

PHC

432 Handouts

5

Approach to a patient with abdominal pain and changes in bowel movement



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COLOR GUID: Doctor's Notes Team Notes Slides Not important Important 431 team work

Objectives

1. Changes in bowel movement
2. Definition and Focus on IBS and Rome criteria
3. Diagnosis including alarm symptoms
4. Management and follow up
5. When to refer to specialist
6. Practical: Examination of Abdomen, How to do?

Abdominal Pain and Change in Bowel Movement

bowel movement (BM):

A 61-year-old African American female (AAF) was admitted to the hospital with a chief complaint (CC) of bilateral (B) knee pain for 2 weeks. She was diagnosed with severe osteoarthritis (OA) and opioid pain medications were started. The patient's **last bowel movement (BM)** was one week prior to admission and she did not have any BM after that despite multiple laxatives. She also admitted to feeling depressed.

What is a bowel movement?

it is the last stop in the movement of food through your digestive tract.

Bowel movements are the end result of your body taking the nutrients it needs from the food you eat and eliminating what's left.

What Are Changes in Bowel Habits?

Bowel habits can **vary** from person to person. This includes how often you have a bowel movement, your control over when you have a bowel movement, and the bowel movement's consistency and color.

Alterations in any aspect of these habits over the course of a day represent a change in bowel habits.

While some bowel movement changes can represent **temporary** infections, others may indicate greater cause for concern.

What Are the Types of Bowel Habit Changes?

color

consistency

Frequency?

(change from what is **typical for you**, pay attention)

1-DIARRHEA

Acute

Bacterial Causes of Diarrhea

Viral Causes of Diarrhea

Chronic Diarrhea

medication

food intolerance

CONSTIPATION

Blockages in the colon or rectum

- Anal fissure
- Bowel obstruction
- Colon cancer
- Narrowing of the colon (bowel stricture)
- Other abdominal cancer that presses on the colon
- Rectal cancer
- Rectocele

chronic:

IBS

IBD inflammatory bowel disease

Diabetes

Hyperthyroidism

Addison's Disease

Chronic pancreatitis

colon cancer

Problems with the **nerves** around the colon and rectum

- Autonomic neuropathy
- Multiple sclerosis
- Parkinson's disease
- Spinal cord injury
- Stroke

Difficulty with the **muscles** involved in elimination

1. Inability to relax the pelvic muscles to allow for a bowel movement (anismus)
2. Pelvic muscles don't coordinate relaxation and contraction correctly (dyssynergia)
3. Weakened pelvic muscles

Conditions that affect **hormones** in the body

1. Diabetes
2. Overactive parathyroid gland (hyperparathyroidism)
3. Pregnancy
4. Underactive thyroid (hypothyroidism)

◆ **Irritable bowel syndrome (IBS)**

Chronic functional disorder of the gastrointestinal tract characterized by chronic abdominal pain and altered bowel habits in the absence of an organic disease.

◆ **Rome criteria**

- recurrent abdominal pain or discomfort at least three days per month in the last three months with two or more of the following:
- Relieved with defecation; and/or
- Onset associated with a change in frequency of stool; and/or
- Onset associated with a change in form (appearance) of stool.

◆ **Etiology of IBS**

- The cause of IBS is unknown

◆ **IBS triggers**

- **Foods** chocolate, spices, fats, fruits, milk and alcohol.
- **Stress**
- **Hormones**

- **Other illnesses:** gastroenteritis

◆ **Risk factors**

- **Young**
- **Female**
- **family history of IBS**
- **mental health problem**

◆ **Subtypes of IBS**

- **IBS with constipation (IBS-C)**
- **IBS with diarrhea (IBS-D)**
- **Mixed IBS (IBS-M)**

◆ **Red flags**

- Rectal bleeding
- Significant weight loss
- Unexplained iron deficiency anemia
- Nocturnal symptoms
- Family history of selected organic diseases including colorectal cancer, inflammatory bowel disease, or celiac sprue
- Onset of Symptoms after Age 50

Refer the patient for more investigation

◆ **Complications**

- Diarrhea and constipation, both signs of irritable bowel syndrome, can aggravate hemorrhoids
- Malnourishment.

5. **Abdominal Examination in IBS:**

Abdomen may be:

- Swollen if you have **gas** in the intestines.
- Tender.
- Bowel sounds may be heard, especially, but not only, if you have **diarrhea**.

*** Diagnosis:**

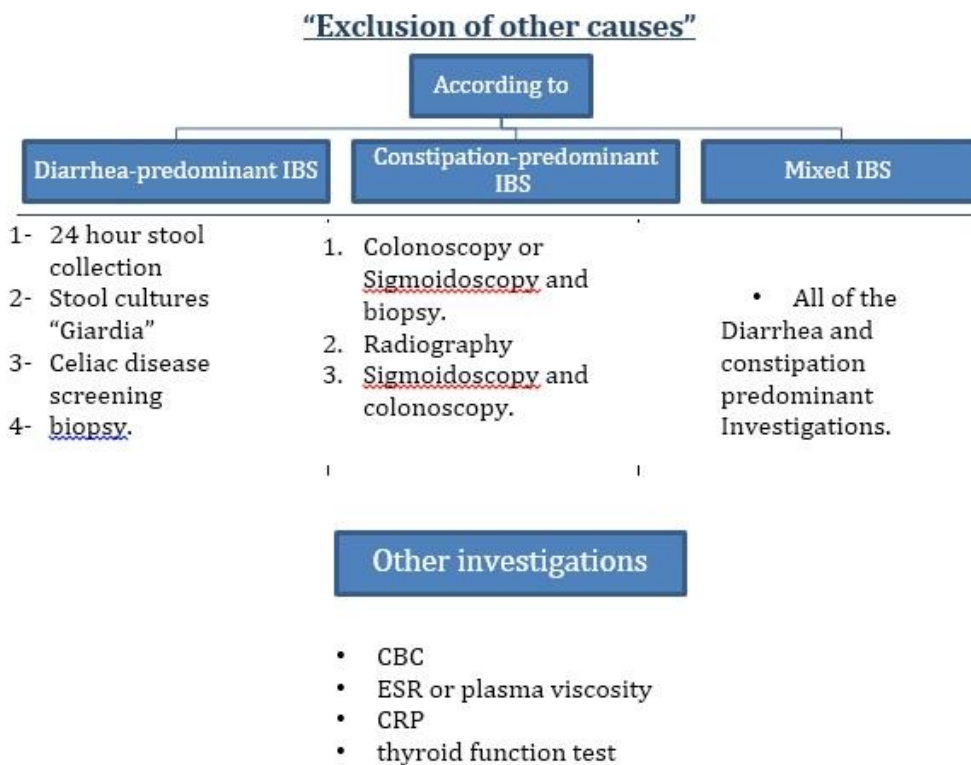
NICE guideline:

1- Possible symptoms of IBS

2- Initial diagnosis of IBS “Rome criteria”

3- Confirming the diagnosis **“exclusion of other causes”**

4- Management.



Management of IBS :

The main goal of treatment is to decrease the severity of the symptoms and improve quality of life.

- **Non pharmacological**
 1. Patient education:
 - People with IBS should be given information about the importance of lifestyle and dietary modifications in effectively managing their IBS.
 - Healthcare professionals should encourage people with IBS to create relaxation time and to avoid stressful situations.
 2. b. Physical activity: Give people with low activity levels brief advice and counseling to increase their activity.
 3. . Dietary modification:
 - Have regular meals and take time to eat. Avoid missing meals or leaving long gaps between eating.
 - Drink at least eight cups of fluid per day, especially water.
 - Reduce intake of alcohol and soft drinks.
 - Possible precipitating substances, such as caffeine, lactose, or fructose, may need to be eliminated from the diet. Symptom monitoring can be helpful to identify precipitating substances and factors.

- **First-line pharmacological treatment**

Choose single or combination medication based on the predominant symptom(s):

- Consider offering antispasmodic agents (Mebeverine).
- Consider offering laxatives for constipation.
- Offer loperamide as the first choice of antimotility agent for diarrhea.

- **. Second-line pharmacological treatment**

Tricyclic antidepressant (TCAs) and Selective serotonin re-uptake inhibitors (SSRIs)

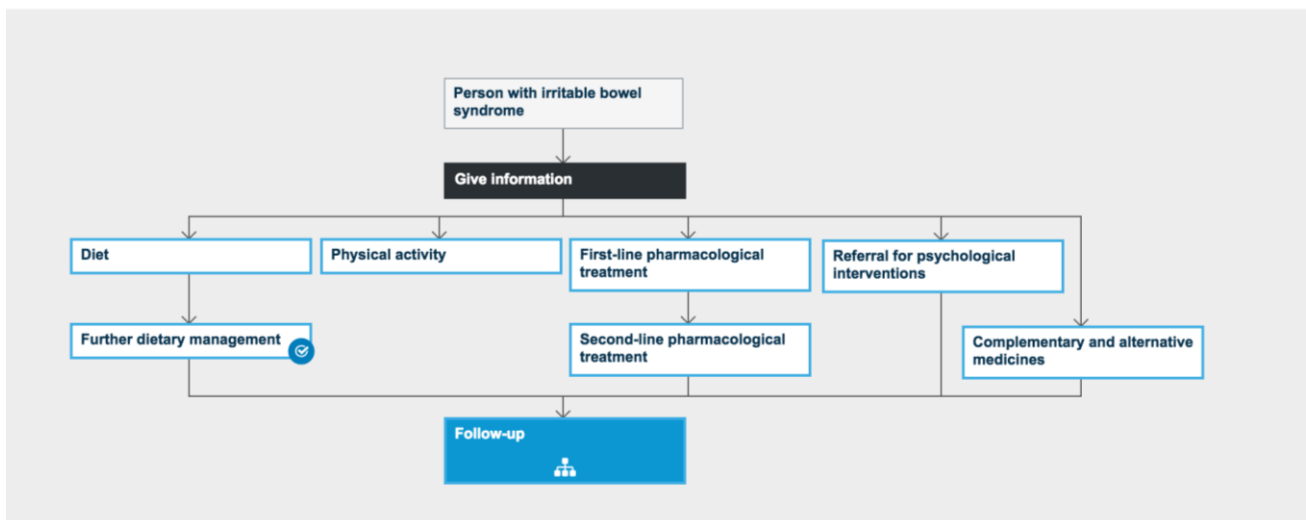
- **4. Psychological Interventions**

Should be considered for people with IBS who do not respond to pharmacological treatments after 12 months:

- a. Cognitive behavioral therapy
- b. Hypnotherapy

- **Follow-up:**

- Follow-up should be agreed based on the response of the patient's symptoms to interventions. The emergence of any 'red flag' symptoms



Crohn's disease:

- ❖ is a disorder of uncertain etiology that is characterized by transmural, granulomatous inflammation of the gastrointestinal tract. CD may involve the entire gastrointestinal tract from mouth to the perianal area
- ❖ people are more frequently diagnosed between the ages of 20 and 40.

most common sites:

- -Terminal ileum and ascending colon (the commonest 50 %)
- -Terminal ileum alone 30%
- -colon alone 20 %
- -ileum and jejunum

Symptoms and signs:

- ❖ Abdominal pain and cramping , which is usually worse after eating
- ❖ diarrhoea fluctuates over a long period of time
- ❖ extreme tiredness (fatigue)
- ❖ unintended weight loss
- ❖ Fever
- ❖ Perianal disease , diagnostic and common when colon is involved .

Diagnose :

- ❖ Serologic markers ; Inflammatory marker : ESR, CRP
- ❖ Antibody tests :
 - ❖ (pANCA) > with UC
 - ❖ (ASCA) > with CD
- ❖ Barium enema of the small intestine or colon.
- ❖ Colonoscopy or flexible sigmoidoscopy **cobblestone appearance**
- ❖ Wireless capsule endoscopy
- ❖ Biopsy
- ❖ Stool analysis , this is a test to look for blood and signs of infection.

Treatment :

- ❖ the aim of treatment is to **stop the inflammatory process, relieve and avoid surgery.**
- ❖ Diet modification (avoid milks ,fiber supplement if colon involved)
- ❖ The first treatment offered to reduce symptoms is usually steroid medication.
- ❖ If this does not help, immunosuppressive medication azathioprine ,infliximab . anti inflammatory (sulfasalazine)
- ❖ In some cases, surgery may be needed to remove the inflamed section of intestine.

2-Ulcerative colitis:

- Ulcerative colitis is characterized by recurring episodes of inflammation limited to the **mucosal layer of the colon**. It commonly involves the **rectum**. it may extend in a proximal and continuous fashion to involve other parts of the colon.

1- Symptoms:

- diarrhea, which may be associated with **blood**.
- colicky abdominal pain, urgency, tenesmus, and incontinence
- Systemic symptoms: fever, fatigue, weight loss, dyspnea and palpitations due to **anemia**.
- No perianal abscess.

2- Investigations:

- CBC
- **Stool culture to exclude infective causes.**
- Sigmoidoscopy and Colonoscopy
- **pANCA**

3- Management:

- Medical treatment
- If it fail then Surgical :

Proctocolectomy with ileostomy. **“curable”**

4- Complications:

- Fibrous stricture of rectum or colon.
- Colon perforation.
- Toxic dilation of the colon.
- Cancer.

3- Celiac Disease:

- Celiac disease can be defined as a small bowel disorder characterized by **mucosal inflammation, villous atrophy, and crypt hyperplasia**, which occur upon exposure to dietary gluten and which demonstrate improvement after withdrawal of gluten from the diet.

1- Symptoms:

- Diarrhea
- weight loss
- Anemia
- Vitamins deficiency
- Hypoproteinemia

2- investigations:

- Antigliadin antibodies

IgA, IgG

- Endoscopic mucosal biopsy

Distal duodenum, proximal jejunum.

3- Management:

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- Gluten free diet.
 - Vitamins supplements.

4- Lactose intolerance:

- Lactose intolerance is a clinical syndrome in which lactose ingestion causes symptoms due to **lactose malabsorption**.
- **1- Symptoms:**
 - abdominal pain
 - Bloating
 - Flatulence
 - Diarrhea
- **2- Investigations:**
 - Lactose breath hydrogen test
 - Lactose tolerance test
- **3- Management:**
 - Dietary lactose restriction
 - Lactase enzyme preparations
 - Vitamins supplements.

Colorectal cancer

It's the cancer of the colon and the rectum

Screening:

Normal person: after turning 50

Before 50 if:

Family history of colorectal polyps or colorectal cancer.

You have [Inflammatory bowel disease](#), Crohn's disease, or ulcerative colitis.

Risk factor :

Older age

A personal history of colorectal cancer or polyps

ulcerative colitis and Crohn's disease

Family history of colon cancer

Low-fiber, high-fat diet

Diabetes

Obesity

Smoking

Alcohol

Radiation therapy for cancer

Sign & symptoms:

- A change in your bowel habits, including diarrhea or constipation or a change in the consistency of your stool, that lasts longer than four weeks

- Rectal bleeding or blood in your stool

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- Persistent abdominal discomfort, such as cramps, gas or pain
 - A feeling that your bowel doesn't empty completely
 - Weakness or fatigue
 - Unexplained weight loss

Management:

Depends on the stage , if :

1- cancer localized to mucosa, submucosa and muscularis >>> surgery

2- spread into the surrounding tissue and lymph node >>> chemotherapy (5-flurouracil)

Summary

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Management of IBS :

Non pharmacological

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2. b. Physical activity:
3. . Dietary modification:

First-line pharmacological treatment

- Consider offering antispasmodic agents (Mebeverine).
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Questions

1. Which one of the following is the most common site affected by crohn's disease:
 - a) Terminal ileum and ascending colon
 - b) Colon alone
 - c) Ileum and jejunum
 - d) Terminal ileum alone
2. Which one of the following is not a symptom of UC:
 - a) diarrhea
 - b) abdominal pain
 - c) tenesmus
 - d) perianal abscess
3. All the following may predispose to colorectal cancer EXCEPT
 - a) Familial adenomatous polyposis
 - b) High fiber, high fat diets
 - c) Ulcerative colitis
 - d) Exposure to irradiation
4. A 27-year-old graduate student in psychology is evaluated for intermittent abdominal pain. She is diagnosed with irritable bowel syndrome. She asks whether there is a relationship between psychiatric disorders and IBS. Which of the following statements is most accurate?
 - a) IBS is usually caused by the underlying psychiatric disorder.
 - b) Psychiatric conditions may worsen coexisting IBS.
 - c) Successfully treating the psychiatric comorbidity causes remission of IBS.
 - d) No evidence supports a relationship between IBS and psychiatric disorders.

Answers:

1st Question: A

2nd Question: D

3rd Question: B

4th Question: B