

## ACUTE AND CHRONIC CONSTIPATION

**DEFINED BY THE ROME CRITERIA IN THE FOLLOWING TERMS:**

<b>Table 77-1 Rome Criteria for Diagnosis of Constipation</b>
Two or more of the following must be present to make a diagnosis of constipation:
Straining at defecation at least 25% of the time
Hard stools at least 25% of the time
Incomplete evacuation at least 25% of the time
Less than three bowel movements per week
Chronic constipation includes symptoms for at least 12 wk (consecutive or nonconsecutive) in the preceding 12 mo

### **PATHOPHYSIOLOGY:**

- Constipation is complicated and often has multiple/overlapping causes

<b>Table 77-2 Differential Diagnosis of Constipation</b>
Acute causes:
GI: quickly growing tumors, strictures, hernias, adhesions, inflammatory conditions, and volvulus
Medicinal: narcotic analgesic, antipsychotic, anticholinergic, antacid, antihistamine
Exercise and nutrition: decrease in level of exercise, fiber intake, fluid intake
Painful anal pathology: anal fissure, hemorrhoids, anorectal abscesses, proctitis
Chronic causes:
GI: slowly growing tumor, colonic dysmotility, chronic anal pathology
Medicinal: chronic laxative abuse, narcotic analgesic, antipsychotic, anticholinergic, antacid, antihistamine
Neurologic: neuropathies, Parkinson disease, cerebral palsy, paraplegia
Endocrine: hypothyroidism, hyperparathyroidism, diabetes
Electrolyte abnormalities: hypomagnesemia, hypercalcemia, hypokalemia
Rheumatologic: amyloidosis, scleroderma
Toxicologic: lead, iron

- Gut motility is affected by diet, activity level, anatomic lesions, neurologic conditions, medications, toxins, microflora, hormone levels and psychiatric complaints
- ACUTE CONSTIPATION IS INTESTINAL OBSTRUCTION UNTIL PROVEN OTHERWISE! → common causes shown above
- Chronic constipation can be caused by the same conditions that cause acute constipation

### **CLINICAL FEATURES:**

- HISTORY:
  - Several historical elements point towards a more ominous cause of symptoms of acute constipation (although most are non-sinister):
    - Rapid onset nausea or vomiting
    - Inability to pass flatus

- Severe abdominal pain or distension
  - Unexplained weight loss
  - Rectal bleeding
  - Un-explained iron deficiency anaemia
  - Family history of colon cancer
- DIARRHOEA ALONE DOES NOT RULE OUT CONSTIPATION OR OBSTRUCTION AS LIQUID STOOL CAN BE PASSING PAST AN OBSTRUCTIVE SOURCE
- PHYSICAL EXAMINATION:
  - Focussed abdominal and pelvic exam PLUS RECTAL EXAMINATION
  - Look for herniae and abdominal or pelvic masses
  - External rectal exam → anal fissures, haemorrhoids,, abscesses or protruding masses
  - Digital rectal exam → faecal impaction or obstructing rectal mass
- LABORATORY EVALUATION/IMAGING:
  - In patient with concerning history for obstruction → upright chest film, and erect/supine AXR → air-fluid levels or dilated bowel → if high suspicion for intestinal obstruction despite normal X-ray → CT IS NECESSARY TO MAKE DIAGNOSIS

**SELECT ENTITIES:**

- FUNCTIONAL CONSTIPATION:
  - No quick fix → multi-disciplinary approach
  - Stress lifestyle and diet modification → without adequate fluid, exercise and fibre, medicinal methods fail
  - Medical options shown below

**Table 77-3 Medical Adjuncts for the Treatment of Constipation**

Type	Generic Name	Trade Name	PRN Doses	Side Effects	Mechanism
Fiber	Bran	NA	1 cup daily	Bloating, flatulence	Increases stool bulk or transit time, increases gut motility
	Psyllium	Metamucil	1 teaspoon three times a day	Bloating, flatulence	
Emollient	Docusate sodium	Colace	100 milligrams daily/twice a day	Cramping	Facilitates mixture of stool fat and water
Stimulants	Bisacodyl	Dulcolax	10 milligrams PR three times a day	Incontinence, rectal burning	Stimulates the myenteric plexus, thereby increasing intestinal motility
	Antraquinones	Peri-Colace	One to two tablets PO daily/twice a day	Melanosis coli, degeneration of myenteric plexus	
	Senna	Senokot, Ex-lax	Two tablets PO daily/twice a day or 15-30 mL daily/twice a day	Laxative abuse, nausea, melanosis coli, cramping	
Saline laxative	Magnesium	Milk of magnesia	15-30 mL daily/twice a day	Magnesium toxicity, especially in renal insufficiency	Decreased colonic transit time
		Magnesium citrate	100-240 mL daily/twice a day	Cramping, flatulence, hypermagnesemia	
Suppository	Glycerin suppository	NA	1 PR daily	Rectal irritation	Local rectal stimulation
Hyperosmolar agents	Lactulose	NA	15-30 mL daily/twice a day	Cramps, flatulence, belching, nausea	Osmotically active nonabsorbable sugars pull fluid into the gut
	Sorbitol	NA	15-30 mL daily/twice a day	Cramps, flatulence	
	Polyethylene glycol	GoLYTELY	1 gallon/4 h	Nausea, cramping, anal irritation	
		MiraLAX	17 grams		
Enemas	Mineral oil	NA	100-250 mL PR	Local trauma	Colonic distention encourages evacuation
	Tap water	NA	500 mL PR	Local trauma	
	Soap suds	NA	1500 mL PR	Local trauma	
	Monophosphate	Fleets	1 unit PR	Local trauma, hyperphosphatemia (especially in patients with renal failure)	

- In its extreme form, functional constipation can result in a variety of potentially life-threatening complications, especially faecal impaction and intestinal pseudo-obstruction (OGILVIE SYNDROME)

- FAECAL IMPACTION:
  - Requires manual disimpaction as enemas provide little or no relief
- INTESTINAL PSEUDO-OBSTRUCTION:
  - Ogilvie syndrome or acute colonic pseudo-obstruction is a clinical disorder with signs/symptoms and radiographic appearance of an acute large bowel obstruction with no evidence of distal colonic obstruction
  - Colon can become massively dilated (>10cm), if not decompressed, the patient risks perforation, peritonitis and death
  - Predisposing factors include recent surgery, underlying neurological disorders and critical illness

PRIOR TO DISCHARGE:

- Need to address potential organic cause of obstruction:

<b>Table 77-4 Symptoms Suggestive of Organic Constipation</b>
Acute onset
Weight loss
Rectal bleeding/melena
Nausea/vomiting
Fever
Rectal pain
Change in stool caliber

- Also need to address:
  - Possible obstructing lesion
  - Systemic illness
  - Electrolyte imbalance
  - Potential for intestinal perforation from self-administered enema