

Irritable Bowel Syndrome

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Irritable Bowel Syndrome

- Symptom complex
 - Abdominal pain
 - Altered bowel movements
 - Constipation and diarrhea
 - Abdominal bloating
- Prevalence
 - 14 percent to 24 percent in women
 - 5 percent to 19 percent in men

Irritable Bowel Syndrome

- Ages
 - Adolescence to old age
 - Most commonly between age 30 and 50 years
- Pathophysiology
 - Cause is unknown
 - Symptoms related to abnormal intestinal motility and exaggerated perception of visceral stimuli
 - Abnormal visceral sensitivity has been seen

Irritable Bowel Syndrome

- Diarrhea-predominant (IBS-D)
 - More fast and painful colonic contractions
 - Greater than 25% of syndrome-related stools are diarrheal
 - Abnormal visceral sensitivity
- Psychological factors alter its course and intensity

Irritable Bowel Syndrome

- Constipation Predominant (IBS-C)
 - Greater than 25% of syndrome-related stools constipated
- Mixed Bowel Habits (IBS-M)
 - Greater than 25% each of syndrome-related stools are either constipated or diarrheal

Irritable Bowel Syndrome

- Symptoms
 - Abdominal pain
 - Constipation
 - Diarrhea
 - Bloating
 - Distention

Irritable Bowel Syndrome

- Abdominal pain
 - Must differentiate amongst medical and surgical problems, especially with recent onset
- Constipation
 - Often alternates with diarrhea
 - May be a medication effect, hypothyroidism, colon cancer, or diverticulitis

Irritable Bowel Syndrome

- Diarrhea
 - Usually long-term, but intermittent basis
 - May indicate IBD
 - Constitutional symptoms
 - Malabsorption
 - Blood in stool
 - Diarrhea that awakens the patient

Irritable Bowel Syndrome

- Bloating
 - Reported by 25% of healthy people
 - Frequently accompanies constipation
 - Usually occurs after meals
 - More common in women and can be part of PMS
 - Cause is unknown, but underlying pathology is not usually serious

Irritable Bowel Syndrome

- Diagnostic Criteria (Manning, 1978)
 - Abdominal distention
 - Relief of pain with bowel movement
 - More frequent stools with onset of pain
 - Looser stools with onset of pain
 - Passage of mucus
 - Sense of incomplete emptying after bowel movement

Irritable Bowel Syndrome

- Rome Criteria
 - 3 months or more of recurrent or continuous symptoms (abdominal pain that is relieved with bowel movements associated with change in stool frequency or change in consistency of stool) AND
 - Two or more of the following, at least 25 percent of the time: altered stool frequency or form, passage of mucus, bloating or distention

Rome IV Criteria

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

Irritable Bowel Syndrome

- Other Functional Bowel Diagnoses
 - Reflux hypersensitivity syndrome
 - Cannabinoid hyperemesis syndrome
 - Opioid-induced constipation
 - Narcotic bowel syndrome

Irritable Bowel Syndrome

- Red Flags
 - Hematochezia
 - Weight loss
 - Nocturnal symptoms
 - Recent antibiotic use
 - Family history of colon cancer (5-10% increased risk)
 - Pertinent abnormal physical examination

Irritable Bowel Syndrome

- Evaluation
 - Look for red flags
 - See if symptoms meet the Rome criteria
 - Laboratory: CBC, FOBT, ESR
 - Microbiological stool studies if indicated
 - Colonoscopy or imaging tests based on patient's age, intensity of symptoms, patient's expectations
 - Avoid excessive testing, when dx is certain

Irritable Bowel Syndrome

- Treatment
 - Educate the patient
 - Acknowledge the symptoms are real
 - Representing an exaggerated response to stimuli such as stress, food, and/or medicines
 - Address psychological issues
 - Maintain good communication
 - (e.g. new symptoms may signify red flags)

Irritable Bowel Syndrome

- Treatment
 - Avoid offending foods
 - Increased dietary fiber
 - Use medications targeted at individual symptoms
 - May refer for manometry, small bowel evaluation, or pelvic floor function testing
 - Placebo causes response of 30-80%

Irritable Bowel Syndrome

- Avoidance of Offending Foods
 - Diet and symptom diaries may identify offending foods or ingredients
 - Diet restrictions should not be excessive
 - With diarrhea-predominant, consider intolerance of fructose, sorbitol, or lactose
 - With pain and bloating predominant, have them avoid gas-forming foods (FODMAP)

Irritable Bowel Syndrome

- Dietary Fiber
 - Constipation-predominant may require up to 30 grams per day
 - Whole-grain breads, cereals, fruits, vegetables
 - Medicinal fiber supplements
 - Emphasize exercise and hydration in the treatment of constipation

Irritable Bowel Syndrome

- Medications for Abdominal Pain
 - Anticholinergic, antispasmodic drugs
 - Dicyclomine (Bentyl), L-hyoscyamine (Levsin)
 - Inhibit bowel contractility directly
 - Work well for postprandial exacerbations
 - Lose effect with long-term use
 - Avoid combinations with barbiturates (Donnatal) or benzodiazepines (Librax)

Irritable Bowel Syndrome

- Medications for Constipation
 - Increase dietary fiber, and use psyllium one to three times per day as a supplement
 - Decreases intestinal transit time
 - Decreases colonic pressure
 - Linzess (linaclotide) guanylate cyclase-C agonist—Increased fluid secretion-less pain
 - Amitiza (lubiprostone) chloride channel activator—increased intestinal fluid secretion without altering serum lytes

Irritable Bowel Syndrome

- Medications for Diarrhea
 - Imodium (loperamide), brief, temporary use
 - Lomotil (diphenoxylate), can be addictive
 - TCAs
 - Verapamil
 - Effective second line treatment
 - Lotronex (alosetron) 5-HT₃ receptor antagonist
 - Limited availability (ischemic colitis)

Irritable Bowel Syndrome

- Medications for Diarrhea
 - Viberzi (eluxadoline) mu opioid receptor agonist (C IV)—reduces intestinal fluid and increases rectal tone
 - Rifaxan (rifaximin) semisynthetic, non-systemic antibiotic (derived from rifamycin)—resets the intestinal microbiota, reduces bacterial growth and inflammatory reaction to bacterial products

Irritable Bowel Syndrome

- Medications for Depression
 - Used as an adjunct to symptomatic therapies
 - SSRIs may cause diarrhea
 - Okay for constipation predominant
 - TCAs may cause constipation
 - Okay for diarrhea predominant
 - Amitriptyline, nortriptyline, imipramine, doxepin are TCAs with anticholinergic activity

Irritable Bowel Syndrome

- Prognosis
 - Generally good
 - Follow-up studies have shown no decrease in survival in IBS patients
 - A good patient–physician relationship yields fewer return visits

Irritable Bowel Syndrome Quiz

- Of the medications listed, which is the best choice for a patient with irritable bowel syndrome whose predominant symptom is diarrhea?
 - Codeine
 - Diphenoxylate
 - Verapamil
 - Sertraline

Irritable Bowel Syndrome Quiz

- Which of the following statements is true regarding irritable bowel syndrome?
 - Individuals aged 14 to 29 years are most commonly affected
 - Manometric readings do not correspond to patient's symptoms
 - Three times as many women as men are affected
 - Altered visceral sensitivity of the small and large bowel has been documented
 - Diarrhea that awakens the patient from sleep is common