

Practical Oral Care for People With Autism

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Providing oral care to people with autism requires adaptation of the skills you use every day. In fact, most people with mild or moderate forms of autism can be treated successfully in the general practice setting. This booklet will help you make a difference in the lives of people who need professional oral care.

Autism is a complex developmental disability that impairs communication and social, behavioral, and intellectual functioning. Some people with the disorder appear distant, aloof, or detached from other people or from their surroundings. Others do not react appropriately to common verbal and social cues, such as a parent's tone of voice or smile. Obsessive routines, repetitive behaviors, unpredictable body movements, and self-injurious behavior may all be symptoms that complicate dental care.

Autism varies widely in symptoms and severity, and some people have coexisting disabilities such as mental retardation or epilepsy. They can be among the most challenging of patients, but following the suggestions in this booklet can help make their dental treatment successful.

**Making a difference
in the oral health of
a person with autism
may go slowly at first,
but determination can
bring positive results and
invaluable rewards.**

Health Challenges in Autism and Strategies for Care

Before the appointment, obtain and review the patient's medical history. Consultation with physicians, family, and caregivers is essential to assembling an accurate medical history. Also, determine who can legally provide informed consent for treatment.

COMMUNICATION PROBLEMS and MENTAL CAPABILITIES are central concerns when treating people with autism.

- ▶ Talk with the parent or caregiver to determine your patient's intellectual and functional abilities, and then communicate with the patient at a level he or she can understand.
- ▶ Use a "tell-show-do" approach to providing care. Start by explaining each procedure before it occurs. Take the time to show what you have explained, such as the instruments you will use and how they work. Demonstrations can encourage some patients to be more cooperative.

BEHAVIOR PROBLEMS—which may include hyperactivity and quick frustration—can complicate oral health care for patients with autism. The invasive nature of oral care may trigger violent and self-injurious behavior such as temper tantrums or head banging.

- ▶ Plan a desensitization appointment to help the patient become familiar with the office, staff, and equipment through a step-by-step process. These steps may take several visits to accomplish.
 - Have the patient sit alone in the dental chair to become familiar with the treatment setting. Some patients may refuse to sit in the chair and choose instead to sit on the operator's stool.

- Once your patient is seated, begin a cursory examination using your fingers.
- Next, use a toothbrush to brush the teeth and gain additional access to the patient's mouth. The familiarity of a toothbrush will help your patient feel comfortable and provide you with an opportunity to further examine the mouth.

- ▶ When the patient is prepared for treatment, make the appointment short and positive.
- ▶ Pay special attention to the treatment setting. Keep dental instruments out of sight and light out of your patient's eyes.
- ▶ Praise and reinforce good behavior after each step of a procedure. Ignore inappropriate behavior as much as you can.
- ▶ Try to gain cooperation in the least restrictive manner. Some patients' behavior may improve if they bring comfort items such as a stuffed animal or a blanket. Asking the caregiver to sit nearby or hold the patient's hand may be helpful as well.
- ▶ Use immobilization techniques only when absolutely necessary to protect the patient and staff during dental treatment—not as a convenience. There are no universal guidelines on immobilization that apply to all treatment settings. Before employing any kind of immobilization, it may help to consult available guidelines on federally funded care, your State department of mental retardation/mental health, and your State Dental Practice Act. Guidelines on behavior management published by the American Academy of Pediatric Dentistry (www.aapd.org) may also be useful. Obtain consent from your patient's legal guardian and choose the least restrictive technique that will allow you to provide care

People with autism need consistency and can be especially sensitive to changes in their environment.

safely. Immobilization should not cause physical injury or undue discomfort.

- ▶ If all other strategies fail, pharmacological options are useful in managing some patients. Others need to be treated under general anesthesia. However, caution is necessary because some patients with developmental disabilities can have unpredictable reactions to medications.

People with autism often engage in perseveration, a continuous, meaningless repetition of words, phrases, or movements. Your patient may mimic the sound of the suction, for example, or repeat an instruction over and over again. Avoid demonstrating dental equipment if it triggers perseveration, and note this in the patient's record.

UNUSUAL RESPONSES TO STIMULI

can create distractions and interrupt treatment. People with autism need consistency and can be especially sensitive to changes in their environment. They may exhibit unusual sensitivity to sensory stimuli such as sound, bright colors, and touch. Reactions vary: Some people with autism may overreact to noise and touch, while exposure to pain and heat may not provoke much reaction at all.

- ▶ Use the same staff, dental operator, and appointment time to sustain familiarity. These details can help make dental treatment seem less threatening.
- ▶ Minimize the number of distractions. Try to reduce unnecessary sights, sounds, odors, or other stimuli that might be disruptive. Use an operator that is somewhat secluded instead of one in the middle of a busy office. Also, consider lowering ambient light and asking the patient's caregiver whether soft music would help.

- ▶ Allow time for your patient to adjust and become desensitized to the noise of a dental setting. Some patients may be hypersensitive to the sound of dental instruments.
- ▶ Talk to the caregiver to get a sense of the patient's level of tolerance. People with autism differ in how they accept physical contact. Some are defensive and refuse any contact in or around the mouth, or cradling of the head or face. Others find such cradling comforting.
- ▶ Note your findings and experiences in the patient's chart.

UNUSUAL AND UNPREDICTABLE BODY MOVEMENTS

are sometimes observed in people with autism. These movements can jeopardize safety as well as your ability to deliver oral health care.

- ▶ Make sure the path from the reception area to the dental chair is clear.
- ▶ Observe the patient's movements and look for patterns. Try to anticipate the movements, either blending your movements with those of your patient or working around them.

SEIZURES may accompany autism but can usually be controlled with anticonvulsant medications. The mouth is always at risk during a seizure: Patients may chip teeth or bite the tongue or cheeks. People with controlled seizure disorders can easily be treated in the general dental office.

- ▶ Consult your patient's physician. Record information in the chart about the frequency of seizures and the medications used to control them. Determine before the appointment whether medications have been taken as directed. Know and avoid any factors that trigger your patient's seizures.

Record in the patient's chart strategies that were successful in providing care. Note your patient's preferences and other unique details that will facilitate treatment, such as music, comfort items, and flavor choices.

- ▶ Be prepared to manage a seizure. If one occurs during oral care, remove any instruments from the mouth and clear the area around the dental chair. Attaching dental floss to rubber dam clamps and mouth props when treatment begins can help you remove

them quickly. Do not attempt to insert any objects between the teeth during a seizure.

- ▶ Stay with your patient, turn him or her to one side, and monitor the airway to reduce the risk of aspiration.

Oral Health Problems in Autism and Strategies for Care

People with autism experience few unusual oral health conditions. Although commonly used medications and damaging oral habits can cause problems, the rates of caries and periodontal disease in people with autism are comparable to those in the general population. Communication and behavioral problems pose the most significant challenges in providing oral care.

DAMAGING ORAL HABITS are common and include bruxism; tongue thrusting; self-injurious behavior such as picking at the gingiva or biting the lips; and pica—eating objects and substances such as gravel, cigarette butts, or pens. If a mouth guard can be tolerated, prescribe one for patients who have problems with self-injurious behavior or bruxism.

DENTAL CARIES risk increases in patients who have a preference for soft, sticky, or sweet foods; damaging oral habits; and difficulty brushing and flossing.

- ▶ Recommend preventive measures such as fluorides and sealants.
- ▶ Caution patients or their caregivers about medicines that reduce saliva or contain sugar. Suggest that patients drink water often, take sugar-free

medicines when available, and rinse with water after taking any medicine.

- ▶ Advise caregivers to offer alternatives to cariogenic foods and beverages as incentives or rewards.
- ▶ Encourage independence in daily oral hygiene. Ask patients to show you how they brush, and follow up with specific recommendations. Perform hands-on demonstrations to show patients the best way to clean their teeth. If appropriate, show patients and caregivers how a modified toothbrush or floss holder might make oral hygiene easier.
- ▶ Some patients cannot brush and floss independently. Talk to caregivers about daily oral hygiene and do not assume that they know the basics. Use your experiences with each patient to demonstrate oral hygiene techniques and sitting or standing positions for the caregiver. Emphasize that a consistent approach to oral hygiene is important—caregivers should try to use the same location, timing, and positioning.

PERIODONTAL DISEASE occurs in people with autism in much the same way it does in persons without developmental disabilities.

- ▶ Some patients benefit from the daily use of an antimicrobial agent such as chlorhexidine.

TIPS FOR CAREGIVERS ARE AVAILABLE IN THE BOOKLET

DENTAL CARE EVERY DAY: A CAREGIVER'S GUIDE, ALSO PART OF THIS SERIES.

- Stress the importance of conscientious oral hygiene and frequent prophylaxis.

TOOTH ERUPTION may be delayed due to phenytoin-induced gingival hyperplasia. Phenytoin is commonly prescribed for people with autism.

TRAUMA and INJURY to the mouth from falls or accidents occur in people with seizure disorders. Suggest a tooth-saving kit for group homes. Emphasize to caregivers that traumas require immediate professional attention and explain the procedures to follow if a permanent tooth is knocked out. Also, instruct caregivers to locate any missing pieces of a fractured tooth, and explain that radiographs of the patient's chest may be necessary to determine whether any fragments have been aspirated.

Physical abuse often presents as oral trauma. Abuse is reported more frequently in people with developmental disabilities than in the general population. If you suspect that a child is being abused or neglected, State laws require that you call your Child Protective Services agency. Assistance is also available from the Childhelp[®] USA National Child Abuse Hotline at (800) 422-4453 or the National Clearinghouse on Child Abuse and Neglect Information (<http://nccanch.acf.hhs.gov>).

Making a difference in the oral health of a person with autism may go slowly at first, but determination can bring positive results—and invaluable rewards. By adopting the strategies discussed in this booklet, you can have a significant impact not only on your patients' oral health, but on their quality of life as well.

Additional Readings

Klein U, Nowak AJ. Autistic disorder: a review for the pediatric dentist. *Pediatric Dentistry*, 20(5):312–317, 1998.

Klein U, Nowak AJ. Characteristics of patients with autistic disorder (AD) presenting for dental treatment: a survey and chart review. *Special Care in Dentistry*, 19(5):200–207, 1999.

National Institute of Child Health and Human Development, National Institutes of Health (NIH). *Autism Questions and Answers for Health Professionals*. NIH Pub. No. 01-4964, 2001.

Towbin KE, Mauk JE, Batshaw ML. Pervasive developmental disorders. In Batshaw ML, *Children With Disabilities* (5th ed.). Baltimore, MD: Paul H. Brookes Publishing Co., 2002. pp. 365–387.

For more information about autism, contact

**National Institute of Child Health and Human
Development Information Resource Center**

P.O. Box 3006

Rockville, MD 20847

(800) 370-2943

www.nichd.nih.gov

NICHDInformationResourceCenter@mail.nih.gov

Practical Oral Care for People With Developmental Disabilities

Making a Difference



National Institute of Dental
and Craniofacial Research



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and Human Development



Centers for Disease Control
and Prevention



Special Care Dentistry

For additional copies of this booklet, contact

National Institute of Dental and Craniofacial Research
National Oral Health Information Clearinghouse
1 NOHIC Way
Bethesda, MD 20892-3500
(301) 402-7364
www.nidcr.nih.gov

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NIH Publication No. 06-5190
Reprinted May 2006

This booklet is one in a series on providing oral care for people with mild or moderate developmental disabilities. The issues and care strategies listed are intended to provide general guidance on how to manage various oral health challenges common in people with autism.

Other booklets in this series:

***Continuing Education: Practical Oral Care for People
With Developmental Disabilities***

Practical Oral Care for People With Cerebral Palsy

Practical Oral Care for People With Down Syndrome

Practical Oral Care for People With Mental Retardation

Wheelchair Transfer: A Health Care Provider's Guide

Dental Care Every Day: A Caregiver's Guide

ACKNOWLEDGMENTS

The National Institute of Dental and Craniofacial Research thanks the oral health professionals and caregivers who contributed their time and expertise to reviewing and pretesting the *Practical Oral Care* series.

Expert Review Panel

- Mae Chin, RDH, University of Washington, Seattle, WA
- Sanford J. Fenton, DDS, University of Tennessee, Memphis, TN
- Ray Lyons, DDS, New Mexico Department of Health, Los Lunas, NM
- Christine Miller, RDH, University of the Pacific, San Francisco, CA
- Steven P. Perlman, DDS, Special Olympics Special Smiles, Lynn, MA
- David Tesini, DMD, Natick, MA