

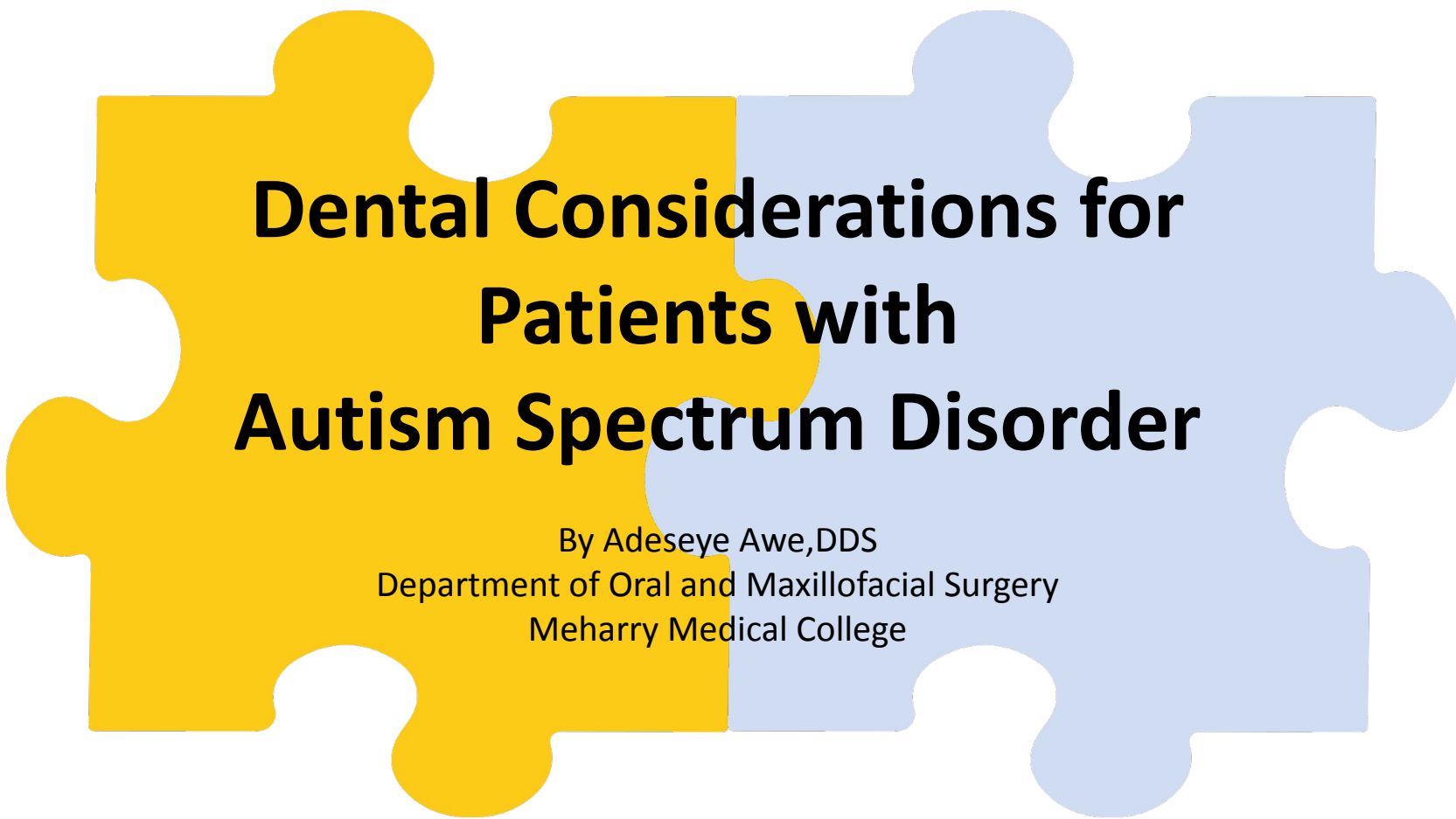


12th ANNUAL AUTISM
CONFERENCE 2022

THEME: CREATING A COMMUNITY OF

AWE-TISM
Advocates





Dental Considerations for Patients with Autism Spectrum Disorder


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Presentation Overview

- Overview and general characteristics of ASD
- Dental considerations and management
- Behavioral methods used by dental staff
- Home based preparation



Overview

- The term Autism describes a brain disorder that affects social interaction, communication and often results in repetitive or stereotyped behavior
- Autism may refer to a specific diagnosis that is consistent with a number of specified symptoms. Autism may also be used as a general term to describe other Pervasive Developmental Disorders (PDD). Pervasive Developmental Disorders include Autism, Asperger syndrome, Rett syndrome, Childhood Disintegrative Disorder, **and Pervasive Developmental Disorder Not Otherwise Specified (PDDNOS)**
- The term Autism Spectrum Disorder (ASD) is often used interchangeably with Pervasive Developmental Disorder by parents and professionals and refers to diagnoses of Autism, Asperger syndrome, and PDDNOS
-  Autism varies widely in symptoms and severity, and some people have coexisting conditions such as intellectual disability or epilepsy



Behavioral Characteristics

- Individuals with ASD spectrum disorders demonstrate difficulties in three main areas:
 - Social interaction
 - Communication
 - Repetitive behaviors or restricted Interests
- The aspects of social interaction that individuals with ASD often have difficulties with include:
 - Poor eye contact
 - An inability to read facial expressions
 - Difficulty with social reciprocity and appropriate peer interactions
- Individuals with ASD also struggle with communication. According to the CDC, approximately 40% of individuals with an ASD are actually non-verbal, **though this doesn't necessarily mean they are not able to understand language**




Prevalence of ASD

- The prevalence of ASD has increased dramatically in recent years
- The Center for Disease Control and Prevention (CDC) estimates that 1 in 110 children under the age of 8 have an ASD
- Furthermore, a recent study in South Korea reports a prevalence rate of 2.6% or 1 in 38 individuals. This represents a 57% increase from 2002 estimates. The importance of oral health cannot be overestimated; oral health impacts an individual's overall health as well as his or her quality of life
- An increasing number of dental practitioners have been able to serve the needs of children and adults with ASD diagnoses, particularly as this population continues to grow
- The CDC estimates that approximately 730,000 individuals from birth to age 21 have an ASD



General Characteristics of Autism Spectrum Disorders

- Individuals with an ASD usually may engage in repetitive behaviors. These behaviors can include repetitive body movements or using objects in a repetitive manner rather than using the objects in the ways in which they were intended to be used
- Individuals with an ASD may have difficulty with transitions and changes in routine and may insist on following rituals or sequences of activities that are meaningful to them but are not obviously meaningful to others. Some individuals with an ASD may have a focused interest in specific topics or objects
- Many individuals with an ASD are particularly sensitive to sensory input. They may have strong positive or negative reactions to sounds, smells, sights, taste, texture or human touch
-  While individuals with an ASD share some common challenges, each individual has a unique set of strengths and needs.



Oral and Physical Findings

- Evidence of erosion & bruxism
- Macrocephaly
- Possible bruising/abrasion on head
- Caries rate: similar or less than healthy population
- Difficulty accept brushing/flossing
- Restricted food choices



Dental Considerations

- Patients who have an ASD diagnosis do not differ from other patients as far as their dental presentations and problems
- What will be different is the flow of these patients through the dental offices and management techniques that can be employed to have a successful visit.
- It is crucial for our dental office staff to understand how to accommodate and work with patients who have ASD diagnoses both in the office and at home, and recommendations for their home care will make it possible to achieve the best oral health outcomes possible



Medical Considerations in Preparation for Dental Treatments

A thorough medical history review is necessary to fully understand the health care problems that may accompany an ASD, most commonly:

- Cognitive Impairment (25- 40%)
- ADHD (18-57%)
- Depression/Anxiety (17-62%)
- Bipolar Disorder (2-8%)
- Epilepsy (approximately one-third)
- Tuberos sclerosis (1-4%)
- Sleep difficulties (44-89%)



Dental Manifestations

- Historically, patients with a diagnosis of ASD have been reported to have lower rates of dental caries than typical patients
- Patients who have an ASD diagnosis may, however, be at higher risk than typical patients for some dental problems
- This may be due to a variety of factors including behavioral difficulties that make oral hygiene at home difficult and a poor diet higher in fermentable carbohydrates and sugars
- Patients with a diagnosis of ASD may also be at higher risk for some specific dental problems depending on the severity of the manifestations of their symptoms.



Dental Manifestations

Some common oral problems dentists may encounter are:

- Bruxism
- Non-nutritive chewing
- Tongue thrusting
- Self injury
- Erosion
- Dry mouth (Xerostomia)
- Overactive gag reflex



Overview of Dental Considerations and Accommodations

- With some simple training it will be easy to implement dental care for patients who have a diagnosis of ASD
- The entire office staff, from the receptionists to the dental assistants, can be educated on how to properly manage these patients and welcome them into your dental practice.
- Ideally, to reduce caries rates it is crucial to teach primary caregivers how to provide optimal home care



The Dental Visit

- To make the dental visit as successful as possible, the entire office staff should be aware of how to work with patients with an ASD diagnosis
- From check-in to check-out, there will be techniques and strategies that can be used to make everyone involved feel good about the visit
- The front desk receptionist is key to setting the tone for future visits and presents the first impression of your office. Front desk staff should be aware of whether a patient has an ASD diagnosis and whether or not there are special accommodations that need to be considered
- For example, some patients may be very sensitive to loud noises and bright lights. If there is a second, quieter waiting area in the office, the patient should be brought there to wait for his or her appointment



The Dental Assistant's or Dental Hygienist' role

- Typically, it is the dental assistant (DA) or dental hygienist (DH) that will has first contact with patients as they bring them from the waiting area to the back clinical area. It is their job to make the patient feel welcome and comfortable. Many patients begin to get fearful and nervous at this stage
- The DA or DH should identify potential pitfalls along the way. For example, if there are other children in the office crying during their dental appointment, this may upset the patient and he or she should be brought to a quieter exam room out of range of the other crying patients
- The DA/DH may even choose a private exam room, if one is available



The Role of the Dentist

- The dentist treating a patient with an ASD should be aware of various behavior management techniques. Standard behavior techniques used in pediatric dentistry may be applied successfully
- Research by Marshall and colleagues shows that patients who have an ASD do particularly well if they can see the same staff and same dentist for every appointment
- However, at large practices, this is not always easy, but effort should be made to keep consistent continuity of care with these patients.
- Research has further shown that patients cooperated better overall if the caregiver was allowed to stay in the operatory with the patient



Tell-Show-Do

- Individuals with ASD diagnoses often respond well to advanced preparation or pre-teaching. Helping an individual with an ASD know what to expect during a dental visit and being clear about the sequence of events which will occur can be very helpful
- For individuals with limited language, the dentist will typically use pictures or objects to help explain what will occur. Use simple language. Some individuals will benefit from practicing certain aspects of a procedure before experiencing them in a dental office
- Desensitization techniques may also be helpful. We discuss the use of visual schedules later in this tool kit, and this may also help an individual learn what to expect during a dental visit



Desensitization Methods

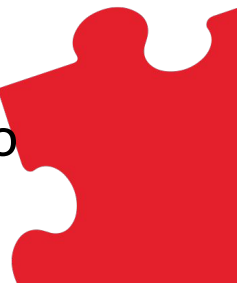
- Some children with ASD diagnoses may have significant anxiety about going to the dentist. This may result in uncooperative behavior and difficulty complying with any dental procedures
- Desensitization techniques and a gradual approach to learning to tolerate dental procedures may be necessary. This will involve a series of short visits to the dental practitioner
- Each visit should involve practicing a specific behavior and should end on a positive note. For example, a first visit may simply involve walking into the dental practitioner's office
- Other initial steps include the following (Next slide)



Initial Steps of Desensitization

Other initial steps might include the following:

- Walking into the exam room
- Sitting in the exam chair for 30 seconds
- Sitting in the exam chair for 1 minute
- Sitting in the exam chair for 5 minutes
- Sitting in the exam chair for 15 minutes
- Sitting in the exam chair and opening mouth
- Sitting in the exam chair while allowing the dental practitioner to count teeth
- Sitting in the exam chair while allowing the dental practitioner to brush teeth
- During each step, a child may require distraction. Also remember to provide rewards to the child for completing each step successfully



Voice Control Techniques by Dental Providers

- As is true for most individuals, using a calm, soothing, and matter-of-fact voice is always helpful
- Voice control involves raising the volume and changing the tone of your voice to regain the child's attention
- If an individual with an ASD becomes upset or if a visit needs to end prematurely, maintain a matter-of-fact attitude and end on a positive note, this is key in helping contribute to a positive dental experience



Distraction Techniques by Dental Providers

- Individuals with an ASD often respond well to being distracted while undergoing some procedures. Distracting activities might include watching a favorite DVD, listening to music, or holding onto special objects
- It may often be helpful to hold an object that can be manipulated. Some examples include a balloon filled with flour, an accordion tube that can be pulled open or pushed shut, or other fidget toys. Parents may also have good ideas about activities or objects that may distract their child during a dental visit
- As providers, we work with parents to develop a plan. For instance, a child may have a particular interest in a specific video. Dental practitioners and parents can work together to make sure that the video is available during a dental visit and also work together to ensure that the child has not seen the video before the dental visit so that the video remains a strong and novel distractor



Sensory techniques

- Consider an individual's reactions to sensory stimuli. It may be necessary to reduce exposure to some stimuli and increase exposure to others.
- For example, some individuals may benefit from wearing headphones to reduce noises that may be over-stimulating.
- Other individuals may respond positively to wearing a weighted vest or a lead apron, such as those used for dental radiographs, to help them remain calm.



Visual tools

- Pictures may be used to help an individual understand the sequence of events and know what will come next. It may also help an individual know what steps have been completed and what steps remain. Visual schedules often help reduce anxiety and uncertainty
- Many individuals with an ASD are visual learners, and a visual schedule may be very helpful. Visual schedules may be used to depict the steps involved in brushing one's teeth or in completing a dental procedure
- Please refer to the visual schedule in the Autism Speaks Family Services Community Connections Dental Guide at www.autismspeaks.org/family-services/tool-kits/dental-tool-kit. Practitioners who are interested in developing their own schedules may find picture cards available at www.do2learn.com



Applied behavior Analysis (ABA)

- ABA involves using behavioral learning theory to help change behaviors.
- ABA methods may be used to understand why a behavior is occurring (this is often called a functional analysis) and to teach specific skills. For example, ABA techniques may be used to help children learn how to brush their teeth



Applied Behavior Analysis

Each component of this skill would be broken down into specific steps, each step would be taught separately, and a child would be rewarded as they learned each component skill. Individual steps might include the following:

- Get toothbrush
- Get toothpaste
- Squeeze toothpaste onto toothbrush
- Wet toothbrush and toothpaste with water
- Brush front teeth
- Brush upper right teeth



Applied Behavior Analysis

- Brush upper left teeth
- Brush lower right teeth
- Brush lower left teeth
- Spit out toothpaste
- Rinse off toothbrush
- Put toothbrush away
- Put toothpaste away



Home Based Preparation

- Dental practitioners can work together with families to help individuals with an ASD have a successful experience.
- Home based preparation may include pre-teaching, reading social stories, and reviewing a visual schedule



Positive Verbal Reinforcement

Just like many individuals who do not have an ASD, individuals with an ASD respond well to the use of verbal praise and smiles



Social Stories

- A social story helps an individual understand events that will occur. Social stories may be used to help an individual know what to expect during a dental visit. Social stories use simple language and pictures to describe a situation
- Social stories were developed by Carol Gray, and we have also included a link to her website: www.thegraycenter.org/social-stories
- Some children may also benefit from reading published books about going to the dentist. There are some books that may capitalize on a child's special interests.
- For example, there are books about the dentist that involve Dora the Explorer (*Show Me Your Smile! A Visit to the Dentist, Dora the Explorer*) by Christine Ricci and Robert Roper and Spongebob Squarepants (*Behold, No Cavities!: A Visit to the Dentist, SpongeBob Squarepants*) by Sarah Wilson and Harry Moore. Other helpful books about going to the dentist include *A Trip to the Dentist* (DK Readers) by Penny Smith and *Going to the Dentist* by Fred Rogers



Goals of Dental Management

- Long-term considerations: Maximize prevention!!
- OH education/ demonstration to parents/caregivers Topical fluoride daily
- Decrease cariogenic behavior
Increase frequency of recall visits
Caution in allowing patient autonomy in home care



Take Home

It is important to recognize that individuals with a diagnosis of ASD often have many *positive qualities* and tend to be:

- Honest
- Forthright
- Liked by adults
- Kind
- Reliable
- Observant of details
- Determined
- Likely to know and remember specific information
- *Always remember...*



“...if you’ve met one person with autism, you’ve met one person with autism.” Dr Stephen Shore



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THANKS FOR LISTENING

