Treatment of Toileting and Feeding Challenges for Children with Autism Spectrum Disorders

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No Disclosures
Goals

• Understand challenges related to eating and toileting for individuals with autism spectrum disorders.
• Overview of medical concerns.
• Learn medical and behavioral steps for achieving toileting and improving feeding.
• Outline of resources.
Overview Toilet Training

- Toilet training is a common issue in pediatric population
- Toilet Training is the consolidation of many skills
- There may be special accommodations or techniques needed when developing a toilet training plan for your child
- Consider your child’s temperament and learning style when developing a plan
- Constipation is a major obstacle in mastering urine and stool continence for both day and night
Goals of Toilet Training

• Ultimate goal is to get your child to be able to access the bathroom and use the toilet/complete process without assistance
• First task is to get your child to be comfortable with using the bathroom and toilet
• Next step is to teach your child to use the toilet for elimination
• Next step is to have your child become accustomed to the entire process (flushing, handwashing, etc.)
Toilet Training Readiness

- Multiple developmental skills needed to successfully toilet train
- No existing medical problems such as constipation – regular bowel patterns
- Helpful if child and parent are both ready
- Signs of readiness: Dry at naptime, hiding to have BM’s, wants to change wet diaper, etc...
- Common age recommended is cognitive age of 2 years or older
Language/Communication Skills

• **Expressive Communication**
  ▫ Ability to communicate that diaper is wet or need to use the bathroom (or access bathroom)
    • Verbally, sign language or picture system

• **Receptive Language**
  ▫ Ability to understand multi-step directions
    • Verbally
    • Picture system (reinforce each step)
    • Sign Language
Motor Skills

- Ability to:
  - Get self to the bathroom
  - Remove clothing (buttons can be difficult)
  - Sit on toilet (on own vs. being placed)
  - Stay balanced (not fall in 😃)
  - “Push” (Use balloon, glove, stepstool, etc.)
  - Wipe – have child count out squares if obsessive over paper
  - Get down from toilet.....

- For Children with physical handicaps there is adaptive equipment available
Cognitive Skills

- How long can child stay dry (can depend on cognitive level)
- Understand the process of “what is going on”
  - First: Potty is a chair and practice sitting
  - Second: Potty is used to eliminate
    - Making this connection can take time for some children
- Attention Span:
  - Attention is needed to perceive signal, get to bathroom, relax and release urine or stool
- Sequencing of skills can be difficult
Social/Emotional

- Imitation, PECs, Apps, social stories
- Considerations:
  - Outside Pressures/Change in routine
    - New sibling, new school, change in schedule
  - Pressures may interfere with the toilet training process
  - Resistance can lead to withholding and constipation
Social Story

• Sometimes I have to pee. I go to the bathroom when I have to pee.
• Sometimes I have to poop. I go to the bathroom when I have to poop.
• When I go in the bathroom, I pull my pants down. I sit on the toilet.
• Sometimes I pee in the toilet. Sometimes I poop in the toilet.
• When I finish going pee or poop I wipe. After I wipe I flush. After I flush I wash my hands.
Toilet Training Process

- Program must take into account your child’s temperament
- Change tends to be gradual
  ▫ Stepwise approach
- All caretakers should be on the same page during the process (including school if necessary)
  ▫ Include in Individual Education Plan (IEP) at school
Important Behavioral Program Points

Huge leaps may increase anxiety and resistance
Positive Tactics

• Reinforce each step of toilet training
  ▫ Reward – picture system should include task and reward
  ▫ Verbal praise/singing
  ▫ Reward system – instant reinforcement

• Stay positive (easier said than done)
  ▫ Accidents will happen
  ▫ Too much praise can backfire (too much pressure)
Behavioral Treatment

- Sample jobs and goals for resistant children (shaping)
  - Stand in the bathroom to make a bowel movement (no pressure to sit on the toilet)
  - Sit on the potty with pants
  - Sit on the potty without clothes
Strong Preference for Routine

- Build on your child’s preference for routine
- Teach using toilet training as a new routine rather than a change in routine
- Breaking patterns can be difficult and change takes time (passing stool in a certain position or place)
- Allow child to watch a video or play with desired game/toy during sitting times
- Use PECS to demonstrate entire routine
Habit Training

- Typically older than 6 with cognitive functioning < 3 years
- Assess how long child can stay dry
- Use tracking system / collect data
- Child sits every hour for example:
  - Dry or wet when they sit
  - +/- eliminates
  - Goal is to have child learn to stay dry until sitting time
- Include in IEP
- Self-initiation takes time
Inattention/Hyperactivity

- Child May need reminders to use the bathroom
- Watches with vibrating alarms can be helpful (Amazon.com, bedwettingstore.com, pottymd.com)
- Longer sitting times after meals help with bowel patterns
- Handheld games during sitting times can be helpful
- Instant positive reinforcement
Sensory

- Sensory overload in the bathroom – earplugs
- Motor coordination – breaking down the process of “getting pants down, sitting on the toilet, relaxing, releasing, etc..”
- Pressure of urine or stool filled diaper may be tactiley soothing
- Transitioning from diapers to pull-ups to underwear can be very difficult
- “splashing of water” when eliminating into toilet
- Idea of urine/stool getting on the skin
Pathology

- Ensure no pain before toilet training (Constipation/UTI’s)
  - Frequent UTI’s/pain can lead to withholding
  - Constipation can lead to withholding
  - Coordination difficulties can lead to withholding
  - Toilet refusal can lead to withholding
- Withholding > constipation > increased withholding > chronic constipation > Encopresis > Many months of behavioral and medical treatment
ENCOPRESIS
PATIENT TRAINING DIAGRAM

NORMAL INTESTINE (COLON)
- Warming Nerves
- Body Waste
- Strong, Thick Muscle
- Muscle That’s Thin, Weak And Stretched

STRETCHED INTESTINE (MEGACOLON)
- Body Waste Hard And Large (Like Rocks)
- Space Between ROCKS’
- Stretching Out Nerves That Don’t Work

STRETCHED INTESTINE KEPT MOSTLY EMPTY GETTING BETTER
- Intestine Mostly Empty
- Muscle Still Stretched But Not As Bad
- Nerves Starting To Have Feelings Again
- Nerves Give Good Warnings
- Muscle Thick And Strong Again
- Waste Not Too Big

BACK TO NORMAL—AN INTESTINE THAT WORKS

M.D. LEVINE MD
Nighttime Training

• Separate set of skills
• Genetic
• Typical accommodations:
  ▫ Decrease fluids before bed (sips of water following dinner)
  ▫ Urinate frequently throughout the day
  ▫ Urinate before bed
  ▫ Get up to urinate when one awakens at night
• Medications vs. Nocturnal Enuresis Alarms
Feeding Difficulties:
Autism Spectrum Disorders
General Subtypes of Feeding Difficulties:

- Individuals who do not eat enough/show little interest in feeding
- Individuals who only accept a limited diet in relation to sensory features or ritualized routine.
- Individuals whose food refusal is related to aversive experience.
Feeding issues in autism spectrum disorders

• Growth Difficulties: Low appetite
• Ritualized Picky Eaters
• Sensory Picky Eaters
Medical Considerations

- Constipation: food refusal, poor weight gain and behavioral problems
- Reflux: vomiting and food refusal. May lead to poor weight gain and food refusal
- Allergies: May result in poor intake and food refusal
- Other Medical:
  - Celiac Disease: Treatment may include a Gluten-free diet
  - Other gastroenterological conditions
Gluten and Casein Free Diets

- Diet and Nutrition in Children with Autism Spectrum Disorders: An Autism Treatment Network Collaborative Study
  - Susan Hyman

  - Austin Mulloy, Russell Lang, Mark O’Reilly, Jeff Sigafoos, Giulio Lancioni, Mandy Rispoli
Nutrition Deficits

- Deficiencies often found:
  - Iron: immunity & energy level
  - B Vitamins: immunity & energy level
  - Fiber: constipation
  - Calcium: needed for growth in children under 5.
  - Vitamin D: bone health
  - High Quality Protein
Fiber Needs of Children

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<sup>a</sup>Total fiber preferred minimum 14 g/1000 kcal. Read labels to determine amounts on all packaged foods.
Too slow to grow?

- Calculating expected growth based upon mean parental height
- Using appropriate growth curve
  - World Health Organization curve until 2 years
  - Genetic conditions with known growth curves
  - Extreme prematurity
Sensory Restrictive Eating

• “My child will only eat three foods and they are all brown!”
• Selectivity falls along the sensory experience of the food:
  ▫ Visual appearance
  ▫ Texture
  ▫ Smell
  ▫ Taste
• If non-preferred foods are not presented, child typically will not eat
Ritualized Restrictive Eating

• “My child will only drink out of a certain sippy cup. I changed the cup and he stopped drinking. I was afraid he would become dehydrated.”

• Child insists that food or drink presented in a particular manner/form.

• Deviation from routine results in distress and refusal.

• Child may only eat foods out of certain containers or select foods according to brand.
Ritualized Restrictive Eating
Food Refusal Related to Averse Experience

- “Food Phobia”
  - Phobia is the intense FEAR and AVOIDANCE of something.
  - May occur with a “punishing event” or repeated conditioning with negative stimulus.
- Use cognitive-behavioral techniques to treat
  - “Systematic Desensitization”
  - Correct cognitive distortions
Treating Feeding Disorders
Treating Feeding Problems: General Approaches

- Fluid Management
- Solid food choices
- Control grazing: stimulating hunger
- Focus on mealtime behavior, rather than food intake.
  - Sit at the table
  - Length of meal
  - Remove behavioral component in ending mealtimes
  - Address maladaptive or disruptive mealtime behaviors
Behavioral Treatment Approaches

- Reinforcement of Specific Behaviors: Reinforce behaviors that promote good food intake.
- Desensitization: (Food Game) overcoming aversions, fears and over-selectivity.
- Applied Behavioral Analysis or Discrete Trial Training (used in children with autism and developmental delay).
Systematic Desensitization

- Maintain fun, playful atmosphere - not at meals
- Introduce foods in a desensitization chain
- Introduce a small number of foods at a time
- After food is “mastered”, then focus on “generalization”
- Treatment is slow and gradual
- Keep anxiety at a manageable level
- Use play and rewards to increase motivation
- Always end on a positive note
Sensory Food Aversions

• Description: Refuses specific food textures, tastes or smells, eats preferred foods without difficulty.

• Treatment:
  ▫ Introduce foods early in life but back off with severe aversion- Don’t force feed
  ▫ Modeling of parents and peers effective
  ▫ Occupational Therapy
  ▫ Give small amount of the food and make them ask for more.
  ▫ Parents goal: stay emotionally neutral
  ▫ Behavioral Feeding Therapy
Ritualized Restrictive Eating

• Behaviorally reinforce deviations from the routine
• Use pictures and visuals to introduce new foods
• Introduce new before getting rid of the old
• Avoid “Cold Turkey” approaches
• Use behavioral and desensitization therapies
• Use cognitive strategies when appropriate
Using the Applied Behavioral Analysis or Discrete Trial approach:

- Breaking down the steps: “baby steps”.
- Using rewards. Making a high frequency behavior (e.g., perseverative behavior or access to object) contingent on a low frequency behavior (trying a new food).
- Frequency of trials.
- Generalization of gains.
Discrete Trial Training

- Prompt 1: “Do this (hold food/kiss/lick/bite)”
- Response 1: Child responds as prompted.
- Principles:
  - Reinforcer assessment.
  - Errorless learning: prompt correct response
  - Use multiple trials, regularly practiced each day
  - Use ABA sessions AND caregiver directed sessions.
Naturalistic Behavioral Approach

- Touching: incorporate into play as barrier or touch to different parts of face
- Tasting: taking turns, you pick/child picks
- Using first/then with preferred before nonpreferred.
Treating Children with Autism Spectrum Disorders: Visual Supports

• Spell out contingencies: Managing behavioral problems related to feeding difficulties.
• Menu Board: Help child make choices and increase variety
• Reward Token Boards: clearly defines how much a child has to do. Helps with motivation and compliance.
Video example:

feeding.MOV

IMG_0396.MOV
Feeding Resources:

- How to Get Your Child to Eat but Not Too Much by Ellyn Satter
References

• American Academy of Pediatrics, Toilet Training. Guidelines for Parents. AAP
• Stadtler AC, Gorski PA, Brazelton TB. Toilet Training Guidelines Clinicians – The Role of the Clinician in Toilet Training. Pediatrics. 1999; 403 (suppl) 1364-1366