DENTISTRY FOR CHILDREN ON THE AUTISM SPECTRUM

Autism One Conference- May 27th, 2011

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Overview

- **Topic # 1 Nursing Bottle Decay**
- **Topic # 2 Juice/ "Sippy Cup"**
- **Topic # 3 Decay Producing (Cariogenic) Foods**
- **Topic # 4 Snacks That Are Not Cariogenic**
- **Topic # 5 Toothbrushing**
- **Topic # 6 Sealants**
- **Topic # 7 Early Visits And Periodic Dental Care**
- **Topic # 8 What If My Child Needs Dental Treatment, But Won't Cooperate?**
- **Topic # 9 Selecting A Dentist For Your Child**
- **Topic # 10 Controversial Topics**

Topic # 1: Nursing Bottle Decay

This is the greatest threat to your child's teeth by far. Sleeping or napping with a bottle of milk or juice very often will cause a rapid decaying of the upper front teeth. The decay starts from the back (tongue side) of the teeth and by the time a parent notices that there is a problem, the teeth are very seriously decayed requiring crowns and nerve treatments to save them.

The way to avoid NBD is to always hold your child while feeding and never put him down with a bottle, unless it is **plain water.**

Breast feeding for **very long** periods of time (hours) can also result in extensive decay. To avoid this situation, do not allow a child to fall asleep at the breast and limit breast feeding to 10 or 15 minutes per side.

Topic # 2: Juice/ "Sippy Cup"

After NBD, the next greatest threat to the health of your child's teeth is the over consumption of juice, especially via use of the "sippy cup." All forms of juice, especially those specifically marketed to children, e.g. juice boxes, Capri Suns, "Juicy Juice," etc. are a perfect medium for tooth decay with a pH well below 5.5 and chock full of sugar. "Natural" juice affords very little protection since it is both acidic and sweet.

The "sippy cup" further complicates matters. Many toddlers do not always swallow what they put into their mouths. Instead, they let the contents of the "sippy cup" sit in their mouths for long periods of time which fuels the decay process. The best way to avoid the "sippy cup" related decay issue is to use a "sippy cup" with juice only at meals and put water in the sippy cup between meals.

Topic # 3: Decay Producing (Cariogenic) Foods

What do children with a lot of cavities eat? Avoid these type of treats:

Popsicles/Freezer Pops

Sugar Coated Cereal

Peanut Butter and Jelly

Granola Bars

Breakfast Bars

Fruit Rollups/Fruit Snacks/Fun Fruits

Gummies (all kinds including gummy vitamins)

Jolly Ranchers

Skittles

Air Heads, War Heads, Lemon Heads

Swedish Fish

HELPFUL RULE OF THUMB: *Don't let your children eat anything that is sweet and will stick to your teeth. If you aren't sure, try it first. Remember- if the treat is sweet and sticks to your teeth, it will do the same in your child's mouth and will produce tooth decay.*

Topic # 4: Snacks That Are Not Cariogenic *(do not cause tooth decay)*

Chips (all kinds)

Real fruit (apples, bananas, grapes, oranges- not fruit snacks and the like)

Crackers

Pretzels

Cheese

Carrots

Celery with cream cheese

Nuts (if no allergies or copper issues)

Ice Cream (since it melts in the mouth and does not stick to the teeth)

Cookies can cause tooth decay, but are better than "gummies" and fruit rollups since cookies can be brushed off the teeth, whereas "gummies" and fruit rollups stick tenaciously to the natural crevices of the teeth

Topic # 5: Toothbrushing

Toothbrushing helps prevent gum disease, but it is **not** as important as diet in preventing tooth decay. Also, toothbrushing will not remove plaque from between the teeth- only dental floss will perform this critical function which significantly cuts down tooth decay between the teeth.

Topic # 6: Sealants

Sealants are often applied to the biting surfaces of the 6 year molars and 12 year molars to prevent the most common type of tooth decay, namely decay that starts in the natural cracks (pits and fissures) of the permanent back (molar) teeth. Sealant is a plastic material that is "painted" on the teeth like nail polish and fills in the natural openings of the molars where plaque and food collect and start cavities. It is essential to keep the teeth completely dry so that the sealant will stick so a child must be cooperative for sealants to be done successfully.

Topic # 7: Early Visits And Periodic Dental Care

The American Academy of Pediatric Dentistry now recommends a child see a dentist for her first dental visit at age 1. Early dental care dramatically decreases the likelihood of developing early childhood tooth decay.

Topic # 8: What If My Child Needs Dental Treatment, But Won't Cooperate?

The following is a very common question: What if my child needs dental treatment and cannot cooperate for treatment in the office using local anesthetic (novocaine)?

Young children can sometimes be restrained for short procedures, but, in general, older, larger children and children requiring extensive dental care are sedated or treated under general anesthesia. If an experienced dental anesthesiologist is available and the child is healthy, then treatment can sometimes be done in a dentist's office. Many times, however, this is not the case and care must be provided in a surgery center or hospital. Childrens' hospitals often have dental departments that specialize in providing this type of service. If you live in an area that is not served by a childrens' hospital with a dental department that can provide this service, you may need to consider traveling to such a facility. Today, these type of procedures are done on an outpatient basis so an overnight hospital stay is not required (there are some exceptions).

It is important to know how your insurance works and any pertinent laws that your State may have enacted with respect to dental treatment performed under general anesthesia.

Topic # 8: What If My Child Needs Dental Treatment, But Won't Cooperate? (Continued)

In Illinois, a law was passed in 2003 that states that for all children 6 years and younger and for all patients with a developmental disability, treatment under general anesthesia *performed in a hospital setting*, cannot be denied as a covered medical expense solely on the basis that it is for dental procedures. Unfortunately, this law does not apply to all insurance carriers in Illinois- about 35% are exempt from this law, but it still applies to about 65% of the insurance carriers in the State. For more information about these type of legal provisions, contact your State Dental Association. The best way to find out how to contact your State Dental Association is through "Google" or through the American Dental Association.

Regardless of the laws in your State, if "medical necessity" can be established for dental treatment under general anesthesia, coverage has to be provided for such care. Often times it is very difficult to convince the insurance company that such treatment is indeed "medically necessary" and letters from your pediatrician, pediatric dentist, and any other medical specialist involved in the care of your child will be necessary to obtain the insurance company's approval.

Topic # 9: Selecting A Dentist For Your Child

I am biased toward a pediatric dentist since this is my specialty. However, not all communities have a pediatric dentist and long distance travel may not be feasible. If you know a pediatric dentist and family or friends have had favorable experiences over a long period of time or if your pediatrician will make a referral, I would recommend calling this dentist's office and inquire about their experience with autism. If you have specific questions that only the doctor can answer, I do not think it is unreasonable to request that the pediatric dentist call you at a mutually convenient time, perhaps in the evening to address your concerns. If the dentist's office is unwilling to provide this service, then perhaps this is a sign to go to the next name on your list.

Should the nearest pediatric dentist be too far away, I would seek a general dentist with extensive experience treating children and ask which pediatric dentist he or she works with in the event a referral is necessary. For help in locating a pediatric dentist or orthodontist or other dental specialist, contact your State Dental Association or the American Academy of Pediatric Dentistry or the American Association of Orthodontists.

Topic # 10: Controversial Topics

1) Silver amalgam fillings: Traditional silver fillings are composed of a combination of silver, mercury, and other metals. Many people believe that there is enough evidence to support the avoidance of silver amalgam fillings in children on the autism spectrum. Safer alternatives would be composites (tooth colored resin fillings) or stainless steel crowns. There are others that believe that, as a precaution, silver amalgam fillings should be avoided in all women who are either pregnant, nursing, or in their child bearing years.

2) There have been many reports of problems associated with use of antibiotics in children on the autism spectrum. Therefore caution is recommended in using antibiotics in dentistry as follows: (a) if possible, avoid antibiotic therapy; (b) if antibiotics must be utilized, be aware which antibiotic is being prescribed, in what dose, and how long a period of time, and consider the use of probiotics along with the antibiotic to avoid GI problems. For information about probiotics, consult your pharmacist.

Topic # 10: Controversial Topics (Continued)

3) If your child is on a casein free diet and drinking such cow's milk substitutes as rice milk, soy milk, or hazelnut milk, be aware that these products may contain more sugar than cows milk and can be very "retentive." Rice milk, for example, can be more difficult to brush off the teeth than regular milk. Parents and other care givers need to be aware of this and brush the rice milk completely off the child's teeth after every feeding. This is because rice milk can cause very rapid and very destructive tooth decay. (Also, if your child is on a casein free diet, he should not use MI paste which is used to strengthen the enamel, since it is made with milk products)

4) The use of fluoride for children on the autism spectrum may be viewed differently from a dentist's perspective and a parents point of view. Many believe that all the science has not been done with respect to fluoride and children on the spectrum with detoxification issues. If you are not comfortable with the use of fluoride in your child's preventive dental care, you should discuss your concerns with your dentist. You may be asked to sign a waiver if you do not wish that fluoride be utilized, since the application of topical fluoride for children susceptible to decay is considered the standard of care.

Treating The Patient With Special Needs In The Orthodontic Practice

Autism One Conference - May 27th, 2011

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Overview

- Defining Disabilities
- The Numbers
- Oral Health And The Special Patient
- Dental Concerns
- Access To Care
- Choosing An Orthodontist
- Professional Affiliation Resources
- Your First Orthodontic Visit
- The Orthodontic Office
- Adaptive Techniques

Defining Disabilities

The Americans with Disabilities Act (ADA) of 1992 defines a disability as "a physical or mental impairment that substantially limits one or more major life activities such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working."

Journal American Dental Association 1996: 127; 1406-1408

The Numbers

There are currently 54 million people in the United States living with some type of disability. Seventeen percent of children under 18 have a developmental disability.

The Dent. Assist. 2005 Sept-Oct; 74 (5): 24, 26-27

Oral Health And The Special Patient

Oral health starts in childhood. According to former Surgeon General C. Everett Koop M.D., "You are not healthy without good oral health."

Oral health and systemic health are directly related.

Poor oral health impacts:

- Speech / Communication
- Self-esteem
- Nutrition
- Periodontal disease

Cardiovascular disease Pulmonary infection and lung disease

Exceptional Parent, Psy-Ed Corp. 2003: 3-4

Dental Concerns

- Variations in the eruption, number, size and shape of teeth
- Bad bites (Malocclusions)
- Developmental defects from high fever or medications
  - Under-mineralized enamel
  - Decayed enamel
- Poor motor coordination
  - Inability to naturally cleanse the tongue, brush or floss
  - Oral trauma
- Habits
  - Mouth breathing (Dry's up the saliva causing swelling and redness of the gums)
  - Pocketing food in the cheeks
- Special diets and medications
  - Pureed foods
  - Sweetened medications (Contribute to tooth decay)
  - Anti-seizure medications (Contribute to gingival overgrowth and interfere with chewing and speech)
  - Sedative drugs (May reduce flow of saliva that protects the teeth)

The Dent. Assist. 2008: Nov / Dec; 6-9

Access To Care

The Americans With Disabilities Act prohibits discrimination against a person with a disability who is seeking access to dental services. Title 3 of the law requires dentists to serve persons with disabilities.

There are several problems with access to oral health care:

1. Lack of adequate training in school
   - In 2004, The Commission of Dental Accreditation (CODA) adopted new standards for education programs to ensure didactic and clinical opportunities to better prepare dental professionals when treating patients with special needs.
2. Cost
   - Inadequate compensation
   - Extra time for treatment
   - Extensive paperwork
3. Modifying treatment modalities
   - Severe disabilities may require treatment in a hospital
   - Office protocol adjustments
   - Knowledge of specialized techniques and equipment

Choosing An Orthodontist

- Is the Orthodontist a parent him / herself?
- How long has the Orthodontist been in practice?
- Does the Orthodontist have experience treating special needs patients?
- Does the Orthodontist work closely with the child's dentist?
- Who do your family and friends go to?
- Is the Orthodontist Board Certified? DIPLOMATE AMERICAN BOARD OF ORTHODONTICS
- Does the Orthodontist have hospital staff privileges?

Professional Affiliation Resources

- American Association of Orthodontists (National Society)
- Illinois Society of Orthodontics (State Society)
- Midwest Society of Orthodontists (Regional Society)

The American Association of Orthodontists (AAO)

Call 1-800-787-2444 or

www.braces.org

Your First Orthodontic Visit

Thorough review of the medical/dental history:

- Behavior management problems?
- Oral motor sensory issues? – May be unable to tolerate certain appliances in the mouth
- Gross motor problems
- Fine motor problems
  - Unable to brush thoroughly around braces or appliances
  - Unable to hook up rubber bands, headgear
  - Unable to properly place retainers in the mouth
- Speech problems
  - Speech therapy?

Your First Orthodontic Visit (Continued)

- Health history
  - Medical problems?
  - Medications taken?
  - Allergies to medication?
  - Airway: Tonsils and adenoids present?
- Hypo vs Hypertonic muscle tone?
- Sensory Issues
  - Stimulants: Smells, sounds, lights, touch…
- Chronologic vs cognitive age
- Social interactions (open bay vs private treatment rooms)

Your First Orthodontic Visit (Continued)

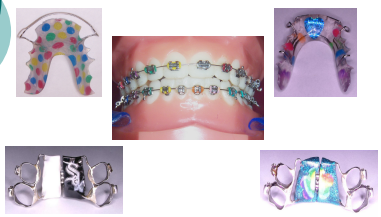
- Are certain appointments scheduled for longer periods of time?
- Are appointments scheduled during non-busy hours?
- Are longer appointments divided into several shorter appointments?
- Is an office tour given at the initial visit?
- Does the office have private and non-private rooms?
- Is the facility ADA compliant?

The Orthodontic Office

- Positive reinforcers ("Bribes")
- Contests and giveaways
- Do these things encourage positive behavior or are they over stimulating for your child?

Is The Office Environment Personalized, Comfortable, and Inviting?

Make Treatment *Fun* !!! Cool Colored Expanders, Retainers and Braces

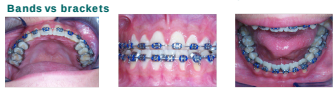


Adaptive Techniques

- "First/Then" concept - Bribes

Adaptive Techniques (Continued)

- Descriptive photo cards
- The show/tell method
- Papoose board, restraints, nitrous oxide, sedation, out patient surgery (O.R.) procedures
- Parental assistance: The human bear hug
- Bands vs brackets



- Mouth props

Adaptive Techniques (Continued)

- Modifying the treatment plan: braces vs Invisalign vs retainers only
- Breaking down procedures into smaller separate stages
- "Realistic" finished results vs "ideal" finished results