

AAPD Council on Clinical Affairs

The American Academy of Pediatric Dentistry provides recommendations and guidelines for the practice of Pediatric Dentistry.

Breast Feeding

The American Academy of Pediatric Dentistry endorses the American Academy of Pediatrics' policy statement on breast-feeding and the use of human milk. The AAP identifies breast-feeding as the ideal method of feeding and nurturing infants. Research shows that human milk and breast-feeding of infants provide advantages with regard to general health, growth and development while significantly decreasing risk for a large number of acute and chronic diseases. The AAP statement concludes "breast-feeding ensures the best possible health as well as the best development and psychosocial outcomes for the infant."

Although breast-feeding is essential in providing the best possible nutrition to infants, the AAPD cautions that frequent breast-feeding at night and on demand after eruption of teeth may be implicated in contributing to the development of early childhood caries.

Reasons for Dental Care of the Pediatric Patient

Dental caries, periodontal disease and other oral conditions left untreated can limit substantially a child's development and an individual's participation in life activities. A person should be considered to have a dental disability if pain, infection or lack of functional dentition:

1. Restricts nutritional intake adequate for growth and energy needs
2. Delays or otherwise alters growth and development
3. Inhibits participation in life activities

Caries Risk Assessment

In children younger than 3 years of age, any sign of smooth-surface cavities is indicative of severe early childhood caries. From ages 3-5, one or more cavities or filled smooth surfaces in primary maxillary anterior teeth or decayed, missing or filled are also positive signs of severe early childhood decay.

Fluoride Recommendation

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 dental decay. Alternate means of fluoride administration are less beneficial but are effective and economical. Data within the last half-century indicate reductions in decay

of 55-60 percent, without significant dental fluorosis, when domestic water supplies are fluoridated at an optimal level. The costs of oral health care for children can be reduced by as much as 50 percent by the long-term use of fluorides. An even higher caries reduction can be obtained if the proper use of fluorides is combined with other dietary, oral hygiene and preventive measures as prescribed by a pediatric dentist familiar with the child's oral health and family history. 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.

Clinical trials have confirmed the anti-caries effect of a 5%-neutral sodium fluoride varnish. Fluoride varnishes can prevent or reverse enamel demineralization. In children with moderate to high caries risk, fluoride varnishes and fluoride-releasing restorative and bonding materials have been shown to be beneficial and are best utilized as part of a comprehensive preventative program in the "dental home."

The AAPD endorses and encourages the adjustment of fluoride content of domestic community water supplies. 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 Council on Scientific Affairs of the American Dental Association. The AAPD does not support the use of prenatal fluoride supplements.

Oral Habits, Bruxism, Tongue Thrusting

Oral habit behaviors include digit-sucking, pacifier sucking, lip sucking and biting, nail-biting, grinding, self-injurious habits, mouth breathing and tongue thrust. Non-nutritive sucking behaviors 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 non-nutritive 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.

Grinding, defined as the habitual, nonfunctional forceful contact between occlusal tooth surfaces, can occur while awake or asleep. Evidence suggests that juvenile grinding is a self-limiting condition that does not progress into adult grinding.

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. Management may consist of simple habit control, myofunctional therapy, habit appliances, orthodontics and possible surgery.

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.

Intraoral and Perioral Piercing

The use of intraoral jewelry and piercings on oral and perioral tissues has 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. Life threatening complications associated with oral piercings have been reported including bleeding, edema and airway obstruction. Unregulated piercing parlors and techniques have been identified by the National Institutes of Health as a possible vector for disease transmission (i.e. hepatitis, tetanus, tuberculosis) and as a cause of bacterial endocarditis in susceptible patients.

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.

The Role of Six-Month Exams and Cleanings in the Pediatric Population

There are several reasons for a dental cleaning, including:

1. Removal of plaque, stain and calculus
2. Elimination of factors that influence the buildup and retention of plaque
3. Demonstration of proper oral hygiene methods to the patient/caregiver
4. Facilitation of a thorough clinical examination
5. Introduction of the child to dental procedures

Microbial plaque is the primary cause of dental decay and gum disease. Although it may be possible to remove most plaque using mechanical oral hygiene aides, many patients do not have the motivation or skill to maintain a plaque-free state for extended periods of time. Clinical studies show that “self-administered plaque control programs alone, without periodic professional reinforcement, are inconsistent in providing long-term inhibition of gingivitis.

The type of cleaning recommended is based on an individual patient’s risk assessment for dental decay and gum disease. A cleaning can be performed using gauze, cloth and toothbrush or rubber cup on the incisors of an infant only. Once the molars have begun to erupt, manual or power toothbrush, rubber cup and/or hand instruments followed by site specific flossing may be used.

Tobacco Use

The AAPD opposes the use of all forms of tobacco including cigarettes, pipes, cigars and smokeless tobacco and alternative nicotine delivery systems such as tobacco lozenges, nicotine water, nicotine lollipops or “heated tobacco” cigarette substitutes.

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. Infants and children exposed to tobacco smoke have higher rates of lower respiratory illness, middle ear infections, asthma and decay in the baby teeth and are at increased risk for sudden infant death syndrome.

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. If current tobacco use patterns continue in the United States, an estimated five million persons now under the age of 18 will die prematurely from tobacco-related illness. Each year in the United States, tobacco kills more citizens than alcohol, cocaine, heroin, homicide, suicide, car accidents, fire and AIDS combined.

Policy on Third-Party Reimbursement of Medical Fees Related to Sedation/General Anesthesia for Dental Procedures

The AAPD, in order to ensure that all children have access to the full range of dental delivery systems, 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.

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.

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. "Protection of a child's developing psyche" is a recognized medical indication for allowing such procedures as tonsillectomy, myringotomy or pediatric dental care to be performed, utilizing sedation or general anesthesia. 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. For instance, medical policies often provide reimbursement for sedation/general anesthesia or facility fees related to myringotomy for a 3-year-old child but will deny these benefits when related to treatment of dental disease and/or infection for the same patient.

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.”

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

Sedation and/or general anesthesia is necessary to deliver compassionate, quality oral health care to some infants, children, adolescents and persons with health care needs. Insurance companies are encouraged to include sedation and/or general anesthesia and related facility services as benefits of health insurance without discrimination between the “medical” and “dental” nature of the procedure.

The AAPD shall work to end all arbitrary and unfair limitations of benefits for sedation/general anesthesia and facility costs related to the delivery of oral health care.

Medically necessary dental care is the reasonable and appropriate diagnostic, preventative and treatment services and follow-up care as determined by qualified, appropriate health care providers in treating any condition, disease, injury or congenital or developmental malformation. Medically necessary care includes all health care services that directly support the delivery of dental/oral health care that, in the judgment of the attending dentist, are necessary for the provision of optimal quality of therapeutic and preventative oral care to patients with medical, physical or behavioral conditions. These services include, but are not limited to, sedation, general anesthesia and utilization of surgical facilities. Dental care is medically necessary for the purpose of preventing, controlling and eliminating orofacial infection, pain and disease and correcting facial disfigurement or dysfunction.

Guideline on Fluoride Therapy

Use of fluorides for the prevention and control of caries is documented to be both safe and highly effective. Optimizing fluoride levels in the water supplies is an ideal public health measure because it is effective and inexpensive and does not require conscious daily cooperation from individuals. Daily fluoride exposure through water supplies or supplementation and monitored use of fluoride toothpaste after 6 months of age can be effective primary preventive procedures. Before supplements are prescribed, it is essential to review all dietary sources of fluoride (e.g., all drinking water sources such as home, day care and school, consumed beverages, prepared food, toothpaste) to determine the patient’s true exposure to fluoride. The use of fluoridated toothpaste in children who cannot spit carries an increased risk of dental fluorosis. Clinical studies have shown the effectiveness of a professionally applied topical fluoride treatment. Professionally applied fluoride treatments are more potent and effective for the prevention of dental decay than fluorides used at home. Children at higher caries risk may require additional fluoride therapies.

Fluoride supplements should be considered for all children drinking fluoride deficient water. After the fluoride level of the water supply has been determined, assessing the child's caries risk is determined using the Dietary Fluoride Supplement Schedule.

Professional topical fluoride treatment should be based on caries-risk assessment. The use of fluoride-containing toothpaste should be recommended as a primary preventive procedure. Because ingestion of fluoridated toothpaste carries an increased risk of fluorosis, this risk must be weighed against the benefit of caries prevention in determining the use of fluoridated toothpaste by a child.

Children at high risk for decay (i.e. children with orthodontic/prosthetic appliances, with reduced salivary function, who are unable to clean teeth properly, who are at dietary risk, who have mothers or siblings with caries or who have high oral levels of cariogenic bacteria) or children who have active caries should be considered for additional fluoride therapy. Home fluoride programs using fluoride mouth rinses or brush-on fluoride gels should be recommended for use by school-aged children at high risk for caries. If a high caries risk patient cannot or will not comply with home fluoride therapy, frequent professional fluoride treatments may be substituted.

Guidelines on Periodic Examinations, Preventive Dental Services and Guidance and Oral Treatment for Children

Recommendations:

1. Complete the clinical oral examination with appropriate diagnostic tests to assess oral growth and development, pathology and/or injuries; provide diagnosis.
2. Provide oral hygiene counseling.
3. Remove supragingival and subgingival stains or deposits.
4. Assess the child's fluoride status and provide counseling regarding fluoride. Prescribe systemic fluoride supplements, if indicated, following assessment of total fluoride intake from drinking water, diet and oral hygiene products.
5. Recall appointments should be conducted every six months or as indicated by patient's risk status.

Early Childhood Caries (Baby Bottle/Nursing Caries)

The American Academy of Pediatric Dentistry recognizes early childhood caries as a significant public health problem. 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.

Frequent consumption of liquids containing fermentable carbohydrates (e.g. juice, milk, formula, soda) increases the risk of caries due to prolonged contact between sugars in the consumed liquid and cariogenic bacteria on susceptible teeth. 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, caries. The major place from which infants acquire *Mutans streptococci* is their mother's saliva. The success of the transmission and resultant colonization of maternal bacteria depends largely on the magnitude of the inoculum. 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. Decreasing oral bacteria in the mother via routine and adequate dental care and fluoride treatments can prevent or delay infant inoculation.

Early childhood caries include a higher risk of new carious lesions in both the primary and permanent dentitions, hospitalizations and emergency room visits, increased treatment costs and time, insufficient physical development, loss of school days and increased days with restricted activity, diminished ability to learn and diminished oral health-related quality of life.

Appropriate preventive measures include:

1. Infants should not be put to sleep with a bottle. Ad libitum nocturnal breast-feeding should be avoided after the first baby tooth begins to erupt.
2. Parents should encourage infants to 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 measure should be implemented by the time of eruption of the first primary tooth.
5. A Pediatric Dentist visit within six 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.

Guideline on Adolescent Oral Health Care

The Academy of Pediatric Dentistry recognizes that long-term oral health is more likely to be assured if a pediatric dentist manages the oral health needs of the adolescent. These guidelines address the unique needs within the adolescent population and propose general recommendations for their management. The adolescent patient is recognized as having distinctive needs due to a potentially high caries rate, increased risk for traumatic injury and gum disease, a tendency for poor nutritional habits and increased aesthetic desire and awareness, complexity of combined orthodontic and restorative care and dental phobia and unique social and psychological needs.

Recommendations:

Adolescence marks a period of significant caries activity for many adolescents. Current research suggests that the caries rate is declining; yet it remains the highest during adolescence. A particular concern is the changing pattern of caries. The numbers of caries free adolescents is increasing, and there is growing evidence that a small percentage of children and adolescents account for the most severe caries. These carious lesions often are confined to developmental pits and fissures.

Immature permanent tooth enamel, a total increase in susceptible tooth surfaces and environmental factors such as diet, independence to seek care or avoid it, a low priority for oral hygiene and additional social factors also may contribute to the upward slope of caries in adolescence. The positive effects of fluoridation, routine professional care, patient education and personal hygiene can have, should be emphasized.

Fluoridation has proven the most economical and effective caries prevention measure. The adolescent should receive maximum fluoride benefit. 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. Professionally applied fluoride treatments should be based on the individual patient's caries-risk assessment as determined by the patient's dental provider.

Orthodontic Considerations: Malocclusion can be a significant treatment need in the adolescent population as both environmental and genetic factors come into play. Although the genetic basis of much malocclusion makes it unpreventable, numerous methods exist to treat the occlusal disharmonies, TMJ, periodontal disease and disfiguration, which may be associated with malocclusion. Within the area of occlusal problems are several tooth/jaw-related discrepancies, which can affect the adolescent. Third-molar malposition and TMJ disorders require special attention to avoid long-term problems. Congenitally missing teeth present complex problems for the adolescent and often require combined orthodontic and restorative care for solution. Any tooth/jaw positioned problems that present significant aesthetic, functional, physiologic or emotional dysfunction are potential difficulties for the adolescent. These can include single or multiple tooth malpositions, tooth/jaw size discrepancies and craniofacial disfigurements.

Third molars can present acute and chronic problems for the adolescent. Impaction or malposition leading to such problems as pericoronitis, caries, cysts or periodontal problems merits evaluation for removal. Evaluation of third molars, including radiographic diagnostic aids, should be an integral part of the dental examination of the adolescent. An appropriately trained oral surgeon should perform treatment of third molars that are potential or active problems. Diagnostic criteria for extraction should be those currently accepted by the dental profession.

Pediatric Dentists Serve as Both Primary and Specialty Care Providers

The American Academy of Pediatric Dentistry 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.

“Pediatric Dentistry is an age-related specialty that provides both primary and comprehensive preventative and therapeutic oral health needs for infants and children through adolescence including those with special health care needs.” The ADA, the American Academy of General Dentistry and the AAPD all recognize the pediatric dentist as both a primary care provider and a specialty care provider. This dual role is similar to that of pediatricians, gynecologists and internists in medicine.

Sealants

Pit and fissure sealants can be of significant benefit in the reduction of caries risk. The occlusal (chewing) surfaces of second molars (12-year molars) are highly prone to caries attack due to lack of enamel maturation, the presence of deep grooves, poor oral hygiene and dietary habits. Sealants are an effective caries preventive technique that should be considered.

Sports Dentistry

Sports Dentistry is the treatment and prevention of oral/facial athletic injuries and related oral diseases and their manifestations. An estimated 30-50 percent of all oral sports injuries are preventable. In sports, the challenge is to maximize the benefits of participation and to limit injuries. Sports dentistry has a major role to play in this area. Prevention and adequate preparation are the key elements in minimizing injuries that occur in sports. Many facets can help prevent trauma related to sporting events. Included are teaching proper skills such as tackling technique, purchasing and maintaining appropriate equipment, safe playing areas and certainly the wearing and utilization of properly fitted protective equipment.

In some sports, injury prevention, through properly fitted mouthguards, is considered essential. These are contact sports of football, boxing, martial arts and hockey. Other sports, traditionally classified as non-contact sports such as basketball, baseball, bicycling, rollerblading, soccer, wrestling, racquetball, surfing and skateboarding, also require properly fitted mouthguards as dental injuries, unfortunately, are a negative aspect of participation in these sports.

Dental injuries are the most common type of oral/facial injuries sustained during participation in sports. Victims of tooth avulsions who do not have the teeth properly preserved or replanted will face lifetime dental costs estimating from \$10,000-\$15,000

per tooth, the inconvenience of hours spent in the dental chair and possibly other dental problems.

Treatment of oral/facial injuries includes not only treatment of injuries at the dental office, but also treatment at the site of injury, such as a basketball court or football or rugby field, where the dentist may not have the convenience of the diagnostic tools available.

Preseason screenings and examinations are essential in preventing injuries. Examinations include health histories, at-risk dentitions, diagnosis of caries, maxilla/mandibular relationships, orthodontics, loose teeth, dental habits, missing teeth and the possible need for extractions for orthodontic concerns. Determination of the need for a specific type and design of mouthguard is made at this time.

Mouthguard design and fabrication is extremely important. There are four types of mouthguards. Stock, Boil and Bite, Vacuum Custom Made and Pressure Laminated Custom Made. Stock Boil and Bite Mouthguards purchased at sporting good stores do not provide the optimum treatment expected by the athlete. These ill-fitting mouthguards cannot deal with the idiosyncrasies athletes and children may have. If everyone had the same dentition; were of the same gender; played the same sport under the same conditions; had the same experience and played the same position at the same level of competition; were the same age and same size mouth, with the same number and shape of teeth, prescribing a standard mouthguard would be similar.

Erupting teeth (ages 6-12) should be noted so the mouthguard can be designed to allow for eruption during the season. Boil and bite mouthguards do not allow for this eruption space.

Child Identification Programs

More than 800,000 children in America are reported missing each year. Since the passage of the Missing Children Act in 1982 and 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. Numerous cases are published in which law enforcement agencies called upon dentistry to provide information that proved vital to the identification process. Data found in dental records used for identification purposes is invaluable.

Non-dental sources of distinguishing information currently include fingerprints, photographs, DNA from blood, saliva and other tissues and physical descriptions. Some of these non-dental sources have practical limits. Dentistry can provide data without many limitations and can collect DNA non-invasively with a bite registration.

All community identification programs should include a dental component documenting the child's dental home and encourage consistent dental visits. The first dental visit should be within six months of the eruption of the first primary tooth and no later than 12

months of age. 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 X-rays, photographs, study casts and bite registration.

Reason for Referral

The American Academy of Pediatric Dentistry 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 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.

The caregiver should be informed of the problem and what treatment is recommended. The dentist has the obligation to act for the benefit of the patient in a timely manner. 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 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.

Poor Oral Health Can Affect a Child's Ability to Learn

An oral examination prior to attending school could improve school readiness by providing timely opportunity for diagnosis and treatment of oral conditions. Professional care is necessary to maintain oral health. The AAPD emphasizes the importance of very early professional intervention and the continuity of care based on the individualized needs of the child. 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. General health examinations prior to school entrance are mandated by many states. Integration of general health and oral health care programs is lacking. In the U.S., many children have not received a professional oral health assessment prior to entering kindergarten.

Caries is the most common chronic disease of childhood. Caries and gingivitis can be prevented and eradicated, but not everyone is aware of the measures necessary to do so. Greater than one-third of the population of the United States does not benefit from community water fluoridation. Because the use of fluoride contributes to the prevention, inhibition and reversal of caries, early determination of the child's systemic and topical fluoride exposure is important. 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. Children with dental pain may be irritable, withdrawn or unable to concentrate. Pain can affect test performance as well as school attendance. When these

problems are treated and children no longer are experiencing pain, their learning and school attendance improve.

The Recent News on Pop

12-19-year-old boys who consume soda pop drink an average of 2 1/3 12-ounce sodas per day (868 cans per year or 15 teaspoons of sugar a day). Girls drink about one-fourth less.

Soda pop is American's single biggest source of refined sugars, providing the average person with 1/3 of that sugar.

As teens have doubled or tripled their consumption of soft drinks, they drank 40 percent less milk. Boys and girls consume twice as much soda pop as milk. Pop drinking teenage girls consume 48 percent of the recommended amount of calcium. It is crucial for females in their teens and twenties to build up bone mass to reduce the risk of osteoporosis later in life. Preliminary research suggests that drinking soda pop instead of milk can contribute to broken bones in children and adolescents.

Obesity rates have risen in tandem with soda consumption. Soft drinks provide 10.3 percent of the calories consumed by overweight teenage boys. The National Institute of Health recommends that people trying to lose or control their weight should drink water instead of soft drinks with sugar.

Among frequent consumers, regular soft drinks promote tooth decay because they bathe the teeth with sugar-water for long periods of time.

Aphthous Ulcers:

Canker sores, oral ulcerations and mouth ulcers are the most common oral mucosal disease known to human beings. Recurrent Aphthous Stomatitis presents as well-defined round or ovoid painful ulcers with shallow necrotic centers, raised margins and erythematous halos. These ulcers are most commonly found on non-keratinized oral mucosa and recur with variable frequency intervals of a few months to a few days. In most patients, these occurrences decrease in frequency and severity with age.