



Constipation: infrequent, difficult, painful, or incomplete evacuation of hard stools

CAUSES OF CONSTIPATION

Organic:

- Hirschsprung disease
- Hypothyroidism
- Cystic fibrosis
- Celiac disease
- Diabetes
- Spinal cord abnormalities
- Anorectal malformation
- Drugs (eg. opioids, antidepressants)
- Toxins (eg. lead)

Functional (90-95%):

- Irritable bowel syndrome
- Withholding behaviour (eg. fighting the urge to go due to fear or embarrassment)
- Poor fluid intake
- Insufficient dietary fiber
- Dietary changes
- Sedentary lifestyle

PRESENTATION

- Infrequent stools (<3x/week)
- Hard or painful to pass stool
- Large, difficult to flush stool
- Blood in the stool
- Fecal incontinence (encopresis)
- Overflow diarrhea
- Abdominal pain or cramps
- Difficulty urinating
- Behavioural issues

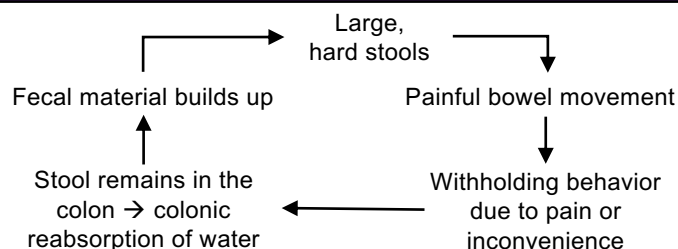
PHYSICAL EXAM

- Abdominal exam: distension, bowel sounds, palpation for masses and tenderness
- Anal fissures
- DRE to check for rectal tone, stool mass, and stool consistency
- Features of spina bifida (sacral dimple, hair tuft)
- Misplaced anal opening

BRISTOL STOOL CHART

TYPE 1		Severe constipation – separate hard lumps, difficult to pass
TYPE 2		Mild constipation – sausage shaped, but lumpy
TYPE 3		Normal – like a sausage, but with cracks on the surface
TYPE 4		Normal – like a sausage or snake, smooth and soft
TYPE 5		Lacking fiber – soft blobs with clear-cut edges (passes easily)
TYPE 6		Mild diarrhea – fluffy pieces with ragged edges, a mushy stool
TYPE 7		Severe diarrhea – watery, entirely liquid, no solid pieces

PATHOPHYSIOLOGY OF FUNCTIONAL CONSTIPATION



INVESTIGATIONS

No investigations needed if history and physical exam are consistent with functional constipation

Investigations to consider:

- Abdominal x-ray, TSH, celiac testing, HgA1C, CF testing, electrolytes, extended electrolytes, lead level



Red flags: delayed passage of meconium (> 48 hours), young infants, poor feeding and/or growth, recurrent fevers, bilious emesis, bloody stool, developmental delays, hypotonia, poor suck, abnormal neurologic exam

MANAGEMENT

Disimpaction

Bowel clean out with PEG3350 or Pico-salax

Maintenance

PEG3350 for ≥ 3 months to restore normal bowel routine. Titrate to effect.

Regular toileting

Have the child sit on the toilet after each meal.



Healthy diet

Increase fluid intake



Increase physical activity



Arrange follow-up



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