

PHC

432 Team

19 Change in bowel movement



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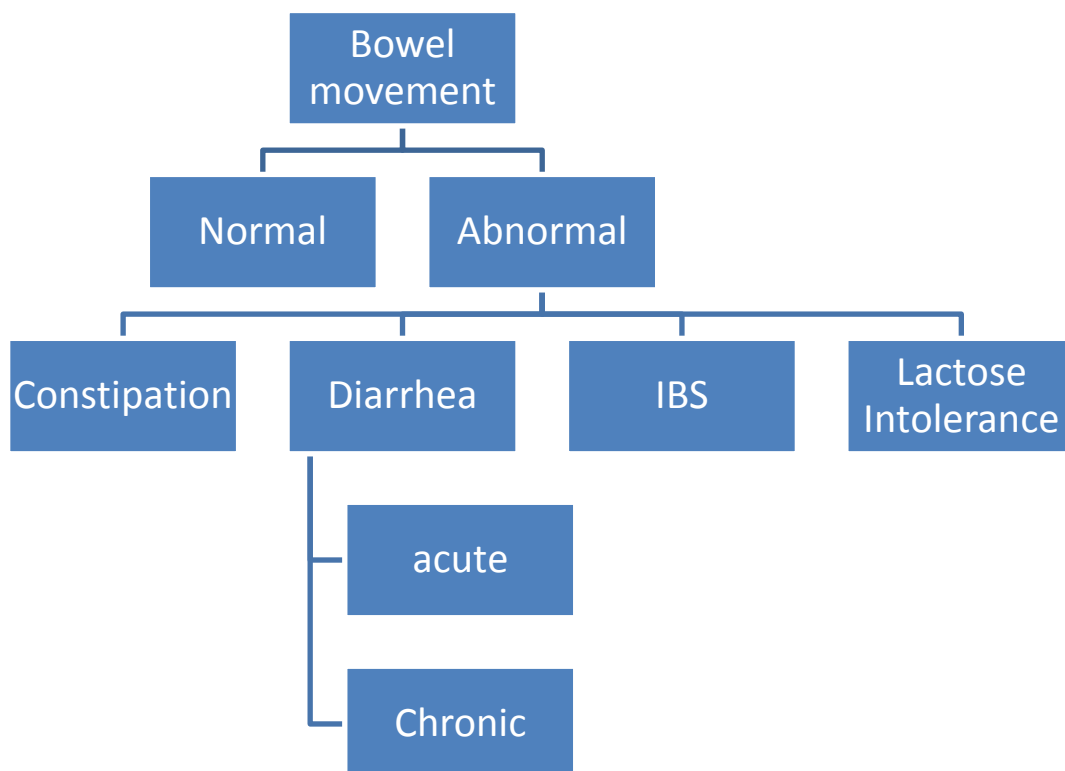
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Objectives

1. Definition
2. 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

Mind Map



Change in bowel movement

Normal bowel movement

Definition:

Body wastes passed through the rectum and anus. Normally: consist of **brown stools, not too hard, not too loose.**

Frequency of bowel movements:

There is **no rule** for frequency of bowel movements, but the general range is from **3 times a day to 3 times a week.** "each person has his own pattern.

Abnormal bowel movement (Constipation & Diarrhea)

1. Constipation

a. Definition:

- 1-Infrequent bowel movements (**less than three times per week**)
- 2-Defecation (straining and a sensation of hard stools that are **difficult or painful to pass**)

b. Causes:

- Insufficient dietary fiber intake or a diet high in fats.
- Inadequate fluid intake or dehydration.
- Decreased physical activity.
- Side effects of medications :
 1. Pain medications (**especially narcotics**)
 2. Blood pressure medications (**calcium channel blockers**)

c. Alarm symptoms (Red flags)



Especially in patients **over the age of 50**:

1. Anemia.
2. Weight loss.
3. Rectal bleeding.
4. Positive occult blood test.
5. Recommended test: **colonoscopy**.

d. Management:

- 1) **Treat the cause** (Hypothyroidism, drug side effect)
- 2) Lifestyle and diet changes (Patient Education):
 - Increase intake of water and fibers in diet
 - Exercise is recommended for better overall health
- 3) Consider drugs only if above measures fail (**laxatives**)

e. When to refer to specialist?

- Constipation which last for **three weeks or more**.
- **Never been constipated before**, especially 50 years and above.
- **Severe** abdominal pain.
- Noticed **blood in stool**
- Unintentional **weight loss**.



2. Diarrhea

a) Definition:

- 1) **Osmotic diarrhea:** means that something in the bowel is **drawing** water from the body into the bowel, such as excessive sugar or excessive salt. (**ex: in malabsorption**).
- 2) **Secretory diarrhea:** occurs when the body is releasing water into the bowel when it's not supposed to or if there is an inhibition of absorption. (**ex: bacterial toxin: cholera & E. coli**).
- 3) **Exudative diarrhea:** refers to the presence of **blood and pus** in the stool. This occurs with **inflammatory bowel diseases**



b) Alarming symptoms (Red flags):

- Rectal bleeding.
- Nocturnal or progressive abdominal pain.
- Weight loss.
- Laboratory abnormalities such as anemia, elevated inflammatory markers, or electrolyte disturbances.

	Acute diarrhea	Chronic diarrhea
Duration	Less than 14 days	More than 4 weeks
Causes	1-Infections Bacterial: Campylobacter Viral: Rotavirus Parasites 2-Allergies to certain food 3-Reaction to certain medications like antibiotics .	1-Irritable bowel syndrome, Inflammatory bowel disease 2-Mal-absorption syndromes 3-Chronic Infections

Irritable bowel syndrome

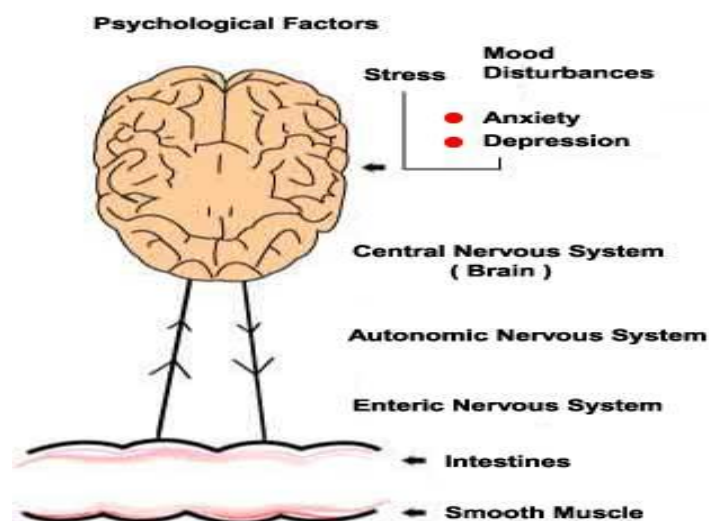
Definition:

It is a gastrointestinal **syndrome** characterized by **chronic abdominal pain** and **altered bowel habits** in the **absence of any organic causes**; it is the most commonly diagnosed gastrointestinal condition, and the point prevalence worldwide is 10-20%.

Etiology:

The causes of IBS are **not well understood**, a combination of physical and mental health problems can predispose to IBS and the possible causes of IBS include the following:

- a. Brain-gut signal problems (**thalamic activity**).
- b. **Mental** health problems (such as anxiety and depression).
- c. Gastrointestinal **infections**.



Clinical Manifestations:

1. **Chronic abdominal pain or discomfort**.
2. **Altered bowel habits** (diarrhea and constipation).
3. Abdominal **bloating or distention**.

Diagnostic Approach:

1. (NICE guidelines)

Consider assessment for IBS if the person reports having had any of the following symptoms for at least 6 months:

1. Abdominal pain or discomfort
2. Bloating
3. Change in bowel habit.

2. Rome III diagnostic criteria: (Important)

Recurrent abdominal pain or discomfort for **at least 3 days per month** in the last **3 months, plus 2** or more of the following:

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

Symptoms Support The Diagnosis:

- Altered stool passage (straining, urgency, incomplete evacuation) .
- Abdominal bloating (5 > 4), distension, tension, or hardness.
- Symptoms made worse by eating.
- Passage of mucus .
- Other commonly associated symptoms include Lethargy, nausea, backache, and bladder symptoms.

Diagnostic tests:

In people who meet the IBS diagnostic criteria, the following tests should be undertaken **to exclude other diagnoses**:

1. Complete blood count (CBC)
2. erythrocyte sedimentation rate (ESR)
3. c-reactive protein (CRP)
4. antibody testing for coeliac disease (endomysial antibodies [EMA] or tissue transglutaminase [TTG]).



Red flags:

History	Clinically
<ul style="list-style-type: none">➤ Unintentional and unexplained weight loss➤ Rectal bleeding➤ Rectal masses	<ul style="list-style-type: none">➤ Anemia➤ Abdominal masses➤ Rectal masses➤ Markers for IBD

Management:

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

1. Non pharmacological

a. 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**.

b. Physical activity:

Give people with low activity levels brief advice and counseling to **increase their activity**.

c. 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.

2. First-line pharmacological treatment

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

- a. Consider offering **antispasmodic agents** (Mebeverine, hydrochloride)
- b. Consider offering **laxatives** for constipation.
- c. Offer **loperamide** as the first choice of antimotility agent for diarrhea.

3. 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 during management and follow-up should prompt further investigation and/or referral to secondary care.

Referral to secondary care:

In case of **red flag**, when the symptoms persist and if the **diagnosis is uncertain**.

Prognosis: Patients with IBS have an **excellent prognosis** in the sense that they have a normal life expectancy, and there are no long-term complications of their disease.

Lactose Intolerance

Lactose intolerance is a common disorder and is due to the inability to digest lactose into its constituents, glucose and galactose, secondary to low levels of **lactase enzyme** in the brush border of the duodenum.

Summary

▪ **Change in bowel movement**

There is no rule for frequency of bowel movements, but the general range is from 3 times a day to 3 times a week. "each person has his own pattern".

➤ **Abnormal bowel movement (Constipation & Diarrhea)**

1. Constipation

a-Infrequent bowel movements (less than three times per week)

b-Defecation (straining and a sensation of hard stools that are difficult or painful to pass)

c- Causes: Insufficient dietary fiber intake or a diet high in fats, Inadequate fluid intake or dehydration, Decreased physical activity and Side effects of medications (especially narcotics and calcium channel blockers)

d- Recommended test: colonoscopy.

e- Management: Treat the cause ,Lifestyle and diet changes and if above measures fail(laxatives) .

2. Diarrhea

a-Frequent bowel movements (three times or more per day) loose or watery stools.

▪ **Irritable bowel syndrome**

A-Clinical Manifestations:

1. Chronic abdominal pain or discomfort.
2. Altered bowel habits (diarrhea and constipation).
- 3-Abdominal bloating or distention.

Summary

B-Diagnostic Approach:

1. (NICE guidelines)

2. Rome III diagnostic criteria: (Important)

Recurrent abdominal pain or discomfort for at least 3 days per month in the last 3 months, plus 2 or more of the following:

- 1) Improvement by defecation.
- 2) Onset associated with change in stool frequency.

C-Management:

- Non pharmacological:
 - a. Patient education.
 - b. Physical activity.
 - c. Dietary modification.
- First-line pharmacological treatment:
 - a-Antispasmodic agents (Mebeverine, hydrochloride).
 - b-Laxatives for constipation.
 - c-Loperamide for diarrhea.
- 3. Second-line pharmacological treatment:
 - a-Tricyclic antidepressant (TCAs) and Selective serotonin re-uptake inhibitors (SSRIs)
- 4. Psychological Interventions.

d-Referral to secondary care:

In case of red flag.

Questions

1) The following are typical symptoms of IBS except?

- a. Abdominal pain improves with defecation.
- b. Onset of abdominal discomfort is associated with changes in normal stool.
- c. Progressive abdominal pain.
- d. Change in frequency of stool.

2) Which one of the following is considered a red flag for a patient with IBS?

- a. Diarrhea alternating with constipation.
- b. Rectal bleeding.
- c. Who take ASPIRIN.
- d. None.

3) First choice of anti-motility agent for diarrhea in people with IBS?

- a. Loperamide
- b. Linaclotide
- c. TCA
- d. SSRI

4) For a 25 - year - old female complaining of chronic constipation for 4 months, the first line treatment is?

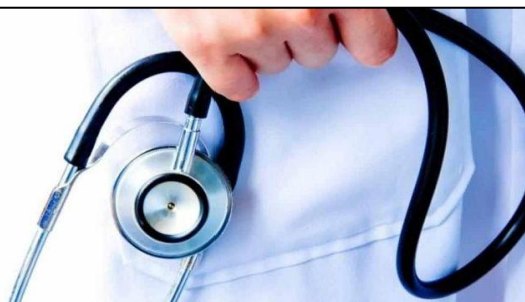
- a. Oral laxatives
- b. Refer to GI specialist
- c. Change life style and diet
- d. IV fluid administration

5) Which one of the following can cause acute diarrhea?

- a. Irritable bowel syndrome
- b. Inflammatory bowel disease
- c. Chronic infection
- d. Food poisoning

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Answers:

- 1st Questions: C
- 2nd Questions: B
- 3rd Questions: A
- 4th Questions: C
- 5th Questions: D