

A 3-year-old boy is brought to the physician for help with toilet training. He recently started day care and screams "no" when teachers try to place him on the toilet. He has bowel movements every other day and strains when he passes hard, pellet-like stools. The boy is a picky eater but loves milk and drinks up to 30 oz of chocolate milk daily. He has no medical problems and takes no medications. His weight and height have been tracking along the 75th percentile. Examination shows a cooperative, well-nourished boy. He runs well and can climb onto the examination table independently. He speaks in short sentences that are mostly understandable. The boy's abdomen is soft, nontender, and nondistended. He has normal Tanner I male genitalia. A small fissure is noted on the anal verge. Which of the following is the best next step in management of this patient?

- ☐ A. Abdominal x-ray
- ☐ B. Anorectal manometry
- ☐ C. Disimpaction with rectal enema
- ☐ D. Increase juice intake
- ☐ E. Oral laxative therapy
- ☐ F. Rectal biopsy
- ☐ G. Thyroid function testing

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- ☐ A. Abdominal x-ray [6%]
- ☐ B. Anorectal manometry [4%]
- ☐ C. Disimpaction with rectal enema [10%]
- ☐ D. Increase juice intake [15%]
- ☒ E. Oral laxative therapy [63%]
- ☐ F. Rectal biopsy [1%]
- ☐ G. Thyroid function testing [1%]

Proceed to Next Item

Explanation:

User Id: [redacted]

Constipation in children	
Risk factors	<ul style="list-style-type: none">• Initiation of solid food & cow's milk• Toilet training• School entry
Clinical presentation	<ul style="list-style-type: none">• Straining with passage of hard stools• Crampy abdominal pain• ≤ 2 defecations/week
	<ul style="list-style-type: none">• Anal fissures

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Clinical presentation	<ul style="list-style-type: none"> • Straining with passage of hard stools • Crampy abdominal pain • ≤ 2 defecations/week
Complications	<ul style="list-style-type: none"> • Anal fissures • Hemorrhoids • Encopresis • Enuresis/urinary tract infections • Vomiting
Treatment	<ul style="list-style-type: none"> • Increase dietary fiber • Limit cow's milk intake to <24 oz • Laxative • +/- Suppositories, enema

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Toddlers are at risk for constipation due to multiple transitional events, including dietary changes, **toilet training**, and school initiation. The **straining, hard stools**, and **anal fissures** in this patient are characteristic of constipation and likely exacerbated by **excessive milk consumption**, toilet training, and adjusting to day care.

Although constipation is common, prevention and treatment are important as straining and painful defecation can be very stressful. Children may avoid defecation, which creates a vicious cycle of further accumulation of hard stool, increased pain, and persistent stool withholding. Severe fecal impaction can mimic intestinal obstruction and cause abdominal pain and vomiting. If the rectum dilates progressively, the internal anal sphincter may relax in response to the increasing pressure, resulting in **encopresis** (fecal incontinence). The stool burden also decreases bladder capacity and can contribute to **enuresis** (urinary incontinence).

Children should increase water intake, drink <24 oz of cow's milk, eat fiber-rich foods, and sit on the toilet after each meal. Oral laxatives (eg, **polyethylene glycol**, **mineral oil**) are the preferred treatment and should be administered until the stool is consistently soft.

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(Choice A) Constipation is a clinical diagnosis. Abdominal x-rays are not routinely indicated but can be helpful to rule out air-fluid levels and free peritoneal air if constipation is severe enough to cause abdominal pain and vomiting.

(Choices B and F) Hirschsprung disease is diagnosed by rectal biopsy and usually presents in the neonatal period with delayed meconium passage and abdominal distension. Mild disease may manifest later in childhood and is an uncommon cause of chronic constipation. If constipation persists despite standard therapy, screening with anorectal manometry can be considered.

(Choice C) Enemas are helpful in evacuating stool. However, rectal manipulation may be distressing to children. An enema can be administered if oral laxatives are not helpful and there has been no bowel movement for several days.

(Choice D) Sorbitol-containing juices (eg, prune, pear, apple) can increase stool water content. Juice is less effective than laxatives, and excessive consumption increases the risk for obesity.

(Choice G) Constipation is rarely the sole manifestation of hypothyroidism. These children usually have other problems (eg, short stature, lethargy, dry skin, brittle hair).

Educational objective:

Constipation is a common problem in toddlers due to transition to solid food and cow's milk, toilet training, and school entry. Complications include anal fissures, encopresis, and enuresis. Laxative therapy should be initiated promptly to soften stools.

References:

1. [Polyethylene glycol: a game-changer laxative for children.](#)
2. [Hypothyroidism is a rare cause of isolated constipation.](#)
3. [Managing functional constipation in children.](#)