PUBLIC HEALTH – SEATTLE & KING COUNTY SPRING 2014

Child Health Notes

Promoting early identification and partnerships between families, primary health care providers & the community.

Distributed by Public Health-Seattle & King County–Children with Special Health Care Needs Program. This newsletter provides physicians, nurse practitioners, primary health care providers, public health centers and community partners with current information regarding identification and management of special health issues for children. Contributing agencies and programs include: Washington State Department of Health and UW – Center on Human Development & Disability

FECAL INCONTINENCE (ENCOPRESIS) IN CHILDHOOD

Constipation, defined as either a decrease in the frequency of bowel movements or the painful passage of bowel movements, is a common childhood problem. Chronic constipation accounts for approximately 5% of visits to a primary care provider, and 25% of visits to a pediatric gastroenterologist. Only a small number of children have an organic cause for constipation. Chronic constipation can lead to *fecal incontinence*. Most fecal incontinence is related to retained stool or impaction (i.e. *constipation-associated fecal incontinence)*, but approximately 20% of children seen in a sub-specialty clinic have *non-retentive fecal incontinence*[1]. Once functional constipation is diagnosed and treated, it can take 6-12 (or more) months of management for a child's stool pattern and bowel function to return to normal.

DEFINITIONS

Functional constipation - An umbrella term for constipation without evidence of pathology, such as a structural, neurologic or other disorder (e.g. tethered spinal cord, Hirschsprung disease, medication effects).	***Fecal incontinence (soiling, encopresis)*** - Bowel movements often occurring in places other than the toilet in a *toilet-trained* child (e.g. stool leakage into underwear or a bowel movement while asleep). Fecal incontinence can be retentive or non-retentive.
Constipation-associated (retentive) fecal incontinence – Fecal incontinence associated with chronic presence of rectal stool, often impaction.	***Non-retentive fecal incontinence*** - Fecal incontinence without any evidence of constipation or presence of rectal stool in a child older than 4 years.

It is important to distinguish between *constipation-associated fecal incontinence* and *non-retentive fecal incontinence*, since the initial treatment is different. A good history can help to distinguish between them.

Constipation-associated fecal incontinence: A child who experiences a single painful bowel movement may begin to avoid passing stool. Stool accumulates in the rectum and becomes hard and even more painful to pass. Eventually, the rectal enlargement causes loss of sensation and a decrease in the perception of the urge to defecate. Semi-solid stool can leak onto the perianal skin and clothing. **Stools that clog the toilet, as well as incontinence during sleep, strongly suggest underlying constipation.** *A child may also present with secondary urinary incontinence due to the large stool burden.* **Non-retentive fecal incontinence**: Children with non-retentive fecal incontinence usually have full bowel movements in their clothing, rather than just soiling. Episodes tend to occur during the afternoon and evening

EVALUATION

The first step is a **careful history**, including stool characteristics and patterns, medications, dietary habits and growth. The next step is an **abdominal and rectal exam**. An abdominal fecal mass can be palpated in about half of children with constipation, and a rectal exam reveals a dilated rectum packed with stool in 90% of children with constipation. If non-retentive fecal incontinence is suspected, an **abdominal X-ray** is indicated to rule-out any occult constipation. Organic causes, which occur in about 5% of children, can include: hypothyroidism, Hirschsprung disease or a tethered spinal cord.

TREATMENT

The general approach to the child with functional constipation includes the following steps: determine whether fecal impaction is present, treat the impaction if present ("clean-out"), initiate treatment with oral medication, provide parental education and close follow-up, and adjust medications as necessary. Relapses are common.

Parental education: It is essential for parents to understand that soiling related to overflow incontinence is not due to willful or defiant behavior by the child. Most often, the child is not misbehaving but simply cannot feel the stool coming out,

and should not be punished for soiling episodes. It is helpful to explain how and why the constipation became chronic. They should be told that regaining normal rectal tone, sensation and bowel function may take from 6 months to over a year.

Disimpaction (clean-out): This is necessary before maintenance therapy can be started, and can usually be achieved as an outpatient, with oral medication. Polyethylene glycol (PEG 3350 powder: Miralax) has been shown to be effective. High dose mineral oil (in children >1 year old and not at risk of aspiration), senna, or bisocodyl can be added if necessary. This is usually done for 3 days, and can be repeated once/week for several weeks if needed. *This step is skipped for children with non-retentive fecal incontinence.*

Maintenance: The child will need close follow-up and monitoring to adjust medication as necessary. The goal is to maintain soft bowel movements once or twice a day. It may take 6-12+ months of treatment for rectal tone and sensation to return to normal. Miralax is the most commonly used medication for maintenance. Increased dietary fiber and hydration are helpful, but not sufficient on their own.

Behavioral interventions: ***This is an essential component of treatment***. The child should be encouraged to sit on the toilet for 5-10 minutes after meals. The child should be rewarded for effort (sitting) rather than success (evacuation in the toilet). A diary should be used to record bowel movements, medication and episodes of fecal incontinence, abdominal pain, and wetting. *School and daycare need to be included in the plan* for accommodations such as unrestricted access to the bathroom, access to a private bathroom, or use of a unobstrusive signal to let the teacher know of the need to use the toilet. ***Referral to a child psychologist may be indicated to assist parents with management strategies.***

RESOURCES

Clinical Practice Guideline: Evaluation and Treatment of Constipation in Infants and Children: Recommendations of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition. Journal of Pediatric Gastroenterology and Nutrition 43: e1-e13, September 2006 http://www.naspghan.org/user-assets/Documents/pdf/PositionPapers/constipation.guideline.2006.pdf

Parent information:

- North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN):
- http://naspghan.org/user-assets/Documents/pdf/Public%20Education%20Brochures/2011/FECAL%20SOILING%20-ENG%20REV12-10.pdf
- Nemours Foundation: http://kidshealth.org/parent/emotions/behavior/encopresis.html
- AAP: http://www.healthychildren.org/English/health-issues/conditions/emotional-problems/pages/Soiling-Encopresis.aspx
- NIH: http://digestive.niddk.nih.gov/ddiseases/pubs/constipationchild/index.aspx

SPECIAL NEEDS INFORMATION AND RESOURCES:	
Children with Special Health Care Needs Program Nurse	206-296-4610
Early Support for Infants and Toddlers Program (formerly ITEIP)	http://del.wa.gov/development/esit/ King County: 1-800-756-5437
Parent to Parent Support Program-Arc of King County	206-829-7039 arcofkingcounty.org
Washington State Medical Home	http://www.medicalhome.org
American Academy of Pediatrics	www.aap.org
AAP Developmental and Behavioral Pediatrics	www.dbpeds.org
CDC Act Early	www.familyvoices.org
Nutrition for Children with Special Health Care Needs in WA State	http://depts.washington.edu/cshcnnut/
• CSHCN Nutrition Network	http://depts.washington.edu/cshcnnut/nutnet/index.html
• Washington State Community Feeding Teams	http://depts.washington.edu/cshcnnut/feeding/index.html

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Children with Special Health Care Needs

Washington State Department of Health

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