



PRIMARY HEALTHCARE TEAMWORK

Changes In Bowel Habits

Objectives:

- ★ Define constipation and diarrhea
- ★ Discuss the definition, etiology and classification of irritable bowel syndrome (IBS)
- ★ Explain how to diagnose IBS
- ★ List the alarm symptoms and differential diagnosis
- ★ Provide a comprehensive management plan and follow up for patients with IBS
- ★ Recognize when to refer to specialist
- ★ Demonstrate history taking and physical examination for patients presented with history suggestive of IBS

Color index:

Original text **Important** Doctor's notes **Golden notes** Extra

Introduction

Bowel Movements

- Normal bowel movement is between **3** times a **day** to **3** times a **week**.
- Problems arise when bowel movements frequency decreases or increases.

Bowel Movements Disorders:

Constipation

Fewer than **three** bowel movements in a **week**, and stools are hard, dry, and small, making them painful and difficult to pass.

Diarrhea

Passage of **three or more loose or liquid** stools per day (or more frequent passage than is normal for the individual).

Irritable Bowel Syndrome (IBS)

- Defined as **chronic or recurrent abdominal pain** (Usually intermittent left lower colicky pain), **altered bowel habits, and bloating**, with the **absence** of structural or biochemical abnormalities.
- Known as functional gastrointestinal disorders (FGIDs).
- People with IBS present most commonly with diarrhea predominant or constipation predominant.
- IBS most often affects people **between the ages of 20-30 years** and is **twice as common in women as in men**.
 - When you see it at extreme of age you begin to worry (>50 y/o).
- Prevalence in the general population is estimated to be between 10- 20% and the incidence of irritable bowel syndrome at 1-2% per year.
- One of the top 10 reasons for visits to primary care physicians.
- Increased prevalence among students.
- Infection with **giardia lamblia** has been shown to be associated with an increased prevalence of IBS (association not causative)
- Two thirds of patients with IBS have psychological disorders.

IBS Classification

Etiology Of IBS

- **The causes of irritable bowel syndrome remain poorly defined.**
- **Possible etiologies for IBS include:**
 - Stress and anxiety, *some patients may improve after SSRIs.*
 - Visceral hypersensitivity.
 - Gastrointestinal infections.
 - Neurohormonal stress response.
 - Food sensitivity.
 - Psychological disorders.



Classification of IBS

1

IBS-C

IBS with Constipation: Hard or lumpy stools for $\geq 25\%$ of bowel movements and loose (mushy) or watery stools for $\leq 25\%$ of bowel movements.

2

IBS-D

IBS with Diarrhoea: Loose (mushy) or watery stools for $\geq 25\%$ of bowel movements and hard or lumpy stool for $\leq 25\%$ of bowel movements.

3

IBS-M (Difficult to manage)

Mixed IBS: Hard or lumpy stools for $\leq 25\%$ of bowel movements and loose (mushy) or watery stools for $\leq 25\%$ of bowel movements.

4

Unspecified (IBS-U)

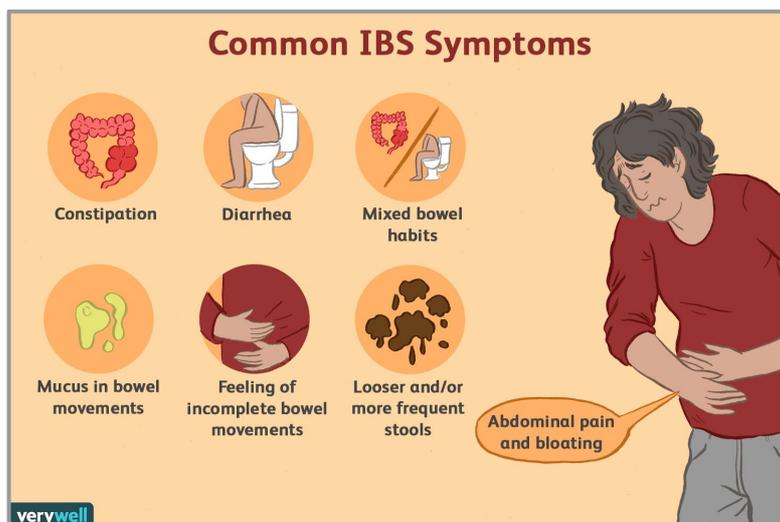
Unspecified IBS: Insufficient abnormality of stool consistency to meet criteria for above subtypes.

Diagnosis

How To Diagnose IBS?

- **Two acceptable criteria:**

<p>1. Rome IV criteria (2016)</p>	<ol style="list-style-type: none"> 1. Recurrent abdominal pain, on average, at least 1 day/week in the last 3 months, associated with two or more of the following criteria: <ul style="list-style-type: none"> ○ Related to defecation. ○ Associated with a change in frequency of stool. ○ Associated with a change in form (appearance) of stool. 2. Criteria fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis. 3. Also the patients shouldn't have any warning signs and symptoms. <ul style="list-style-type: none"> ● Other supporting symptoms for diagnosing IBS: <ul style="list-style-type: none"> ○ Mucus in stool (Mucorrhea). ○ Abdominal bloating or subjective distention. ○ IBS can be associated with depression and anxiety.
<p>2. NICE Guideline (2017)</p>	<ol style="list-style-type: none"> 1. Abdominal pain or discomfort for at least 6 months that is either: <ul style="list-style-type: none"> ○ Relieved by defecation. ○ Associated with altered bowel habit (frequency or stool form). 2. This should be accompanied by at least 2 of the following 4 symptoms: <ul style="list-style-type: none"> ○ Altered stool passage (straining, urgency, incomplete evacuation). ○ Abdominal bloating, distension, tension or hardness. ○ Symptoms made worse by eating . ○ Specific foods passage of mucus. ● Exclude alarm symptoms (red flags): <ul style="list-style-type: none"> ○ All people presenting with possible IBS symptoms should be assessed and clinically examined for red flag indicators and should be referred to secondary care for further investigation if any are present.



Investigation

What Are The Warning Signs?

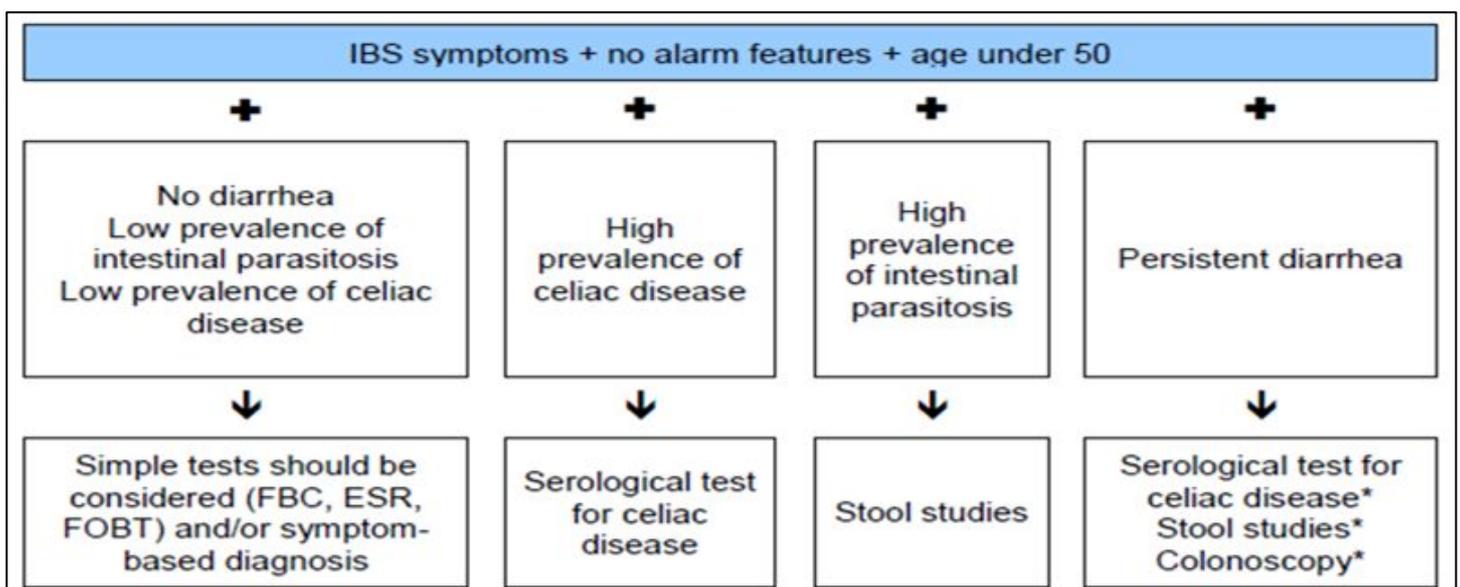


- Patient has **none** of the following warning signs :
 - Age \geq 50 yr, no previous colon cancer screening and presence of symptoms.
 - Recent change in bowel habit.
 - Evidence of overt GI bleeding. (i.e., melena or hematochezia)
 - Nocturnal pain or passage of stools.
 - Unintentional weight loss
 - Family history of colorectal cancer or inflammatory bowel disease.
 - Palpable abdominal mass or lymphadenopathy.
 - Evidence of iron deficiency anemia on blood testing.
 - Positive test for fecal occult blood.

Diagnostic Tests:

- No specific tests.
- In people who meet the IBS diagnostic criteria, the following tests should be undertaken to **exclude other diagnoses**:
 - **CBC** to exclude anemia.
 - **ESR** to exclude IBD.
 - **CRP**
 - **Endomysial antibodies [EMA] and anti-tissue transglutaminase [TTG]**
 - To rule out celiac disease.

IBS Diagnostic Algorithm



Investigations & Management

Alarming Symptoms

- Anemia.
- Age >50.
- Nocturnal symptoms.
- Weight loss.
- Rectal bleeding.
- +ve FHx Colorectal CA.
- **What's your next step??**
 - You will not label the patient as IBS, rather you will investigate more.



Differential Diagnosis:

- Colorectal Cancer / Carcinoid tumor.
- Inflammatory bowel disease. (crohn's disease & Ulcerative colitis)
- Celiac disease / Lactose intolerance.
- GI infection. (Recent Antibiotic use)
- Ischemic colitis.
- Thyroid dysfunction. (Either hypo or hyper)

Management

- **Lifestyle advice:**
 - Creating a relaxation time.
 - Increase physical activity.
 - Support group would be a good way to achieve this.
- **Dietary advice:**
 - Regular timing meal.
 - High fluid intake (8 cups per day).
 - Restriction intake of caffeine, alcohol and soft drink.
 - Avoid high intake of fibers, starch and fruits (3 per day) in IBS-D.

Management

Symptoms Persist?

- **Dietary management:**
 - Include single food avoidance and exclusion diets (for example, a low FODMAP diet [fermentable oligosaccharides, disaccharides, monosaccharides and polyols])
 - Done by dietitian.
- **Pharmacological therapy:**

Constipation-predominant IBS	Diarrhea-predominant IBS
<ul style="list-style-type: none"> ● Laxative & fibers should be considered in C-IBS. ● Lactulose to be avoided. <ul style="list-style-type: none"> ○ It is worsening the condition by ↑ pain. ● Consider linaclotide for people with IBS only if: <ul style="list-style-type: none"> ● Optimal or maximum tolerated doses of previous laxatives from different classes have not helped and they have had constipation for at least 12 months. ● Follow up people taking linaclotide after 3 months. 	<ul style="list-style-type: none"> ● Loperamide (antimotility) should be the first choice.
<ul style="list-style-type: none"> ● Others: <ul style="list-style-type: none"> ○ Antispasmodic agents taken when required. e.g. mebeverine ○ Consider TCA as second-line treatment. In refractory cases e.g. amitriptyline <ul style="list-style-type: none"> ■ Switch to SSRI if not effective. ○ Probiotics should be advised to take the product for at least 4 weeks while monitoring the effect. (Safe medication but there is no strong evidence) ○ Follow up is required due to possible side effect. 	
<ul style="list-style-type: none"> ● People with IBS should be advised how to adjust their doses of laxative or antimotility agent according to the clinical response. ● The dose should be titrated according to stool consistency, with the aim of achieving a soft, well-formed stool. ● In practice we don't use percentages to determine the type or to treat, rather we determine based on patient's presentation. <ul style="list-style-type: none"> ○ Classification can change from IBS-C to IBS-D and vice versa. ● We treat the symptoms that the patient presented with if: <ul style="list-style-type: none"> ○ ↑ Pain give mebeverine. <ul style="list-style-type: none"> ■ Not responding give amitriptyline. ○ ↑ Gases give disflatyl. ○ Mixed treat based on the current presentation / complaint. 	

Management

No Effect?

- Do not respond to pharmacological treatments **after 12 months** and who develop a continuing symptom profile (described as refractory IBS).

Psychological Intervention:

- Cognitive behavioural therapy [CBT].
- **Complementary and alternative medicine (CAM)??**
 - Healthcare professionals should discourage the use of aloe vera in the treatment of IBS.
 - Reflexology and acupuncture should not be encouraged for the treatment of IBS.

Follow Up

- Why it's important?
 1. Some patients think that there is bad consequences to IBS. Its a benign condition.
 2. Because IBS type may change and the management change due to that.
 3. You give reassurance to the patient.



Lecture Quiz

Q1) Which of the following is not recognized as a symptom that supports the diagnosis of IBS according to the Rome criteria?

- A. Altered stool frequency
- B. Mucorrhea
- C. Abdominal bloating or distention
- D. Frequent nausea

Q2) IBS is categorized into How many types?

- A. 3
- B. 4
- C. 5
- D. 6

Q3) Which of the following is an alarming feature in patient complaining of abdominal pain?

- A. Constipation
- B. Age > 45
- C. Anaemia
- D. Nausea

Q4) A 28 years old female has IBS for 4 years but recently she is having frequent diarrhea what is the best treatment?

- A. Linaclotide
- B. Lactulose
- C. Loperamide
- D. Castor oil

Q5) Male patient diagnosed with IBS he is working in stressful job which one of the drugs best prescribed with him?

- A. SSRI.
- B. Beta blocker
- C. Laxatives
- D. Loperamide

THANKS!!

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*Send us your feedback:
We are all ears!*