



Constipation, Toileting and Autism: Understanding how to support children

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Tom Patterson, MD, FAAP, FABP
Family Medicine Residency of Idaho

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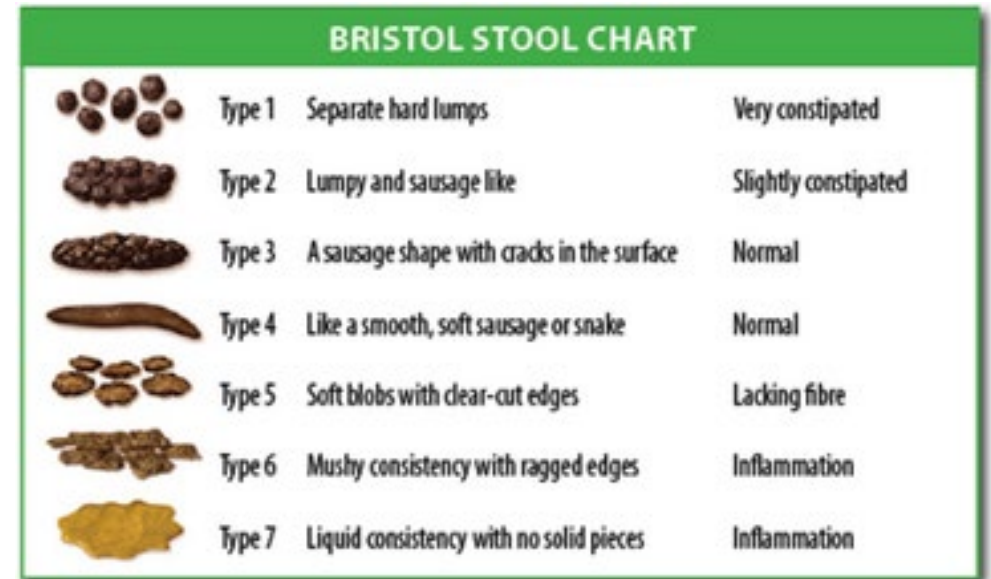
Learning Objectives

- ✓ Constipation and Children with ASD
- ✓ Screening
- ✓ Treatment Options
- ✓ Daily Management



Definitions

- Constipation
 - Hard stools
 - Painful stools or hard to pass stools
 - Fewer than 3 stools per week
- Impaction
 - Large stool that will not pass- painful, decreased appetite, irritable
- Encopresis
 - Leakage of liquid stool around a large, hard stool



Constipation and the Child with Autism

- Children with ASD present difficulties and complexities that are intertwined with behavioral and communication difficulties, thus complicating their management.
 - Those who are nonverbal or with severe ASD can be atypical and manifest merely as a change in behavior.*
- There is a higher use of ED and UC settings for management of constipation in Autism*
- Several studies (Mazurek, 2013, Chaidez, 2013 & Chandler, 2014) report a higher incidence of GI symptoms in children with ASD when compared to typically developing peers and children with developmental delay.
- Several studies on children with ASD and GI disturbances cite anxiety and altered autonomic nervous system functioning which may explain increased rates of GI symptoms in the child with ASD (Ferguson et al, 2017 Mazurek, 2013).

**J Pediatr Gastroenterol Nutr.* 2006; 43: e1-13

Special Consideration:

Sensory Sensitivities:

- Some children do not like the sound of flushing
- Other sensory experiences associated with toileting/pooping may be distressing
 - i.e., some kids like the warm feeling of poop in their pull-up and cold of toilet is distressing

Fear of Painful Poops

- Medication and desensitization is important for this

Difficulty with change in routine

- Toilet train on the regular potty

Poor Communication:

- Visual aids and routine

Contributing Factors to Constipation

All Children	Specific to a Child with ASD
<ul style="list-style-type: none">• Changes in routine (travel, weather, stress)	<ul style="list-style-type: none">• Difficulty with transitions and/or rigid-compulsive behaviors
<ul style="list-style-type: none">• Toilet training	<ul style="list-style-type: none">• Low muscle tone
<ul style="list-style-type: none">• Withholding	<ul style="list-style-type: none">• Increased withholding behavior
<ul style="list-style-type: none">• Inadequate fluid intake• Inadequate fiber intake	<ul style="list-style-type: none">• Selective eaters• Food sensitivities (gluten, casein)
<ul style="list-style-type: none">• Illness• Medications	<ul style="list-style-type: none">• Anxiety

Screening For Constipation

All children:

- Belly pain
- Decreased appetite
- Decreased activity
- Infrequency of stools
- Stool consistency
- Prolonged time to defecate
- Difficulty with defecating
- Weight loss
- Obstructive Symptoms: impaction or encopresis
- Enuresis
- Physiological co-occurring conditions



Specific to Autism:

- Communication skills: ability to report symptoms
- Abnormalities in sleep or eating habits
- Behavior changes: self-injurious, tantrums or aggression
- Behavior and Mood changes are highly correlated with underlying medical issues.
- **Increased risk:** screening needs to be done on regular basis

Questions for Screening







- Does your child have a bowel routine?
- Any changes in appetite, mood, activity or behavior?
- Changes in sleep pattern?
- How long is your child in the bathroom?
- What does his/her stool look like? Use the Bristol Stool Chart.
- Does the toilet become clogged with large stool?
- Is there blood on the toilet paper?
- Fecal smearing ?
- Does your child appear to be uncomfortable prior to and when going to the bathroom?
- Frequent UTI?



Visual Aids


THE BRISTOL STOOL FORM SCALE (for children)

choose your POO!

type 1		looks like: rabbit droppings Separate hard lumps, like nuts (hard to pass)
type 2		looks like: bunch of grapes Sausage-shaped but lumpy
type 3		looks like: corn on cob Like a sausage but with cracks on its surface
type 4		looks like: sausage Like a sausage or snake, smooth and soft
type 5		looks like: chicken nuggets Soft blobs with clear-cut edges (passed easily)
type 6		looks like: porridge Fluffy pieces with ragged edges, a mushy stool
type 7		looks like: gravy Watery, no solid pieces ENTIRELY LIQUID

Concept by Professor OGA Candy and Emma Davis, based on the Bristol Stool Form Scale produced by Dr MW Heaton, Reader in Medicine at the University of Bristol. ©2005 Produced by Norgine Pharmaceuticals Limited

BRISTOL STOOL CHART

	TYPE 1 - SEVERE CONSTIPATION Separate, hard lumps
	TYPE 2 - MILD CONSTIPATION Lumpy and sausage like
	TYPE 3 - NORMAL A sausage-shape with cracks in the surface
	TYPE 4 - NORMAL Like a smooth, soft sausage or snake
	TYPE 5 - LACKING FIBER Soft blobs with clear-cut edges
	TYPE 6 - MILD DIARRHEA Mushy consistency with ragged edges
	TYPE 7 - SEVERE DIARRHEA Liquid consistency with no solid pieces

Physical Signs of Constipation

- Poor appetite
- Irritability (improvement with stooling?)
- Abdominal pain or discomfort
- Posturing of stool withholding – tip toeing, arched back , straight legs.



Treatment Options:

- Obstructive symptoms (encopresis, impaction) - require a cleanout
 - Severe may need hospitalization (rare these days). KUB may be helpful here-digital rectal exam and physical exam correlate better.
- Use of laxatives:
 - Infrequent, large BM
 - stimulant laxatives to contract and move stool (senna, Bisacodyl)
 - Lubricant laxatives to help stool pass easily (glycerin suppository, mineral oil)
 - Recommended use limited to improving stool consistency and frequency
- Use of daily medications:
 - osmotic laxatives (polyethylene glycol, lactulose)
 - Goal: soft stool daily or every other day
- Test to consider for chronic constipation: CBC, calcium, glucose, thyroid studies, celiac panel, hypothyroidism, Crohn's- only if constipation treatment response does not seem to fit the diagnosis.
- Referral to GI specialist: symptoms have not resolved, obstructive symptoms, uncomfortable with treating constipation

Daily Management of Constipation

- Diet Changes
 - Increasing fiber- hide fiber in food
 - Increasing fluids- essential when adding fiber
- Behavioral Changes
 - Regular Exercise
 - Bowel Habit Training
 - Access to bathrooms after meals
- Supplements
 - Bulk-forming
 - Prebiotic/probiotic
- Medicine
 - Medication to help regulate stool frequency and consistency
 - “Clean out” medications used only when child is having difficulty with stooling.



Fiber Facts:

Benefits of fiber

- Promotes regular bowel movements and can help with constipation
- Adds bulk to stool and stimulates peristalsis
- Gradual increase in fiber over several days will reduce gas, cramping and bloating

Types of fiber

- Soluble Fiber – Pulls water into the gut and stimulates peristalsis
 - Examples: oats, strawberries, apples, beans, flax seed
- Insoluble Fiber – Adds bulk to the stool to keep it moving through the intestine, undigested
 - Examples: wheat, whole grains, cabbage, brown rice, green beans, corn
- Combined Soluble/Insoluble Fiber- many foods are both
 - Examples: zucchini, oats, prunes, plums

Meal Planning Tips for Constipation

- Foods to promote a healthy gut: yogurt, kefir, miso soup, green beans, carrots, chickpeas, apple cider vinegar, probiotic drinks/juices
- Use of a hot beverage or hot cereal with fiber first thing in the morning
- As stool frequency and consistency improves, slowly increase fiber: 5 grams per day until age-appropriate fiber needs are met or 1-2 fiber rich foods per 2-3 days.
- Drink hydrating fluids to meet fluid needs



Physical Activity

- Physical activity helps the digestive system to stay active and healthy. Activity stimulates the natural contraction of intestinal muscles. Intestinal muscles that contract efficiently help move stools out quickly.
- Participate in at least 10 minutes of activity at a time, several times per day. Shorter bursts of activity will have the same health benefits.
- Physical activities:
 - Walk, jog, skate or cycle
 - Jumping rope
 - Playing tag
 - Swimming
 - Stretching
 - Exercise videos/games
 - Dancing
 - *Plan the day by parking out further, taking stairs, etc.*



Bowel Habit Training



1. Be patient with yourself and your child.

Teaching new skills, especially this one, is not easy.

- If at any time you feel frustrated, the child likely feels the same- so back up to a step that you felt comfortable

2. Start by teaching your child to sit on the toilet, even if he/she does not have a bowel movement. Normalize this behavior yourself.
3. Provide quiet activities that your child can do while sitting on the toilet
 - i.e., books, drawing, handheld computer games, music, books on tape
4. Help your child be comfortable
 - Choose a toilet or small potty that is comfortable for your child
5. Pick a daily time for your child to use the Bathroom
 - A regular schedule will help the body develop a normal bowel pattern

Supplements

1. Consider a fiber supplement when fiber sources within diet are limited or refused. Bulk forming supplements have psyllium, wheat dextrin or calcium polycarbophil
2. Use of probiotic during acute symptoms – Bifidobacterium – most effective (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3048518/>)



Developing Care Plan



1. Treatment

- Length of treatment: > 6mos
(normalization of colon and rectum)
- Medications/supplements
- Goal of medicine

2. Address dietary changes

3. Provide guidelines for fluids

4. Behavior changes: exercise, bowel habit training

5. Monitoring

Questions?



References

- Anxiety, sensory over-responsivity, and gastrointestinal problems in children with autism spectrum disorders. (Mazurek et al, 2013)
- Gastrointestinal problems in children with autism, developmental delays or typical development. (Chaidez et al., 2014)
- Parent-Reported Gastro-intestinal Symptoms in Children with Autism Spectrum Disorders. (Chandler et al., 2013)
- Psychophysiological Associations with Gastrointestinal Symptomatology in Autism Spectrum Disorder. (Ferguson et al., 2017)
- Evaluation of constipation by abdominal radiographs correlated with treatment outcome in children with dysfunctional elimination. (Allen et al., 2007)
- Evaluation and treatment of constipation in infants and children: recommendations of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. (2006)
- Is Bifidobacterium breve effective in the treatment of childhood constipation? Results from a pilot study. (Tabbers et al., 2011)

Session Resources

CONSTIPATION

- [Autism Speaks - Parent's Guide to Managing Constipation in Children with Autism](#)
- [Healthy Children.Org - Constipation](#)
- [Bristol Stool Chart](#)
- [CHOC – How Much Water Should Kids Drink](#)