

Conflict of Interest



This presentation contains number of brand for pharmacotherapy. I have no personal association with any of these nor do I make any money directly or indirectly from any of these brands/companies.

AW



Learning Objectives



- Recognize the difference between primary and secondary constipation
- Assess and evaluate for alarming signs and symptoms for secondary constipation;
- Recommend evidence based pharmacologic and non-pharmacologic treatment for constipation.



Constipation



- straining
- lumpy or hard stools
- feeling of incomplete evacuation
- feeling of anorectal obstruction or blockage
- manually facilitating defecation during $\geq 25\%$ of defecations
- < 3 bowel movements/week
- Loose stools rarely present without laxatives

Drossman DA. Functional gastrointestinal disorders: history, pathophysiology, clinical features, and Rome IV. *Gastroenterology*. 2016;150(6):1262-1279.e2.



Constipation



- · Chronic if symptoms lasting more than 3 months
- Can be
 - Primary/Essential
 - Secondary
- · Women are more affected than men
- Age > 65 is more likely to report

Malone M, Waheed A, Samiullah S. Functional Gastrointestinal Disorders: Functional Lower Gastrointestinal Disorders in Adults. FP Essent. 2018 Mar; 466:21-28.



Primary Constipation



- Functional
 - Idiopathic Functional Constipation
 - Difficult defecation, psychological distress, excessive thinking about defecation, bloating, discomfort
- Delayed or Slow Transit/Colonic Inertia
 - Increased time between BMs, lack of urge to defecate
- Outlet Dysfunction/Sysynergic Defecation
 - Fissure-in-ano, anal stricture, proctalgia fugax, rectal prolapse, rectocele, pelvic floor dysfunction, tumor
- Combined forms/Mixed

American College of Gastroenterology Chronic Constipation Task Force. An evidence-based approach to the management of chronic constipation in North America. Am J Gastroenterol. 2005;100(suppl 1):51-54.



Secondary Constipation WellSpan



- · intestinal obstruction
 - malignant large bowel obstruction
 - small bowel obstruction
- constipation secondary to conditions or disorders

 irritable bowel syndrome (IBS)
- hypothyroidism
- multiple sclerosisParkinson disease

- pregnancyadvanced age
- colon cancer and rectal cancer
- Megacolon or Megarectum
- Ogilvie Syndrome, Shy- Drager Syndrome/ Multisystem Atrophy

Advanced Diabetic Autonomic Neuropahty

nerican College of Gastroenterology Chronic Constipation Task Force. An evidence-based approx the management of chronic constipation in North America. Am J Gastroenterol. 2005;100(suppl 1):S1-S4.



Secondary Constipation Wellspan Good Samaritan Hospital



- constipation secondary to medication, such as
 - opioids
 - Antispasmodics
 - Iron Supplements
 - diuretics
 - antidepressants
 - anticonvulsants
 - antacids
 - anticholinergics
 - calcium channel blockers (CCBs)
 - beta blockers

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ROME 4 Criteria for Diagnos WellSPAN Good Samaritan Hospital



Functional Constipation

Bowel disorder associated with \geq 2 of the following

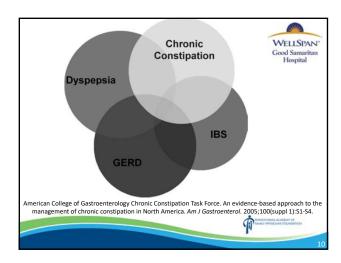
- straining
- lumpy or hard stools
- feeling of incomplete evacuation
- feeling of anorectal obstruction or blockage
- manually facilitating defecation during ≥ 25% of defecations
- < 3 bowel movements/week</p>
- Loose stools rarely present without laxatives

IBS-Constipation

- Recurrent abdominal pain, on average, ≥1 day/week in the last 3 months,
- associated with ≥2 of the following criteria:
 - Related to defecation
 - Associated with a change in frequency of stool
 - Associated with a change in form (appearance) of stool



Tack J, Drossman DA. What's new in Rome IV astroenterol Motil. 2017;29(9)



Alarms!!



- acute onset (especially in elderly)
- fever
- nausea and/or vomiting
- unintentional weight loss > 10 lbs
- anemia
- hematochezia
- melena
- positive fecal occult blood test
- change in bowel habits
- symptoms refractory to conventional therapy (regardless of age)
- Family History of Colorectal cancer
- · personal history of any cancer

Malone M, **Waheed A**, Samiullah S. Functional Gastrointestinal Disorders: Functional Lower Gastrointestinal Disorders in Adults. FP Essent. 2018 Mar; 466:21-28.



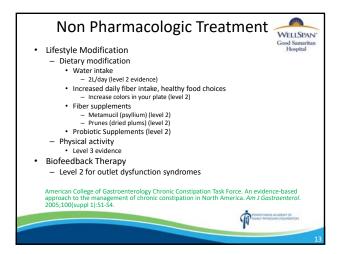
Work Up



- No alarms—none indicated
- Alarms: think about possible causes
 - Colonoscopy: all patients (insufficient evidence), risk factors
 - CBC, CMP (preferably fasting), TSH
 - Referral to Gastroenterologist
 - Colonic transit time study
 - Defecography, Ano-rectal manometry, defecodynamic studies

Rao SS, Ozturk R, Laine L. Clinical utility of diagnostic tests for constipation in adults: a systematic review. Am J Gastroenterol. 2005;100(7):1605-1615









Stool Softeners



- Although some have FDA approval, Insufficient Evidence Level 3
- Sodium Docusate (Colace, Sufrac, Diocto)
- Enable additional fat and water incorporation in stool hence stool
- It takes 12-72 hours for action
- Good for opiod analgesic, iron or calcium supplement induced constipation
- Lubricants/emolients: type of stool softener like mineral oil—not for long term use for min/vit def

erican College of Gastroenterology Chronic Constipation Task Force. An evidence-based approach to management of chronic constipation in North America. Am J Gastroenterol. 2005;100(suppl 1):S1-



Stimulants



- Senna products (Senokot, Ex-lax)
- Bisacodyl (Dulcolex, Correctol, Carter's Pills): Both tabs and suppository
- Mesenteric & Myenteric Plexus
- Act on Cells of Cajal
- Increase motility as well increase secretion of water and solute
- Insufficient Evidence to use in Chronic Constipation

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Hydrants/Osmotic Laxatives



- · Hyperosmotic agents
 - Lactulose (level 1)
 - Polethyline Glycol: Superior to above (level 1)

 - PO powder (Miralax)
 Electrolyte solution: Golytely, Glycolex, Colyte, Nulytely, Suprep,
 - Glycerine (suppositories) (level 2)
 - Sorbitol (level 2)
- Mg citrate, MgSO₄, MgOH, Na-K tartarate, KCl (Insufficient Evidence)

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Herbals and Others



- Caster Oil: Both oral and suppository
- Microlax, Aloe Vera (extracts from rose petals-"Qaland"), Buckthom, Phenolphthaline, Red Chillies
- Insufficient Evidence

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Opioid Induced Constipation WELLSPAN



- Prevention: Lifestyle modification, softeners and bulking agents right from beginning, occasional use of stimulants
- Methylnaltrexone (Relistor): Level 2 evidence, difficult to get outpatient coverage unless demonstrated failure of other meds



"Newer" and Rarely Used Meds WELLSRAW



- Level 1 evidence but have become "expert use only"
 - Prucalopride (Resolor, Prudac, DuphaPro): availability and insurance coverage is an issue
 - Cisapride: cardiac s/e, limited use only
 - Tegaserod (Zelnorm, Zelmac): limited use only for experts, cardiac
- IBS-Constipation agents
 - Lubiprostone (Amitza)
 - Linaclotide (Linzess)
- Not FDA Approved but may prescribe open label
 - Colchicine 0.6mg PO TID



