Functional bowel disorders

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Functional bowel disorders

- Functional bowel disorders are functional gastrointestinal disorders with symptoms attributable to the middle or lower gastrointestinal tract. These include the IBS, functional bloating, functional constipation, functional diarrhea, and unspecified functional bowel disorder
- To separate these chronic conditions from transient gut symptoms, they must have occurred for the first time ≥6 months before the patient presents, and their presence on ≥3 days a month during the last 3 months indicates current activity
- Previous diagnostic criteria presumed the absence of a structural or biochemical disorder.
- Moreover, IBS, functional bloating, functional constipation and functional diarrhea may have multiple etiologies.

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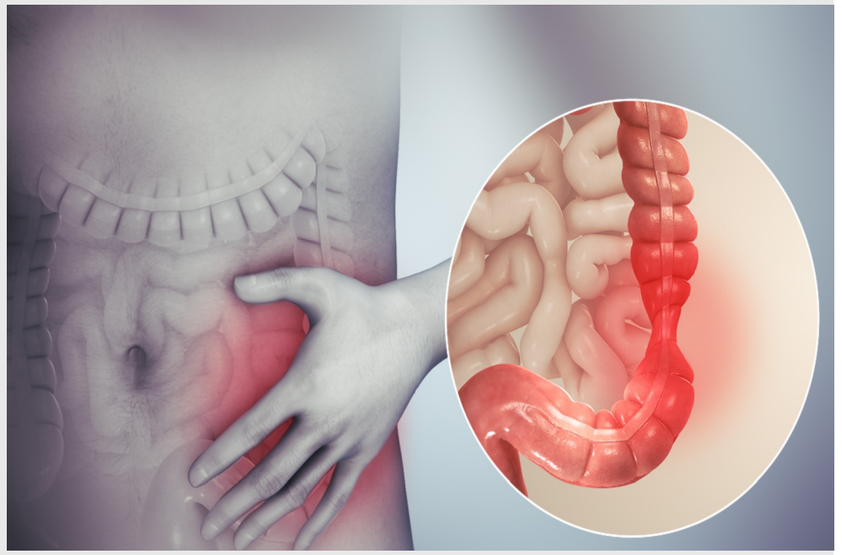
Functional bowel disorders

<u>Irritable Bowel Syndrome</u>

- IBS is a functional bowel disorder in which abdominal pain or discomfort is associated with defecation or a change in bowel habit, and with features of disordered defecation
- about 10%–20% of adults and adolescents have symptoms consistent with IBS
- most studies find a female predominance
- IBS symptoms come and go over time
- overlap with other functional disorders
- impair quality of life
- high health care costs



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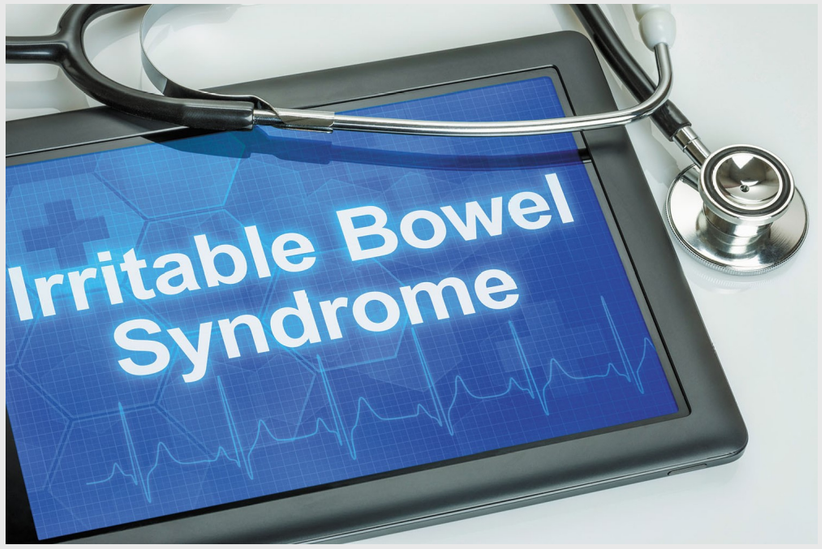
Functional bowel disorders

<u>Irritable Bowel Syndrome</u>

- Diagnostic Criteria
  - Recurrent abdominal pain or discomfort
  - at least 3 days per month in the last 3 months
  - associated with 2 or more of the following:

1. Improvement with defecation
2. Onset associated with a change in frequency of stool
3. Onset associated with a change in form (appearance) of stool



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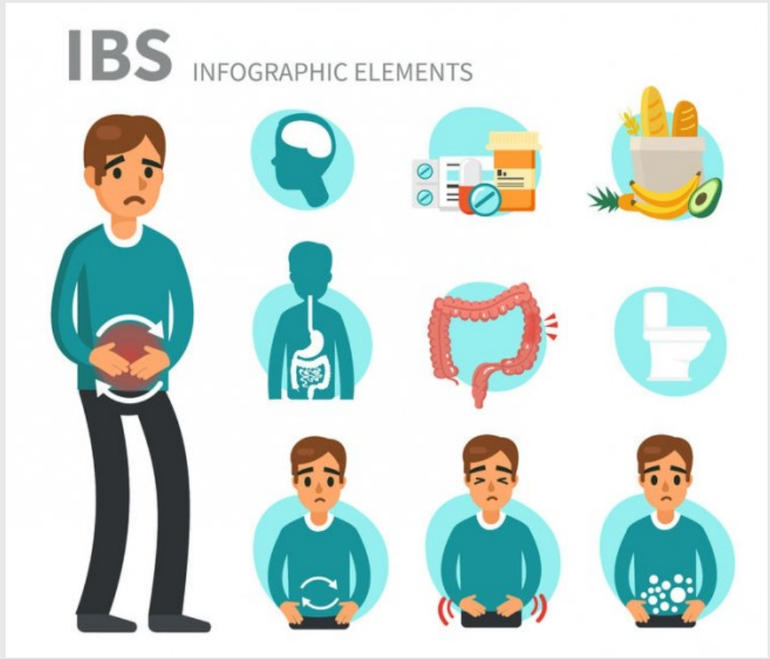
Functional bowel disorders

<u>Clinical Evaluation</u>

depends on careful interpretation of the

- temporal relationships of pain/discomfort, bowel habit and stool characteristics.
- Pain/discomfort related to defecation is likely to be of bowel origin
- Pain/discomfort associated with exercise, movement, urination, or menstruation usually has a different cause.
- Fever, gastrointestinal bleeding, weight loss, anemia, abdominal mass and other “alarm” symptoms or signs are not due to IBS but may accompany it



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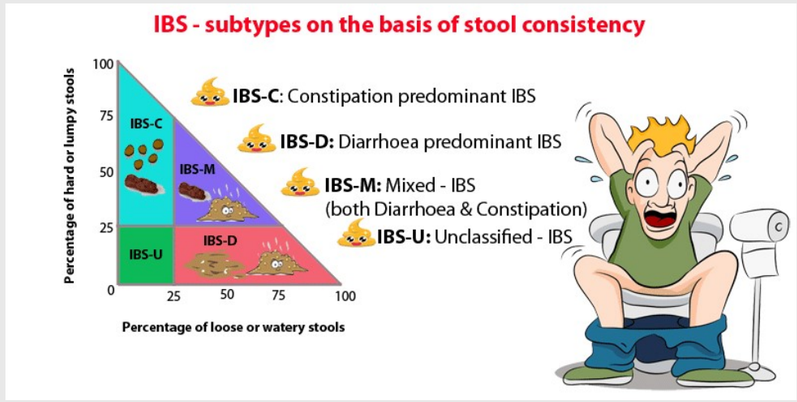
- In women the pelvic pain may lead to worsening of IBS symptoms during menstruation
- Dyspareunia or other gynecologic symptoms may obscure the diagnosis.
- Incorrect symptom attribution can lead to <u>hospitalization and surgery</u> especially cholecystectomy, appendectomy, and hysterectomy

<u>4 possible IBS subtypes</u>

- IBS-C, IBS with constipation
- IBS-D, IBS with diarrhea
- IBS-M, mixed IBS
- IBS-U, unsubtyped IBS



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Functional bowel disorders

Diagnosis

- A confident diagnosis can be made through
  - careful history taking
  - examination
  - limited laboratory and structural evaluations individualized to each patient's needs.
  - IBS is often properly diagnosed without testing

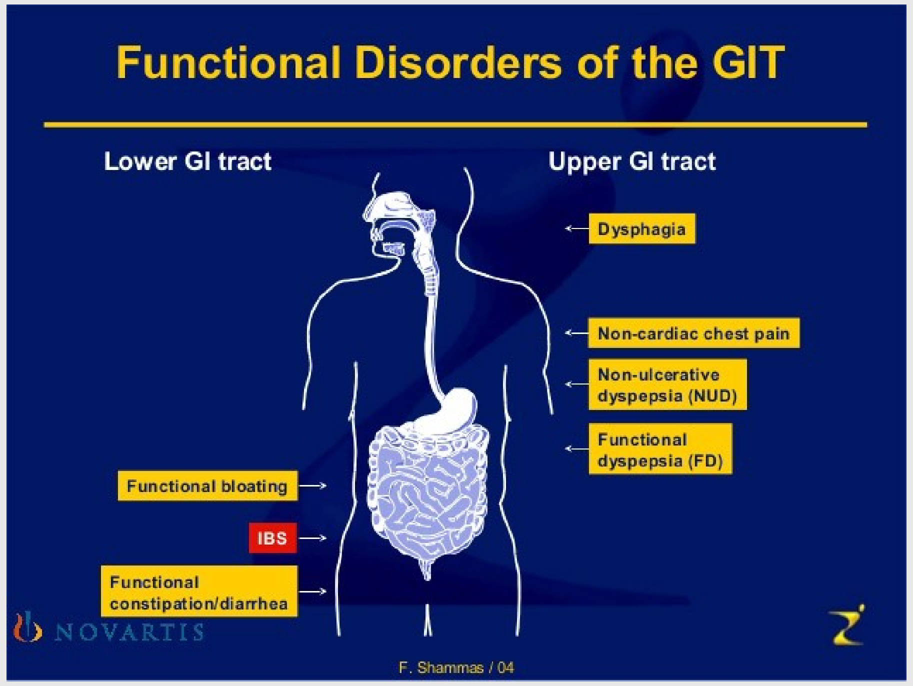
Treatment

- Management depends on a confident diagnosis,explanation of why symptoms occur, and suggestions for coping with them.
- Education about healthy lifestyle behaviors, reassurance that the symptoms are not due to a life-threatening disease such as cancer, and establishment of a therapeutic relationship are essential
- patients have a greater expectation of benefit from lifestyle modification than drugs
- For such counseling,individual or group interactions are effective

Functional bowel disorders

Functional Bloating

- Functional bloating is a recurrent sensation of abdominal distention
- may or may not be associated with measurable distention
- not part of another functional bowel or gastroduodenal disorder.
- up to 96% of IBS patients report this symptom
- 10%–30% of individuals report bloating during the previous year
- It is about twice as common in women as men
- often associated with menses
- worsens after meals and throughout the day and improves or disappears overnight



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<u>Diagnostic Criteria for Functional Bloating</u>

Must include <u>both</u> of the following:

1. Recurrent feeling of bloating or visible distention at least 3 days/month in 3 months
2. Insufficient criteria for a diagnosis of functional dyspepsia, IBS, or other functional GI disorder

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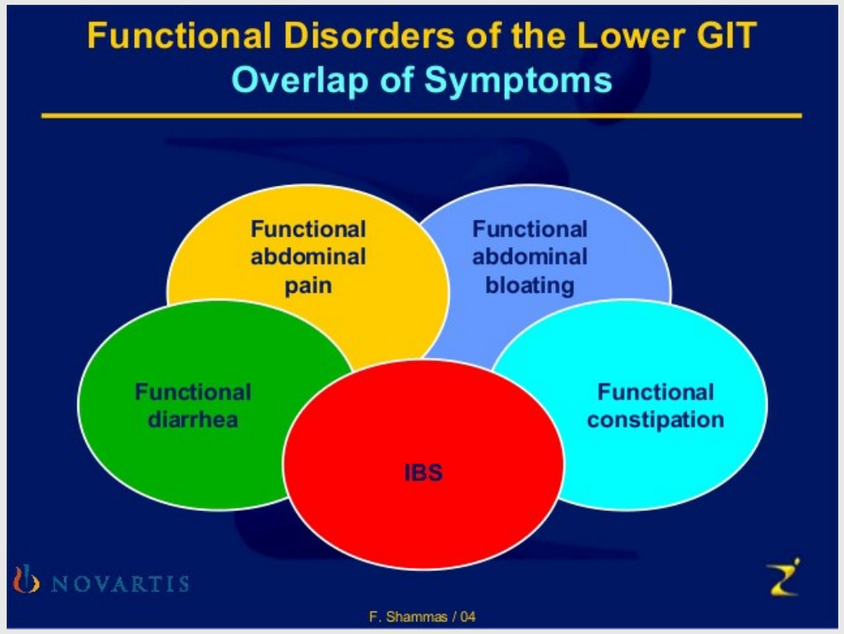
Functional bowel disorders

Clinical Evaluation

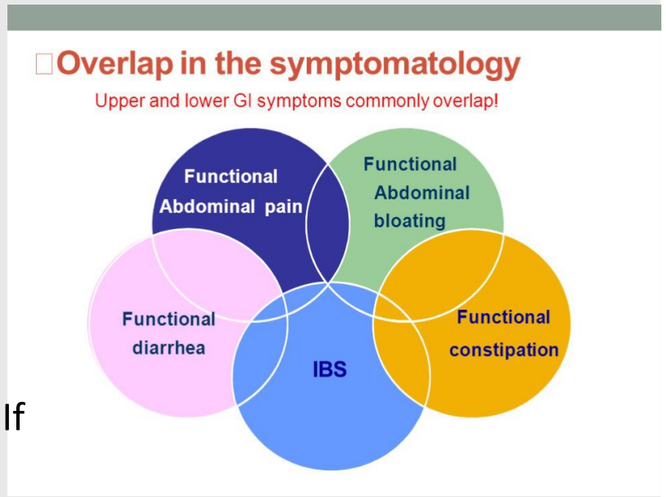
- Bloating is distinguished from other causes of abdominal distention by its diurnal pattern
- It may follow ingestion of specific foods
- Excessive burping or flatus is sometimes present
- These may be unrelated to the bloating
- Diarrhea, weight loss, or nutritional deficiency should prompt investigation for intestinal disease



Functional bowel disorders

Treatment

- Although the functional bloating criteria require the absence of other disorders, most research has been done on patients who have IBS or another disorder.
- Treatment of bloating is similar whether it is isolated or associated with another functional disorder.
- Most treatments are designed to reduce flatus or gut gas, which are of unproved
- importance in bloating, and most are of unproven efficacy
- Bloating may decrease if an associated gut syndrome such as IBS or constipation is improved. If bloating is accompanied by diarrhea and worsens after ingesting dairy products, fresh fruits, or juices, further investigation or a dietary exclusion trial may be worthwhile.
- Antibiotics are unlikely to help, but trials of probiotics are encouraging



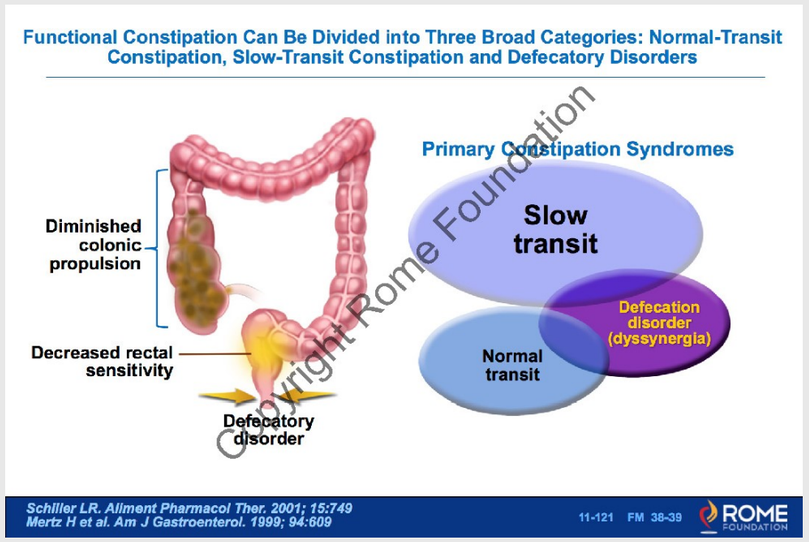
Functional bowel disorders

<u>Functional Constipation</u>

Functional constipation is a functional bowel disorder that presents as persistently difficult, infrequent, or seemingly incomplete defecation, which <u>do not meet IBS criteria</u>

Constipation occurs in up to 27% of people depending on demographic factors, sampling, and definition

It affects all ages and is most common in women and non-whites

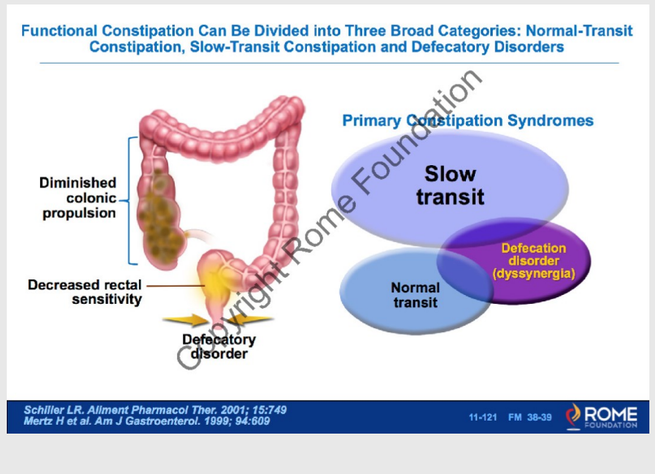


Functional bowel disorders

Diagnostic Criteria for Functional Constipation

- 1. Must include 2 or more of the following:
  - a. Straining during at least 25% of defecations
  - b. Lumpy or hard stools in at least 25% of
  - defecations
  - c. Sensation of incomplete evacuation for at least 25% of defecations
  - d. Sensation of anorectal obstruction/blockage for at least 25% of defecations
  - e. Manual maneuvers to facilitate at least 25%
  - of defecations (eg, digital evacuation, support of the pelvic floor)
  - f. Fewer than 3 defecations per week
- 2. Loose stools are rarely present without the use of laxatives
- 3. There are insufficient criteria for IBS

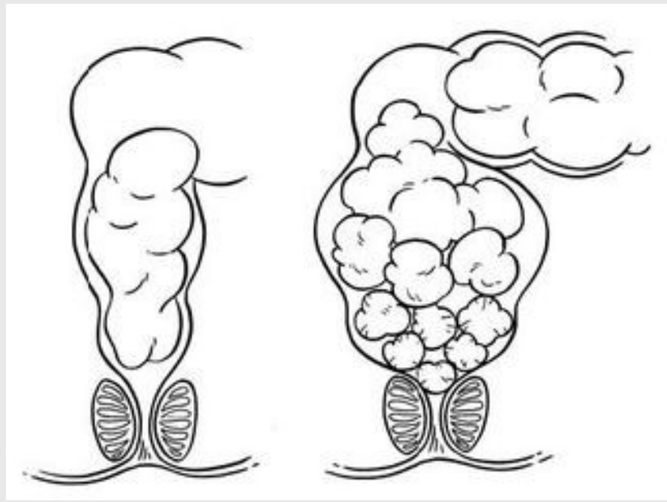
**Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis*



Functional bowel disorders

<u>Clinical Evaluation</u>

- The physician should clarify what the patient means by constipation.
- Manual maneuvers to assist defecation or straining to expel soft stools suggest anorectal dysfunction but are <u>diagnostically unreliable</u>
- Evaluation of the patient's gut symptoms, general health, psychological status, use of constipating medications,dietary fiber intake, and signs of medical illnesses (eg,hypothyroidism) should guide investigation
- perform perianal and anal examination to detect fecal impaction, anal stricture, rectal prolapse, mass, or abnormal perineal descent with straining



https://www.theinsandoutsofpoop.com/insandouts/encopresis.html

Functional bowel disorders

- Laboratory tests are rarely helpful.
- Endoscopic evaluation of the colon may be justified for patients 50 with new symptoms or patients with alarm features or a family history of colon cancer
- If fiber supplementation <u>fails to help or worsens</u> the constipation, measurements of whole gut transit time may identify cases of anorectal dysfunction or colon inertia

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Functional bowel disorders

Treatment

- Reassurance may convince some patients that failure to evacuate for 2 or 3 days is harmless
- Increased fluid intake and physical exercise are unproven measures
- Physicians should stop or reduce any constipating medication the patient may be taking and treat depression and hypothyroidism
- Pharmacologic therapy is not advisable until general and dietary measures are exhausted
- The severity and nature of the symptoms guide further treatment

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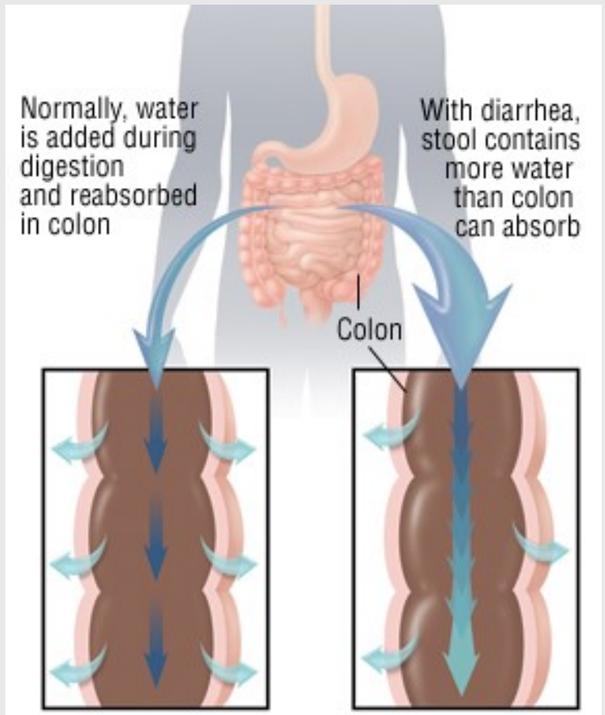
Functional bowel disorders

Functional Diarrhea

- Functional diarrhea is a continuous or recurrent syndrome characterized by the passage of loose or watery stools without abdominal pain or discomfort
- Few studies in which functional diarrhea was specifically diagnosed as distinct from IBS-D, so it is impossible to provide a precise frequency
- Although a common reason for consulting a gastroenterologist, diarrhea was a presenting complaint of 2% of general practice patients
- Diagnostic Criterion* for Functional Diarrhea
  - Loose (mushy) or watery stools without pain occurring in at least 75% of stools

Criterion fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis



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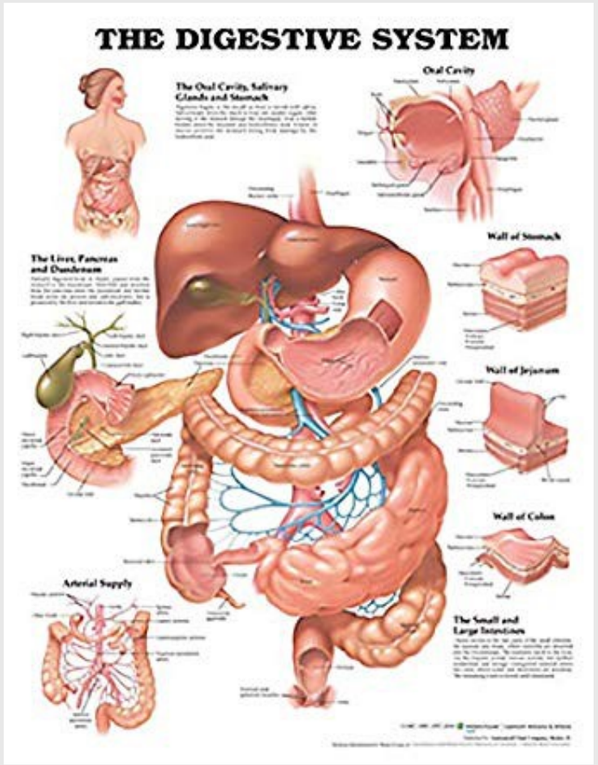
Functional bowel disorders

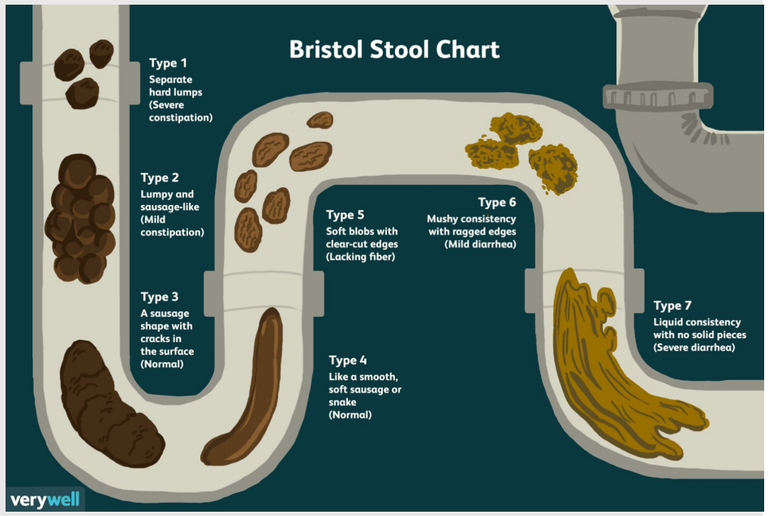
<u>Clinical Evaluation</u>

- The combination of abdominal pain with intermittent diarrhea and constipation is highly suggestive of IBS
- Small-volume, frequent defecation is likely functional
- Pseudodiarrhea (frequent defecation and urgency with solid stools) is not diarrhea.
- A stool diary incorporating the Bristol Stool Form Scale is a useful method to verify stool form
- Dietary history can disclose poorly absorbed carbohydrate intake, such as lactose by patients with hypolactasia, or “sugar-free” products containing fructose,sorbitol, or mannitol
- Alcohol can cause diarrhea by impairing sodium and water absorption from the small bowel.



Functional bowel disorders

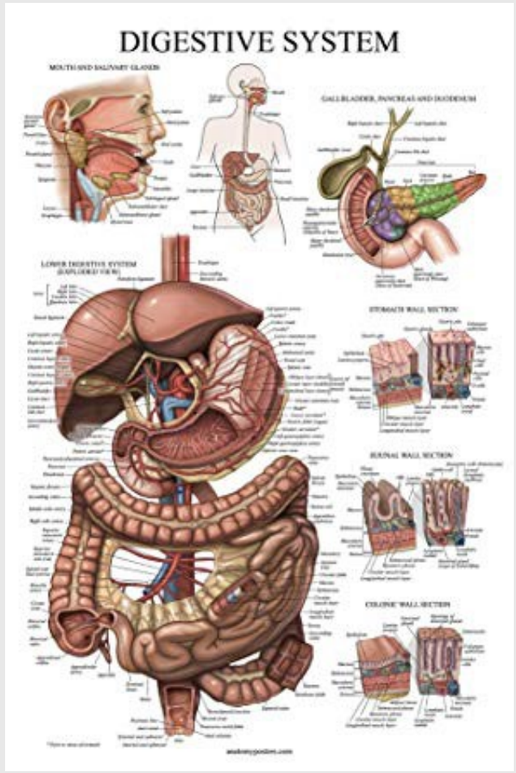
- Physical examination should seek signs of anemia or malnutrition. An abdominal mass suggests Crohn’s disease in the young patient and cancer in the elderly patient.
- Rectal examination, colon endoscopy, and biopsy can exclude villous adenoma, microscopic colitis, and inflammatory bowel disease.
- Abnormal results of blood or stool tests or other alarm features necessitate further tests.
- Features of malabsorption (malnutrition, weight loss, non– blood-loss anemia,
- or electrolyte abnormalities) should provoke the appropriate antibody tests and/or duodenal biopsy for celiac disease.
- Where relevant, giardiasis and tropical sprue should be excluded



Functional bowel disorders

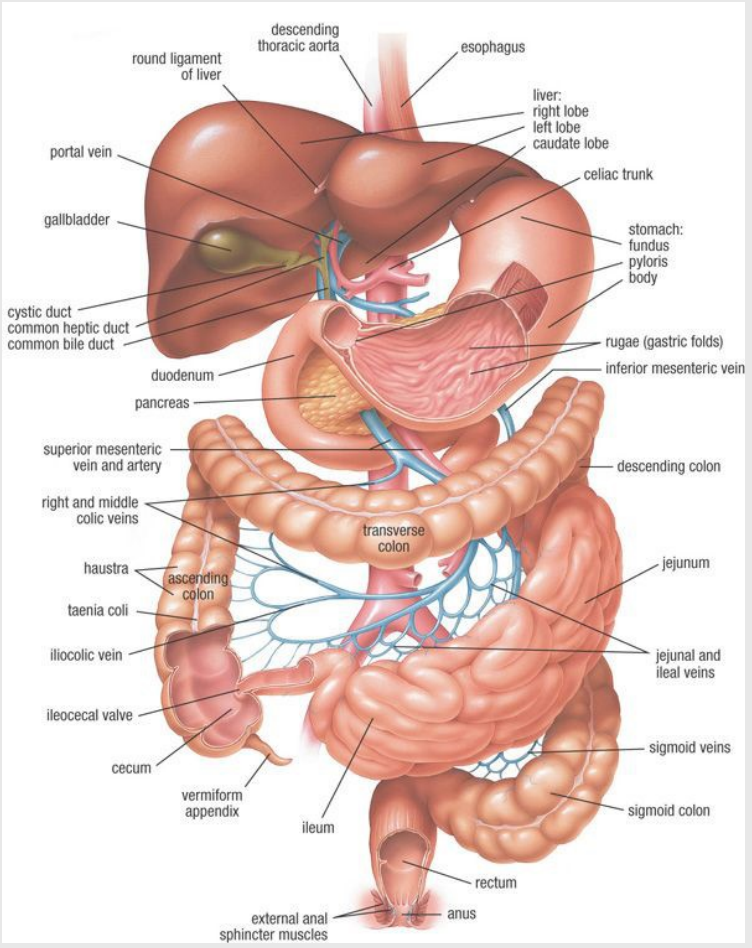
Treatment

- Discussion of possible psychosocial factors, symptom explanation, and reassurance is important
- Restriction of foods, such as those containing sorbitol or caffeine, which seem provocative, may help
- Empiric antidiarrheal therapy (eg, diphenoxylate or loperimide) is
- usually effective, especially if taken prophylactically, such as before meals or public engagements
- Alosetron slows transit and reduces the gastrocolonic response in normal volunteers and may improve diarrhea



Functional bowel disorders

- It is expensive and of limited availability only in the United States; there are no published,randomized, controlled trials in patients with functional diarrhea.
- Cholestyramine, an ion-exchange resin that binds bile acids and renders them biologically inactive, is occasionally very effective.
- The prognosis of functional diarrhea is uncertain, but it is often self-limited



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Functional bowel disorders

Unspecified Functional Bowel Disorder

- Individual symptoms discussed in the previous sections are very common in the population.
- These occasionally lead to medical consultation, yet are unaccompanied by other symptoms that satisfy criteria for a syndrome
- Such symptoms are best classified as unspecified

Diagnostic Criterion for Unspecified Functional Bowel Disorder

- Bowel symptoms not attributable to an organic etiology that do not meet criteria for the previously defined categories

Criterion fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis


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Thank you
for your
attention!