Complete Summary

GUIDELINE TITLE

Clinical guideline on adolescent oral health care.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatric Dentistry (AAPD). Clinical guideline on adolescent oral health care. Chicago (IL): American Academy of Pediatric Dentistry (AAPD); 2005. 10 p. [82 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: American Academy of Pediatric Dentistry. Clinical guideline on adolescent oral health care. Chicago (IL): American Academy of Pediatric Dentistry; 2003. 6 p.

COMPLETE SUMMARY CONTENT

SCOPE
METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

- Oral health and oral diseases including:
  - Dental caries
  - Periodontal disease
  - Gingivitis
  - Malocclusion problems
  - Temporomandibular joint problems
  - Third molar problems
  - Congenitally missing teeth
  - Ectopic eruption
  - Traumatic injuries to the teeth

- Discolored or stained teeth

GUIDELINE CATEGORY

Counseling
Management
Prevention
Risk Assessment
Treatment

CLINICAL SPECIALTY

Dentistry
Pediatrics

INTENDED USERS

Allied Health Personnel
Dentists
Nurses
Physicians

GUIDELINE OBJECTIVE(S)

To address the unique needs and propose general recommendations for the management of oral health care in the adolescent patient

TARGET POPULATION

Adolescents

INTERVENTIONS AND PRACTICES CONSIDERED

Preventative Care

1. Fluoridation
    - Water fluoridation
    - Prescribed supplements
    - Fluoridated dentifrices
    - Topical fluoride supplementation
2. Daily plaque removal
    - Brushing
    - Flossing
3. Professional plaque and calculus removal
4. Diet analysis and management
5. Sealant placement
6. Periodic oral examination
7. Periodic radiographic evaluation
8. Restorative dentistry
9. Trauma prevention program
10. Patient education and positive youth development

Treatment/Management

1. Intraoral infection management
2. Traumatic injury treatment
3. Evaluation for orthodontic treatment
4. Malocclusion treatment
5. Third molar treatment
6. Evaluation and management of temporomandibular joint problems
7. Evaluation and management of congenitally missing teeth
8. Diagnosis and treatment of ectopic eruptions
9. Bleaching of stained or discolored teeth
10. Education on consequences of tobacco use
11. Attention to psychosocial aspects of adolescent care
12. Transitioning to adult care

MAJOR OUTCOMES CONSIDERED

- Rate of caries development
- Incidence of periodontal disease
- Incidence of oral problems associated with adolescent behavior

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A MEDLINE search was conducted using the term "adolescent" combined with "dental," "gingivitis," "oral piercing," "sealants," "oral health," "caries," "tobacco use," "dental trauma," "orofacial trauma," "periodontal," "dental esthetics," "smokeless tobacco," "nutrition," and "diet."

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The oral health policies and clinical guidelines of the American Academy of Pediatric Dentistry (AAPD) are developed under the direction of the Board of Trustees, utilizing the resources and expertise of its membership operating through the Council on Clinical Affairs (CCA).

Proposals to develop or modify policies and guidelines may originate from 4 sources:

1. The officers or trustees acting at any meeting of the Board of Trustees
2. A council, committee, or task force in its report to the Board of Trustees
3. Any member of the AAPD acting through the Reference Committee hearing of the General Assembly at the Annual Session
4. Officers, trustees, council and committee chairs, or other participants at the AAPD's Annual Strategic Planning Session

Regardless of the source, proposals are considered carefully, and those deemed sufficiently meritorious by a majority vote of the Board of Trustees are referred to the CCA for development or review/revision.

Once a charge (directive from the Board of Trustees) for development or review/revision of an oral health policy or clinical guideline is sent to the CCA, it is assigned to 1 or more members of the CCA for completion. CCA members are instructed to follow the specified format for a policy or guideline. All oral health policies and clinical guidelines are based on 2 sources of evidence: (1) the scientific literature; and (2) experts in the field. Members may call upon any expert as a consultant to the council to provide expert opinion. The Council on Scientific Affairs provides input as to the scientific validity of a policy or guideline.

The CCA meets on an interim basis (midwinter) to discuss proposed oral health policies and clinical guidelines. Each new or reviewed/revised policy and guideline is reviewed, discussed, and confirmed by the entire council.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Once developed by the Council on Clinical Affairs (CCA), the proposed policy or guideline is submitted for the consideration of the Board of Trustees. While the board may request revision, in which case it is returned to the council for modification, once accepted by majority vote of the board, it is referred for Reference Committee hearing at the upcoming Annual Session. At the Reference Committee hearing, the membership may provide comment or suggestion for alteration of the document before presentation to the General Assembly. The final document then is presented for ratification by a majority vote of the membership present and voting at the General Assembly. If accepted by the General Assembly, either as proposed or as amended by that body, the document then becomes the official American Academy of Pediatric Dentistry (AAPD) oral health policy or clinical guideline for publication in the AAPD's Reference Manual and on the AAPD's Web site.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Management of Caries

Primary Prevention

Fluoride

The adolescent should receive maximum fluoride benefit:

1. Systemic fluoride intake via optimal fluoridation of drinking water or professionally prescribed supplements is recommended to 16 years of age or the eruption of the second permanent molars, whichever comes first
2. Fluoridated dentifrice is recommended to provide continuing topical benefits through adolescence
3. Professionally applied fluoride treatments should be based on the individual patient's caries-risk assessment, as determined by the patient's dental provider
4. Topical fluoride supplementation via home-applied compounds should be a professional recommendation when indicated by an individual's caries pattern or caries-risk status
5. The criteria for determination of need and the methods of delivery should be those currently recommended by the American Dental Association and the American Academy of Pediatric Dentistry (American Academy of Pediatric Dentistry [AAPD], "Clinical guideline on fluoride therapy," 2004)

Oral Hygiene

1. Adolescents should be educated and motivated to maintain personal oral hygiene through daily plaque removal, including flossing, with the frequency and pattern based on the individual's disease pattern and oral hygiene needs
2. Professional removal of plaque and calculus is recommended highly for the adolescent, with the frequency of such intervention based on the individual's assessed risk for caries/periodontal disease, as determined by the patient's dental provider (AAPD, "Clinical guideline on periodicity," 2004)

Diet Management

Diet analysis, along with professionally determined recommendations for maximal general and dental health, should be part of an adolescent's dental health management. A diet analysis and management should consider:

1. Dental disease patterns
2. Overall nutrient and energy needs
3. Psychosocial aspects of adolescent nutrition
4. Dietary carbohydrate intake and frequency
5. Intake and frequency of acid-containing beverages
6. Wellness considerations

Sealants

Adolescents at risk for caries should have sealants placed. An individual's caries risk may change over time; periodic reassessment for sealant need is indicated throughout adolescence (AAPD, "Clinical guideline on pediatric restorative dentistry," 2004).

Secondary Prevention

Professional Preventive Care

1. Timing of periodic oral examinations should take into consideration the individual's needs and risk indicators to determine the most cost-effective, disease-preventive benefit to the adolescent
2. Initial and periodic radiographic evaluation should be a part of a clinical evaluation. The type, number, and frequency of radiographs should be determined only after an oral examination and history taking. Previously exposed radiographs should be available, whenever possible, for comparison. Currently accepted guidelines for radiographic exposures (i.e., appropriate films based upon medical history, caries risk, history of periodontal disease, and growth and development assessments) should be followed (AAPD, "Clinical guideline on prescribing dental radiographs," 2005)

Restorative Dentistry

Each adolescent patient and restoration must be evaluated on an individual basis. Preservation of non-carious tooth structure is desirable. Referral to an appropriately trained and/or experienced dentist should be considered when treatment needs are beyond the treating dentist's ability or interest.

Periodontal Diseases

Acute Conditions

Acute intraoral infection involving the periodontium and oral mucosa requires immediate treatment. Therapeutic management should be based on currently accepted techniques of periodontal therapy. Traumatic injuries to the teeth and periodontium always require dental evaluation and treatment. Referral to an appropriately trained and/or experienced dentist should be considered when the treatment needs are beyond the treating dentist's ability or interest.

Chronic Conditions

The adolescent will benefit from an individualized preventive dental health program, which includes the following items aimed specifically at periodontal health:

1. Patient education emphasizing the etiology, characteristics, and prevention of periodontal diseases, as well as self-hygiene skills
2. A personal, age-appropriate oral hygiene program including plaque removal, oral health self-assessment, and diet. Sulcular brushing and flossing should be included in plaque removal, and frequent follow-up to determine adequacy of plaque removal and improvement of gingival health should be considered
3. Regular professional intervention, the frequency of which should be based on individual needs and should include evaluation of personal oral hygiene success, periodontal status, and potential complicating factors, such as medical conditions, malocclusion, or handicapping conditions. Periodontal probing, periodontal charting, and radiographic periodontal diagnosis should be a consideration when caring for the adolescent. The extent and nature of the periodontal evaluation should be determined professionally on an individual basis. Those patients with progressive periodontal disease should be referred to an appropriately trained and/or experienced dentist for evaluation and treatment
4. Appropriate evaluation for procedures to facilitate orthodontic treatment including, but not limited to, tooth exposure, frenectomy, fiberotomy, gingival augmentation, and implant placement (Greenwell, 2001)

Occlusal Considerations

Malocclusion

Any malposition of teeth, malrelationship of teeth to jaws, tooth/jaw size discrepancy, bimaxillary malrelationship, or craniofacial malformations or disfigurement that presents functional, esthetic, physiologic, or emotional problems to the adolescent should be evaluated by the appropriately trained dentist or professional team. Treatment of malocclusion by an appropriately trained and/or experienced dentist should be based on professional diagnosis, available treatment options, patient motivation and readiness, and other factors to maximize progress.

Third Molars

Evaluation of third molars, including radiographic diagnostic aids, should be an integral part of the dental examination of the adolescent (AAPD, "Clinical guideline on prescribing dental radiographs," 2005). For diagnostic and extraction criteria, refer to the AAPD Clinical Guideline on Pediatric Oral Surgery (AAPD, "Clinical guideline on pediatric oral surgery," 2005). Treatment of third molars that are potential or active problems should be performed by an appropriately trained and/or experienced dentist.

Temporomandibular Joint Problems

Evaluation of the temporomandibular joint and related structures should be a part of the examination of the adolescent. Abnormalities should be managed by an appropriately trained and/or experienced dentist following accepted clinical procedures (National Institutes of Health, 1996; Skeppar & Nilner, 1993).

Congenitally Missing Teeth

Evaluation of congenitally missing permanent teeth should include both immediate and long-term management. Management should be by an appropriately trained and/or experienced dentist, and a team approach may be indicated (AAPD, "Clinical guideline on management of the developing dentition," 2005).

Ectopic Eruption

The dentist should be proactive in diagnosing and treating ectopic eruption in the young adolescent. Early diagnosis, including appropriate radiographic examination (AAPD, Clinical guideline on prescribing dental radiographs, 2005) of ectopic eruption is important. An appropriately trained and/or experienced dentist should manage treatment and a team approach may be necessary (AAPD, Clinical guideline on management of the developing dentition, 2005).

Traumatic Injuries

Dentists should introduce a comprehensive trauma prevention program to help reduce the incidence of traumatic injury to the adolescent dentition. This prevention plan should consider assessment of the patient's sport or activity including level and frequency of activity (Ranalli, 2002). Once this information is acquired, recommendation and fabrication of an age-appropriate, sport-specific, and properly-fitted mouthguard/faceguard can be initiated (Ranalli, 2002). Players must be warned about altering the protective equipment that will disrupt the fit of the appliance. In addition, players and parents must be informed that injury may occur even with properly fitted protective equipment (Ranalli, 2002).

Additional Considerations in Oral/Dental Management of the Adolescent

Discolored or Stained Teeth

For the adolescent patient, judicious use of bleaching can be considered as a part of a comprehensive, sequenced treatment plan that takes into consideration the patient's dental developmental stage, oral hygiene, and caries status. A dentist should monitor the bleaching process, ensuring the least invasive, most effective

treatment method. Dental professionals also should consider possible side effects when contemplating dental bleaching for adolescent patients (Li, 1998; AAPD, "Policy on dental bleaching," 2004).

Tobacco Use

Education of the adolescent patient on the oral and systemic consequences of tobacco use should be part of each patient's oral health education. For those adolescent patients who use tobacco products, the practitioner should provide or refer the patient to appropriate educational and counseling services (American Dental Association, 1993; American Cancer Society, National Cancer Institute, NIH, 1998; AAPD, "Policy on Tobacco Use," 2005). When associated pathology is present, treatment should be managed by an appropriately trained and/or experienced health care provider.

Positive Youth Development (PYD)

PYD should be recognized as containing a number of key elements that are relevant to care of this age patient:

1. Providing youth with safe and supportive environments
2. Fostering relationships between young people and caring adults who can mentor and guide them
3. Promoting healthy lifestyles and teaching positive patterns of social interaction
4. Providing a safety net in times of need (Department of Health and Human Services, 2002)

Psychosocial and Other Considerations

1. Oral health care of the adolescent should be provided by a dentist who has appropriate training in managing the specific needs of this patient. The primary care dentist should consider referral to a specialist for treatment of particular problems outside his or her expertise. This may include both dental and non-dental problems.
2. Attention should be given to the particular psychosocial aspects of adolescent dental care. Issues of consent, confidentiality, compliance, and others should be addressed in the care of these patients (AAPD, "Clinical guideline on record keeping," 2004; AAPD, "Clinical guideline on informed consent," 2005)
3. A complete oral health care program for the adolescent requires an educational component that addresses the particular concerns and needs of the adolescent patient and focuses on:
    a. Specific behaviorally and physiologically induced oral manifestations in this age group
    b. Shared responsibility for care and health by the adolescent and provider
    c. Consequences of adolescent behavior on oral health

Transitioning to Adult Care

At a time agreed upon by the patient, parent, and pediatric dentist, the patient should be transitioned to a dentist knowledgeable and comfortable with managing that patient's specific oral care needs. For the patient with special health care needs (SHCN), in cases where it is not possible or desired to transition to another practitioner, the dental home can remain with the pediatric dentist and appropriate referrals for specialized dental care should be recommended when needed (AAPD, "Clinical guideline on management of persons with special health care needs," 2004).

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

All oral health policies and clinical guidelines are based on 2 sources of evidence: (1) the scientific literature; and (2) experts in the field.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate oral health care and decrease in the incidence of periodontal disease in adolescent patients

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms
Resources

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 (revised 2005)

GUIDELINE DEVELOPER(S)

American Academy of Pediatric Dentistry - Professional Association

SOURCE(S) OF FUNDING

American Academy of Pediatric Dentistry

GUIDELINE COMMITTEE

Council on Clinical Affairs and Committee on the Adolescent

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: American Academy of Pediatric Dentistry. Clinical guideline on adolescent oral health care. Chicago (IL): American Academy of Pediatric Dentistry; 2003. 6 p.

GUIDELINE AVAILABILITY

Electronic copies: Available from the American Academy of Pediatric Dentistry Web site.

Print copies: Available from the American Academy of Pediatric Dentistry, 211 East Chicago Avenue, Suite 700, Chicago, Illinois 60611

AVAILABILITY OF COMPANION DOCUMENTS

Information about the American Academy of Pediatric Dentistry (AAPD) mission and guideline development process is available on the AAPD Web site.

The following implementation tools are available for download from the AAPD Web site:

- Dental growth and development chart
- American Academy of Pediatric Dentistry Caries-Risk Assessment Tool (CAT)

PATIENT RESOURCES

None available

NGC STATUS

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