Constipation & Red Flags

A clinical guide for medical students

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Understanding Constipation

Constipation is defined as **two or fewer bowel movements per week**, painful defecation, or passage of large-caliber, hard stools requiring excessive straining.

Functional (95% of cases)

No pathological primary cause. Usually due to dietary changes or toilet training difficulties in an otherwise healthy child.

Organic Causes

- **Anatomical:** Hirschsprung disease, colorectal disease
- **Metabolic:** Hypercalcemia, hypothyroidism
- **Neurologic** or **drug-induced**

Diagnosis is usually clinical; managed with lifestyle modification and laxatives.

Alarm Signs (Red Flags)

The following signs suggest a possible **organic cause** and require further evaluation:

Neonatal / Early Onset

- Delayed passage of meconium
- Constipation from birth or early infancy

GI Symptoms

- Vomiting
- Rectal bleeding (without fissure)
- Ribbon stool
- Severe abdominal distention

Systemic Signs

- Fever
- Delayed growth
- Urinary incontinence
- Fecal incontinence without impaction

Neurologic / Structural

- Extraintestinal neurologic deficits
- Abnormal anorectal findings on exam

Clinical Features & Risk Factors

Clinical Features

- Infrequent stool (<3/week)
- Painful passage of stool
- Large, hard, or rabbit-pellet stools
- Fecal encopresis (in toilet-trained children)
- Abdominal pain and bloating
- Withholding posture

Risk Factors

- Low fiber diet and low fluid intake
- Medications (iron, opioids, etc.)
- Withholding due to fear or prior painful defecation
- Toilet training difficulties
- Dietary changes

Investigations

Constipation is **usually a clinical diagnosis** based on history and physical examination. Further testing is reserved for patients with alarm signs or those who fail initial treatment.

Abdominal Radiograph

Assess stool burden and bowel gas pattern.

Contrast Enema

For children with features suggestive of Hirschsprung disease.

Spine Radiograph

When neurologic dysfunction is suspected.

Lab Tests

Celiac screening (TTG + total IgA), TSH, free T4, and serum calcium levels.

Management

Maintenance
Routine laxatives for ≥2 months.

Behavioral
Scheduled toileting after meals and activity.

Disimpaction
Enema or PEG for 5–7 days.

Dietary
Ensure adequate fluids and fiber.

If an **organic cause** is identified, treat the primary underlying condition.
Maintenance therapy should not be discontinued prematurely.

Key Take-Home Messages

Functional First

Most constipation is functional — dietary and behavioral factors are the primary drivers in healthy children.

Always Rule Out Red Flags

Alarm signs must be assessed in **every patient** to exclude organic causes such as Hirschsprung disease or metabolic disorders.

Commit to Treatment

Maintenance laxative therapy should continue for **at least 2 months** to prevent relapse and establish regular bowel habits.

Diagnosis is clinical — history and examination are your most powerful tools. Investigate further only when red flags are present or initial treatment fails.