

## Medical Management of Constipation in Children

### The Goal

Constipation is a common pediatric problem that can be managed at the primary care provider level. The **goal** is for the child to have a regular, soft stool daily. Medications should be given on a regular basis to ensure that this occurs, particularly with those children with encopresis and soiling where the goal is to stay “clean”. It is important to explain to the family that it may take over a year for this problem to resolve, and that some individuals with slow motility require stool softeners and laxatives throughout their lives.

### Recommended management approach

- **Maintenance Stool Softeners** and/or laxatives in ample amounts to elicit a daily, mushy bowel movement. Most children require this aggressive approach for 9-18 months to break the cycle of fear or pain with defecation and stool withholding. Weaning too soon is a common mistake. Miralax is the mainstay of therapy, with nighttime dose of semma product such as Ex-Lax squares for encopretics or neurologically impaired patients with slow bowel motility.
- **Behavior modification** includes sitting on the toilet for 10-15 minutes after breakfast (to stool before school) and after dinner with a book – no video games on the toilet. We do not suggest toilet sitting for young children not yet toilet trained.
- Modest increases in **fiber** where feasible; breads and cereals should have at least 2 gm of fiber per serving. In older children we use Benefiber chewable tablets. Fiber, however, plays a minor role in the management of constipation in children.
- **Cleanouts** when the child becomes backed up with stool can usually be managed at home by doubling medications for 3-4 days. If there is a large rectal plug, the child may also need a daily glycerin suppository for 4 days while oral laxatives are stepped up. Occasionally, with large rectal masses, enemas are also required. We do not recommend rectal medications to children who have been sexually abused.

Miralax can be used for cleanouts at 1.5 gm/kg/day for 4 days (up to 6 capfuls per day) then drop back to maintenance dosing of 0.8 gm/kg/day.

Enemas and suppositories may be necessary in older children who are impacted with stool.

*Fleet's phosphate enemas should never be given to infants or young children due to possibly fatal electrolyte shifts.*

### Adjuncts to therapy

Sugar free gum has sorbitol or xylitol. These sugar alcohols act as laxatives, and may help in the therapy of older children who are non-compliant with medication.

### Useful tips

If an encopretic patient presents with persistent soiling despite medication, and if not apparent by abdominal exam, perform a rectal exam to see if there is a large plug of stool that may necessitate more aggressive therapy.

Medical non-compliance may be best addressed by a behavioral therapist or adolescent specialist.

### Common doses for stool softeners in children

**Miralax** is a product containing polyethylene glycol 3350 (PEG). It is an osmotic laxative that is contained in PEG-electrolyte solutions such as Go-Lytely that has been utilized extensively and found to be safe in children.

(Continued)



Miralax is the mainstay of prescriptions for constipation in children more than one year of age.

- **Maintenance dosing**

- 0.8 gm/kg of body weight per day. (Maximum dose is 102 gm or 6 capfuls per day orally).
- Each 17 gm capful should be mixed in 8 oz of fluid – water, orange juice or Crystal Light work well). If more aggressive therapy is needed, we add senna products at night or a dose of milk of magnesia after school.

- **Cleanout dosing**

- 1.5 gm./kg/day for 4 days, then back to maintenance dosing (maximum dose is 102 gm/day or 6 capfuls/day). Each 17 gm capful should be mixed into 8 oz of fluid.

Senna is a stimulant laxative that comes in tablets or syrup (8 mg/5 ml). It is helpful as an adjunct to Miralax for children with encopresis or neurologic impairment with slow bowel motility, and is usually given at bedtime. Usual dosing extrapolated from *Pediatric Dosage Handbook*:

- 1 year to 2 year = 2-4 sennosides at hs (“Little Tummys” brand = 8mg/5 ml); no >8 mg/day.
- 2 year to 6 year = ½ to 1 tablet at bedtime (no more than 15 mg daily).
- 6 year to 11 year = 1 to 2 tablets at bedtime (no more than 30 mg daily).

- 12 years and older = 2-4 tablets at bedtime (no more than 60 mg daily).

### **Enemas and Suppositories**

- For fecal impactions in toddlers consider pediatric glycerin suppositories to evacuate the lower colon while softening from above. Use one suppository per day for 3-4 days. BabyLax liquid glycerin can be used in its place in infants.
- In older children, an enema may be necessary to disimpact from below. Care should be taken using phosphate containing enemas in young children, they may cause fatal electrolyte shifts in young children or when given too frequently.
- Mineral oil enemas act as a lubricant and are available commercially. The dose is 10 cc/kg/dose with a maximum of 300 ml per dose.

### **References**

1. Pashankar, D.S., et al Polyethylene glycol 3350 without electrolytes: a new safe, effective and palatable bowel preparation for colonoscopy in children. *J Pediatr* 2004; 144: 358-62.
2. Youssef, N.N., et al. Dose response of PEG 3350 for treatment of childhood fecal impaction. *J Pediatr* 2002; 141: 410-4.

*For additional information, please contact Pediatric Gastroenterology and Nutrition at 206-215-2700.*



**Pediatric Gastroenterology and Nutrition**  
1101 Madison, Suite 800  
Seattle, WA 98104

For a free physician referral:  
1-800-SWEDISH (1-800-793-3474)  
[www.swedish.org](http://www.swedish.org)