Table 14-2 Clean-Out Disimpaction

MEDICATION	SIDE EFFECTS/COMMENTS
INFANTS	
Glycerin suppositories	No side effects
Enema—6 mL/kg up to 4.5 oz (135 mL)	If enemas are considered, administer first in physician's office.
CHILDREN	
Rapid Cleanout	
Enema—6 mL/kg up to 4.5 oz (135 mL) every 12–24 h × 1–3	Invasive; risk of mechanical trauma Large impaction: mineral oil enema followed 1–3 h later by normal saline or phosphate enema Small impaction: normal saline or phosphate enema
Mineral oil	Lubricates hard impaction; may not see return after administration
Normal saline	Abdominal cramping; may not be as effective as hypertonic phosphate
Hypertonic phosphate	Abdominal cramping; risk of hyperphosphatemia, hypokalemia, and hypocalcemia, especially with Hirschsprung or renal insufficiency or if retained. Some experts do not recommend phosphate enema for children <4 yr, others for children <2yr.
Milk of molasses: 1:1 milk:molasses	For difficult to clear impaction
Combination: enema, suppository, oral laxative	
Day 1: Enema q12–24 h	See enemas above
Day 2: Bisacodyl suppository (10 mg) q12–24 h	Abdominal cramping, diarrhea, hypokalemia
Day 3: Bisacodyl tablet (5 mg) q12–24 h	Abdominal cramping, diarrhea, hypokalemia
Repeat 3-day cycle if needed × 1–2	
Oral/nasogastric tube: Polyethylene glycol electrolyte solution (GoLYTELY or NuLYTELY)—25 mL/kg/h up to 1000 mL/h × 4 h/day	Nausea, cramping, vomiting, bloating, aspiration. Large volume. Usually requires nasogastric tube and hospitalization to administer
Slower Cleanout	
Oral high-dose mineral oil—15–30 mL per year of age per day up to 8 oz × 3–4 days	Aspiration—lipoid pneumonia. Give chilled.
X-Prep (senna): 15 mL q12h × 3	Abdominal cramping. May not see output until dose 2 or 3
Magnesium citrate: 1 oz/yr of age to maximum of 10 oz per day for 2–3 days	Hypermagnesemia
Maintenance medications—also may be used for cleanout	

or foot support. The child should be praised for all components of cooperation with this program, and punishment and embarrassment should be avoided. As symptoms resolve, toilet sitting is decreased to twice daily and finally to once a day.

When disimpaction is achieved, the child begins the maintenance phase of treatment. This phase promotes regular stool production and prevents reimpaction. It involves attention to diet, medications to promote stool regularity, and behavioral training. Increasing dietary fiber and fluid are recommended. For children with chronic constipation, the recommended daily dose of fiber is calculated as 10 grams plus the child's age in years (e.g., a 10-year-old should take 20 grams of fiber per day). At least 2 oz of nondairy fluid intake per gram of fiber intake is recommended. Sorbitol-based juices, including prune, pear, and apple juice, increase the water content of bowel movements. Lubricants or osmotic laxatives are used to promote regular soft bowel movements. Maintenance medications, including side effects, are listed in Table 14-3. Polyethylene glycol powder is well tolerated because the taste and texture are palatable. Some children may require the use of a lubricant in addition to an osmotic laxative; children with severe constipation may require a stimulant laxative. Treatment failure occurs in approximately one in five children secondary to problems with adherence or poor recognition of inadequate treatment resulting in reimpaction.

Complications

Chronic constipation and soiling interfere with social functioning and self-esteem. Discomfort and fear of accidents may distract children from their schoolwork and other important tasks. Children also may develop unusual eating habits in response to chronic constipation and their beliefs about this condition. Case reports of child abuse related to soiling have been published.

Prevention

The primary care physician can recommend adequate fiber intake in all children and encourage families to help their children institute regular toileting habits at an early age as preventive measures. Earlier diagnosis of chronic constipation can prevent much secondary disability and shorten the length of treatment required.