moderate, and deep) and general anesthesia involving pediatric patients.

When deep sedation or general anesthesia is provided in a private pediatric dental office, the pediatric dentist must be responsible for evaluating the educational and professional qualifications of the general anesthesia or deep sedation provider (if it is other than himself) and determining that the provider is in compliance with state rules and regulations associated with the provision of deep sedation and general anesthesia. The pediatric dentist is also responsible for establishing a safe environment that complies with state rules and regulations, as well as the AAPD's Clinical Guideline on the Elective Use of Minimal, Moderate, and Deep Sedation and General Anesthesia[1] for the protection of the patient.

Educational requirements

Deep sedation and general anesthesia must be provided only by qualified and appropriately trained individuals and in accordance with state regulations. Such providers may include pediatric dentists who have completed advanced education in anesthesiology beyond their pediatric residency advanced training program, dental or medical anesthesiologists, or certified registered nurse anesthetists. The expertise in providing deep sedation and general anesthesia cannot be gained through the undergraduate dental school curriculum or continuing education. Only dentists who have completed an advanced education program which meets the requirements of the American Dental Association (ADA) are considered qualified to provide deep sedation and general anesthesia in practice. This includes:

1. completion of an advanced training program in anesthesia and related subjects beyond the predoctoral dental curriculum that satisfies the requirements described in Part II of the ADA Guidelines for Teaching the Comprehensive Control of Pain and Anxiety in Dentistry[2] at the time training was commenced;
2. completion of an ADA-accredited post-doctoral training program (eg, oral and maxillofacial surgery) which affords comprehensive and appropriate training necessary to administer and manage deep sedation/general anesthesia.

Risk management

As stated above, the pediatric dentist is responsible for providing a safe environment for the in-office provision of

deep sedation and general anesthesia. In addition to evaluating the qualifications of the anesthesia provider, he/she must be involved with the following aspects of care to minimize risks for the patient:

1. facilities and equipment;
2. monitoring and documentation;
3. patient selection utilizing medical history, physical status, and indications for anesthetic management;
4. preoperative evaluation;
5. appropriately trained support personnel;
6. emergency medications, equipment, and protocols;
7. preoperative and postoperative patient instructions;
8. criteria and management of recovery and discharge.

Continuous quality improvement

To reduce the chance of medical error and determine root cause, aspects of continuous quality improvement are applied in the outpatient setting during the administration of deep sedation and general anesthesia as described in the Clinical Guideline on the Elective Use of Minimal, Moderate, and Deep Sedation and General Anesthesia.[1]

Policy statement

The AAPD endorses the in-office use of deep sedation or general anesthesia on select pediatric dental patients administered either by a trained, credentialed, and licensed pediatric dentist, dental or medical anesthesiologist, or nurse anesthetist in an appropriately equipped and staffed facility.

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Policy on Hospitalization for Dental Care of Infants and Children

Originating Committee
Dental Care Committee

Review Council
Council on Clinical Affairs

Adopted
1989

Reaffirmed
1993

Revised
1997, 2001

Background

Pediatric dentists often are asked to treat patients who present special challenges related to their age, behavior, medical status, developmental disabilities, intellectual limitations, or special treatment needs (eg, protection of their developing psyche and medical support necessary for the treatment of other pathologically compromising conditions). To address effectively these challenges and meet these treatment needs, pediatric dentists have developed and employ a variety of management techniques, including accessing anesthesia services and/or the provision of dental care in a hospital setting with or without general anesthesia. Hospital dentistry is an integral part of the curriculum of all accredited advanced pediatric dental training programs and pediatric dentists are, by virtue of training and experience, qualified to recognize the indications for such an approach and to render such care.

Policy statement

The American Academy of Pediatric Dentistry (AAPD) affirms that indications exist for the treatment of selected patients with or without general anesthesia in a hospital setting, and that pediatric dentists are qualified by training and experience to recognize these indications and provide this care. The AAPD shall work with all concerned medical and dental colleagues and organizations to remove barriers to hospital dental care for patients best treated in that setting.

Policy on Hospital Staff Membership

Originating Committee
Hospital Guidelines for Pedodontics Ad Hoc Committee

Review Council
Council on Clinical Affairs

Adopted
1977

Revised
1979, 1991, 1999, 2002

Purpose

Pediatric dentists have the opportunity to play a significant role within a hospital. Staff membership is necessary in order to provide comprehensive, consultative, and/or emergent dental services for infants, children, adolescents, and persons with special health care needs within the hospital setting.

Background

Most commonly, the pediatric dentist can provide essential services to patients within an operating room setting. Additionally, the pediatric dentist can provide consultative and emergency services. "Team" evaluations of patients often require dental input, and certain medical protocols require an oral examination. Beyond patient services, a pediatric dentist may participate within the organizational structure through committee memberships of either clinical or administrative purpose.

Following a credentialing process and receipt of an appointment to a medical staff, a pediatric dentist must accept and fulfill certain responsibilities. Among them are patient care within the limits of approved clinical privileges, participation in emergency department on-call rotations, timely medical records completion, and compliance with the rules and regulations of the medical staff and the policies and procedures of the hospital. Individuals seeking a hospital appointment should contact the medical staff office at their local hospital.

Although hospital and medical-dental staffs have some individual latitude, the standards for all hospital services are issued by national commissions such as the Joint Commission on Accreditation of Healthcare Organization (JCAHO).[1] Standards for dental services are integrated intimately and inseparably within the overall hospital organizational structure and, therefore, are stringently subject to the standards established by these commissions.

Policy statement

The American Academy of Pediatric Dentistry (AAPD):

1. Encourages the participation of pediatric dentists on hospital medical-dental staffs. Beyond having the capability to provide valuable service to their patients, the pediatric dentist can be an effective, contributing member to the hospital through consultative services, educational opportunities, and committee membership.
2. Recognizes the American Dental Association as a corporate member of the JCAHO and further recognizes the standards for hospital governance, as established by the JCAHO.
3. Encourages hospital member pediatric dentists to maintain strict adherence to the rules and regulations of the medical staff and the policies and procedures of the hospital.

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Policy on Operating Room Access for Pediatric Dental Care

Originating Council
Council on Clinical Affairs

Adopted
2002

Purpose

The American Academy of Pediatric Dentistry advocates equal access to operating room facilities to provide care for pediatric patients. The dental patient has a right to be seen in a timely manner.

Background

Pediatric dentists occasionally have experienced difficulty in gaining equal opportunity to schedule operating room time and postponement/delay of nonemergent dental care. The use of general anesthesia sometimes is necessary to provide quality dental care for the infant, child, or adolescent. Dental caries, periodontal diseases, and other oral conditions, if left untreated, can lead to pain, infection, and loss of function. These undesirable outcomes can adversely affect learning, communication, nutrition, and other activities necessary for normal growth and development.

Policy statement

Hospitals or outpatient settings providing surgical treatment must not discriminate against pediatric dental patients requiring care under general anesthesia. These patients and their care providers must have equal access to these facilities.

Policy on Third-party Reimbursement of Medical Fees Related to Sedation/General Anesthesia

Originating Committee
Dental Care Committee

Review Council
Council on Clinical Affairs

Adopted
1989

Reaffirmed
1993

Revised
1995, 2000, 2003

Purpose

To ensure that all children have access to the full range of dental delivery systems, the American Academy of Pediatric Dentistry (AAPD) advocates that, if sedation or general anesthesia and related facility fees are payable benefits of a health care plan, these same benefits shall apply for the delivery of oral health services.

Methods

This policy is based on a review of the current dental literature related to guidelines for sedation and general anesthesia, as well as issues pertaining to medically necessary oral health care. Relevant policies and guidelines of the AAPD are included.

Background

For some infants, children, adolescents, and persons with special health care needs, treatment under sedation/general anesthesia in a hospital, outpatient facility, or dental office or clinic represents the only appropriate method to deliver necessary oral health care. The patient's age, dental needs, disabilities, medical conditions, and/or acute situational anxiety that render the child or adult unable to cooperate in the dental office may be an indication for treatment to be completed under sedation/general anesthesia.[1,2] These patients may be denied access to oral health care when insurance companies refuse to provide reimbursement for sedation/general anesthesia and related facility services.

Most denials cite the procedure is not "medically necessary". This determination appears to be based on arbitrary and inconsistent criteria.[3-7] For instance, medical policies often provide reimbursement for sedation/general anesthesia or facility fees related to myringotomy for a 3-year-old child, but deny these benefits when related to treatment of dental disease and/or infection for the same patient.

American Dental Association Resolution 1989-546 states that insurance companies should not deny benefits that would otherwise be payable "solely on the basis of the professional degree and licensure of the dentist or physician providing treatment, if that treatment is provided by a legally qualified dentist or physician operating within the scope of his or her training and licensure".[8]

Policy statement

The AAPD strongly believes that only the dentist providing the oral health care for the patient can determine the medical necessity of sedation/general anesthesia.[9]

The AAPD encourages the insurance industry to:

1. recognize that sedation and/or general anesthesia is necessary to deliver compassionate, quality oral health care to some infants, children, adolescents, and persons with special health care needs;
2. include sedation, general anesthesia, and related facility services as benefits of health insurance without discrimination between the "medical" or "dental" nature of the procedure;
3. end arbitrary and unfair refusal of reimbursement for sedation, general anesthesia, and facility costs related to the delivery of oral health care;
4. regularly consult the AAPD with respect to the development of benefit plans that best serve the oral health interests of infants, children, adolescents, and patients with special care needs.[10]

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Policy on Third-party Reimbursement for Oral Health Care Services Related to Congenital Orofacial Anomalies

Originating Committee
Clinical Affairs Committee

Review Council
Council on Clinical Affairs

Adopted
1996

Revised
2000, 2003

Purpose

The American Academy of Pediatric Dentistry (AAPD), recognizing that patients with craniofacial anomalies require oral health care as a direct result of the medical condition and that these services are an integral part of the rehabilitative process, advocates reimbursement for provision of comprehensive oral health care services throughout life.[1]

Methods

This policy is based on review of current dental and medical literature, as well as policies and guidelines established by stakeholders in the health of infants, children, and adolescents affected by craniofacial anomalies. Data is not available to determine the effectiveness of various insurance coverage or limitations of that coverage on children with craniofacial anomalies.

Background

Congenital orofacial anomalies that result in malformed or missing teeth, such as ectodermal dysplasia and cleft defects, can have significant negative functional, esthetic, and psychological effects on individuals and their families. Young children benefit from esthetic and functional restorative techniques and readily adapt to appliances that replace missing teeth and improve function, appearance, and self-image. During the period of facial and oral growth, appliances require frequent adjustment and have to be remade as the individual grows.

These patients often are denied coverage for initial appliance construction and, more frequently, replacement of appliances as the child grows. Third-party payors legally may control the coverage of these services by limiting contractual benefits. The distinction between congenital anomalies involving the orofacial complex and those involving other parts of the body is often arbitrary and unfair. For instance, health care policies may provide reimbursement for the necessary prosthesis required for congenitally missing extremities and its replacement as the individual grows, but deny benefits for the initial prosthesis and the necessary periodic replacement for congenitally missing teeth. Third-party payors frequently will refuse to pay for oral health care services even when they clearly are associated with the complete habilitation of the craniofacial condition.[2]

Furthermore, clerical personnel and professional consultants employed by third-party payors often make benefit determinations based on arbitrary distinction between medical vs dental anomalies, ignoring important functional and medical relationships. Evaluation and care provided for an infant, child, or adolescent by a cleft lip/palate, orofacial, or craniofacial deformities team have been described as the optimal way to coordinate and deliver complex services.[2] This approach may provide additional documentation to facilitate "medical necessity" of dental rehabilitation.

Policy statement

The AAPD strongly believes that only the dentist providing the oral health care for the patient can determine the medical indication and justification for treatment in these cases.

The AAPD encourages the insurance industry to:

1. recognize that malformed and missing teeth and resultant anomalies of facial development seen in orofacial anomalies are congenital defects, just as the congenital absence of other body parts;
2. include oral health care services, such as initial appliance construction, periodic examinations, and replacement of appliances, related to these facial and dental anomalies as benefits of health insurance without discrimination between the medical and dental nature of the congenital defect;
3. end arbitrary and unfair refusal of reimbursement for oral health care services related to these facial and dental anomalies;
4. regularly consult the AAPD with respect to the development of benefit plans that best serve the oral health interests of infants, children, and adolescents with craniofacial anomalies.

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Policy on Third-party Reimbursement of Fees Related to Dental Sealants

Originating Committee
Clinical Affairs Committee

Review Council
Council on Clinical Affairs

Adopted
1999

Revised
2002

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that the placement of sealants and their continued maintenance are scientifically sound and cost-effective techniques for prevention of pit and fissure caries.

Background

According to national estimates,[1] by 17 years of age, 78% of children in the United States have experienced dental caries. As much as 90% of all dental caries in school children occurs in pits and fissures. The teeth at highest risk by far are permanent first and second molars where fluoride has its least preventive effect on the pits and fissures.

Current data also show that, although initial sealant retention rates are high, sealant loss does occur at the rate of 10% per year.[2] It is in the patient's interest to receive periodic evaluation of sealants for maintenance or replacement.

Although sealants are safe and effective, their use continues to be low.[3] Sealants are particularly effective in preventing pit and fissure caries and providing cost savings if placed on patients during periods of greatest risk.[4-5] However, initial insurance coverage for sealants often is denied, and insurance coverage for repair and/or replacement may be limited.[6]

Recommendations

1. The dentition should be periodically evaluated for developmental defects and deep pits and fissures that may contribute to caries risk. Dental sealants should be placed on susceptible teeth and should be evaluated for repair or replacement as part of a periodic dental examination.
2. Insurance coverage for sealants should not be age based, as timing of the eruption of teeth can vary widely.
3. The AAPD shall work with other dental organizations, the insurance industry, and consumer groups to make the advantages of dental sealants understood and to seek reimbursement for fees associated with their placement, maintenance, and repair.

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Policy on the Role of Pediatric Dentists as Both Primary and Specialty Care Providers

Originating Council
Council on Clinical Affairs

Adopted
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) emphasizes that health care providers and other interested third parties must recognize the dual role that pediatric dentists play in the provision of professional oral health care, which includes both primary and specialty care services.

Methods

This statement was based on a review of the accreditation standards for advanced specialty training programs in pediatric dentistry and the AAPD position paper on the role of pediatric dentists as primary and specialty care providers.[1,2]

Background

"Pediatric dentistry is an age-related specialty that provides both primary and comprehensive preventive and therapeutic oral health needs for infants and children through adolescence, including those with special health care needs."[1] The American Dental Association, the American Academy of General Dentistry, and the AAPD all recognize the pediatric dentist as both a primary care provider and specialty care provider. This dual role is similar to that of pediatricians, gynecologists, and internists in medicine. Within that profession, clinicians and third-party payors envision these physicians in a dual role and have designed payment plans to accommodate this situation.

The AAPD respects the rights of employers to negotiate health care benefits for their employees. Unfortunately, third-party payors sometimes do not recognize pediatric dentists as primary care providers and restrict access to pediatric dentists for children who have reached a certain age.

Policy statement

The AAPD encourages appropriate, quality oral health care for infants, children, and adolescents. When pediatric oral health care is deemed necessary, either by a responsible adult or referring clinician, the AAPD encourages third parties to recognize pediatric dentists as both primary and specialty oral health care providers and to refrain from age-related restrictions for care by pediatric dentists.

References

1. Commission on Dental Accreditation. Accreditation standards for advances specialty education programs in pediatric dentistry; 2000.
2. American Academy of Pediatric Dentistry. Council on Dental Benefits Programs. Position paper: The role of pediatric dentists as primary and specialty care providers; 2002.

Policy on the Ethics of Failure to Treat or Refer

Originating Council
Council on Clinical Affairs

Adopted
2003

Purpose

The American Academy of Pediatric Dentistry (AAPD) believes that all infants, children, and adolescents are entitled to oral health care that meets the treatment and ethical standards set by our specialty. If a dentist is unable to provide or fails to offer treatment for a diagnosed dental disease or condition, he or she has an ethical responsibility to refer the patient to a specific practitioner capable of providing the necessary care.

Methods

Documents relating to principles of ethics of dental and medical organizations were reviewed. A MEDLINE search using the terms "ethics" and "dentistry" was performed. Experts on dental and medical ethics were consulted.

Background

Dentists have an obligation to act in an ethical manner in the care of patients. Commonly accepted virtues of ethics include autonomy, beneficence, nonmaleficence, and justice.[1,2] Autonomy reflects the patient's or, if the patient is a minor, the parent's or guardian's right to be involved in treatment decisions. The caregiver must be informed of the problem and that treatment is recommended. Beneficence indicates the dentist has the obligation to act for the benefit of the patient in a timely manner, even when there may be conflicts with the dentist's personal self interests. Nonmaleficence dictates that the dentist's care does not result in harm to the patient. In situations where a dentist is not able to meet the patient's needs, referral to a practitioner capable of providing the needed care is indicated. Justice expresses that the dentist should deal fairly with patients, colleagues, and the public.

A patient may suffer progression of his/her oral disease if treatment is not provided because of age, behavior, inability to cooperate, disability, or medical status. Postponement or denial of care can result in unnecessary pain, discomfort, increased treatment needs and costs, unfavorable treatment experiences, and diminished oral health outcomes.

Policy statement

Infants, children, and adolescents, including those with special health care needs, have a right to dental care. The AAPD believes it is unethical for a dentist to ignore a disease or condition because of the patient's age, behavior, or disabilities. Dentists have an ethical obligation to provide therapy for patients with oral disease or refer for treatment patients whose needs are beyond the skills of the practitioner.

References

1. American Dental Association. *Principles of Ethics and Code of Professional Conduct.* Available at: http://www.ada.org/prof/prac/law/code/index.asp.
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Policy on Infection Control

Originating Committee
Clinical Affairs Committee (Infectious Disease Control Subcommittee)

Review Council
Council on Clinical Affairs

Adopted
1989

Revised
1993, 2001, 2004

The American Academy of Pediatric Dentistry (AAPD) recognizes the importance of infection control policies, procedures, and practices in dental health care settings in order to prevent disease transmission from patient to care provider, from care provider to patient, and from patient to patient. The AAPD acknowledges *Guidelines for Infection Control in the Dental Health-Care Setting - 2003*[1] as an in-depth review of infection control measures for dental settings, and supports the strategies therein. Aware that some recommendations are based only on suggestive evidence or theoretical rationale, and because many concerns regarding infection control in the dental setting remain unresolved, the AAPD encourages dental practitioners to follow current literature and consider carefully infection control measures in their practices so as to minimize the risk of disease transmission.

References

1. CDC. Guidelines for infection control in dental health-care settings-2003. *MMWR.* December 19, 2003;52:RR-17.