

# Seminar 1

## Change bowel habits

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# 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 patient presented with history suggestive of IBS. i.e Role play.
- Practical: Examination of the Abdomen, how to perform the examination?

# MCQ:

1/ Which one of the following is **not** a symptom of IBS:

A/ Diarrhea

B/ Bloating

C/ Rectal bleeding

D/ Constipation

# MCQ:

2-irritable bowel syndrome is more **common** in:

A/male

B/female

C/ male and female are equal

D/children

# MCQ:

3- 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.

# MCQ:

4) which one of the following statement for a patient with IBS considered we should refer the patient to specialist?

A/diarrhea alternating with constipation

B/rectal bleeding

C/who take ASPIRIN

D/none

# MCQ:

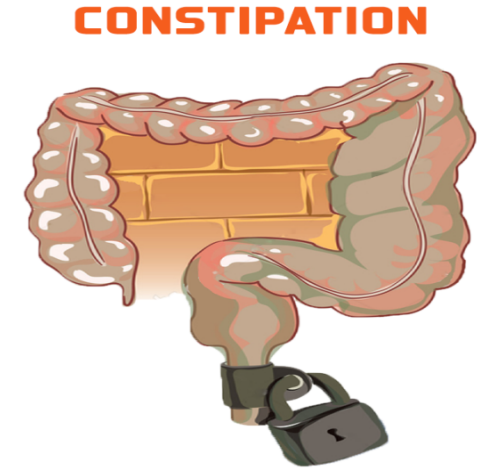
5-To diagnose IBS the symptoms has to be continuous for:

- a) 2 weeks
- b) 3 months
- c) 6 months





# Definition of constipation :



- Chronic constipation is infrequent bowel movements or difficult passage of stools that persists for several weeks or longer.
- Constipation is generally described as having fewer than three bowel movements a week.

# Causes of constipation:

1. Lack of fiber in the diet
2. Blockages in the colon or rectum: Colon cancer, Bowel obstruction,
3. Problems with the nerves around the colon and rectum: Spinal cord injury, Autonomic neuropathy
4. Difficulty with the muscles involved in elimination
5. Conditions that affect hormones in the body: Diabetes, Pregnancy, Underactive thyroid (hypothyroidism)



# Definition of diarrhea:



Diarrhea is defined as having three or more loose or liquid stools per day, or as having more stools than is normal for that person. (WHO)

There are two types :

1. **Acute diarrhea** lasts from a few days up to a week.
2. **Chronic diarrhea** can be defined in several ways, but usually lasts more than three weeks.

# Causes of diarrhea:

## **acute diarrhea**

1. infection:viral, bacterial, and parasitic
1. starting a new medication

## **chronic diarrhea**

1. Irritable bowel syndrome
2. inflammatory bowel disease (IBD)
3. Colon cancer
4. Fat malabsorption
5. Endocrine diseases:  
hyperthyroidism,addison disease

# History Taking :

1. Personal data
2. Chief complaint
3. Presenting problem :

<b>Details of presenting problem :</b>	<b>associated symptoms:</b>	<b>constitutional symptoms:</b>
(onset- duration- progression? - severity-relieving factors, exacerbating factors, frequency, amount , consistency(alternative), color, mucus or blood?, urgency?)	1- abdominal pain relieved by defecation ? 2-bloating? 3-N/V 4-dysphagia 5-Gerd 6-Anemia 7-skin changes/ ulcer 8-stones 9-eye symptoms 10-stress ?	1-Fever 2-Loss of appetite 3- weight loss 4-Night sweet

# History :

1. Past medical , surgical
2. Medication , Allergy (food allergy)
3. Social History (Diet)
4. Family History
5. Systematic review



# Differential diagnosis:

Inflammatory bowel disease	Psychiatric disorders
Medications	Malabsorption syndromes
Infections	Endocrine disorders/ tumors
Lactose intolerance	Colorectal carcinoma

# Alarm symptoms:

## History:

Unexplained weight loss

Persistent diarrhea

Severe constipation

Nocturnal symptoms

Blood in stool

New onset after age 50 years

Family history of colorectal cancer,

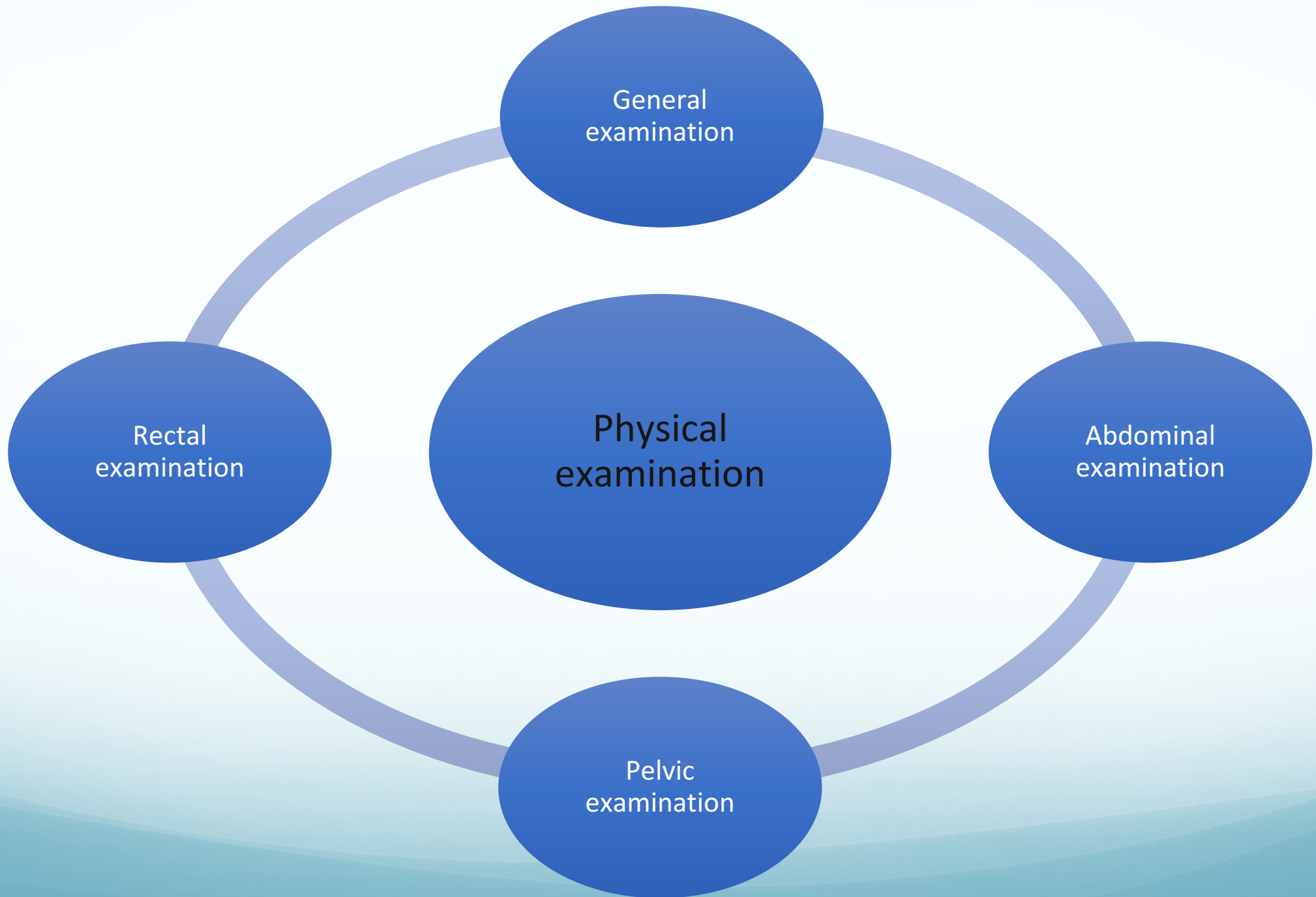
inflammatory bowel disease,

or celiac disease

Travel history to locations with endemic parasitic disease







# Alarm symptoms:



## Physical examination:

Fever

Abdominal mass

Fecal occult or overt blood on  
rectal examination

Evidence of anemia

Signs of bowel obstruction

Signs of thyroid dysfunction

Signs of malabsorption

Active arthritis

Dermatitis

## Initial laboratory tests:

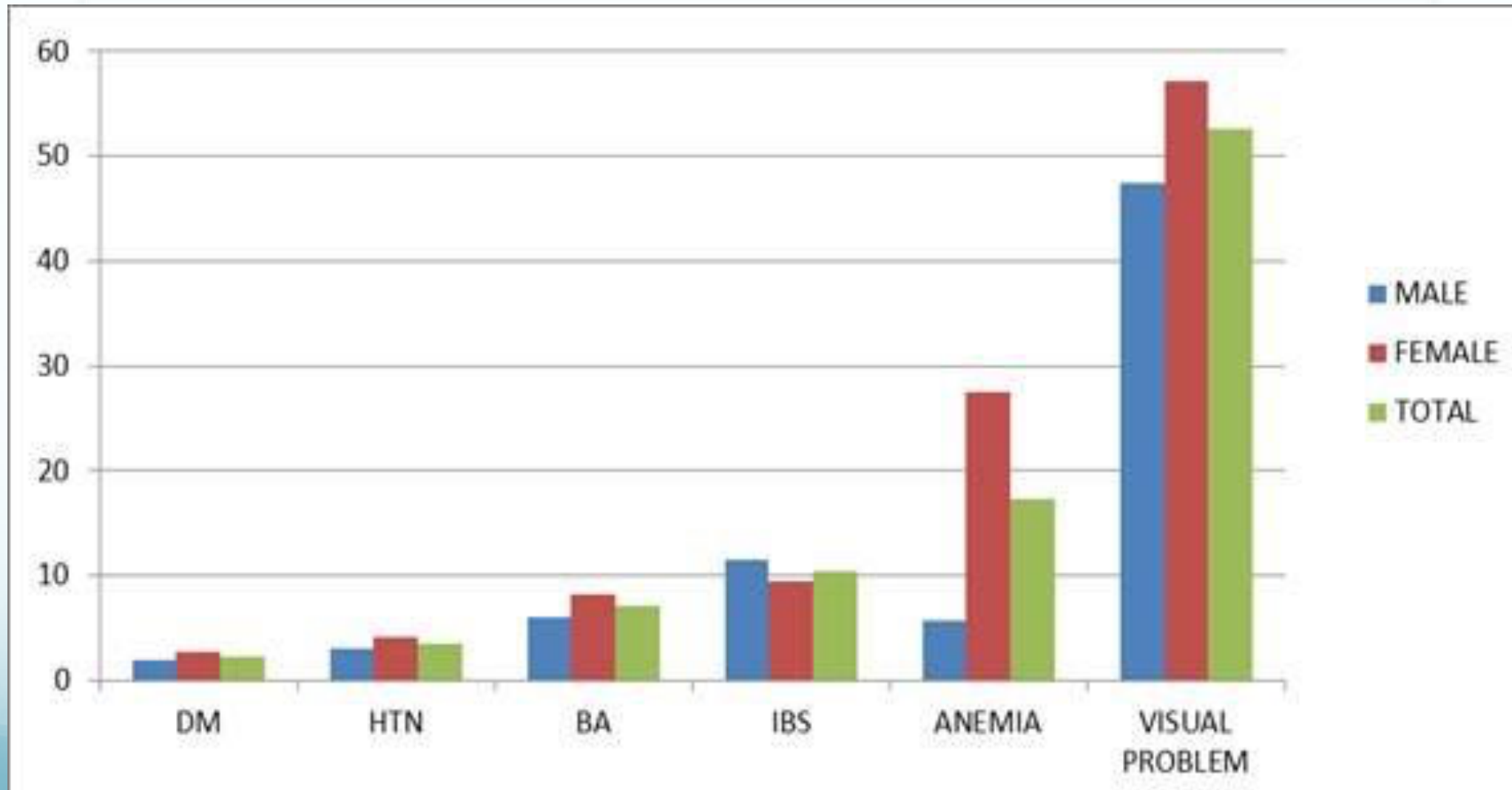
CBC (Anemia, Leukocytosis)

Elevated erythrocyte  
sedimentation rate ESR or C-  
reactive protein level

Abnormal chemistries

Abnormal thyroid-stimulating  
hormone (TSH)

# Prevalence and Factors Affecting Irritable Bowel Syndrome Among Medical Students at Taibah University

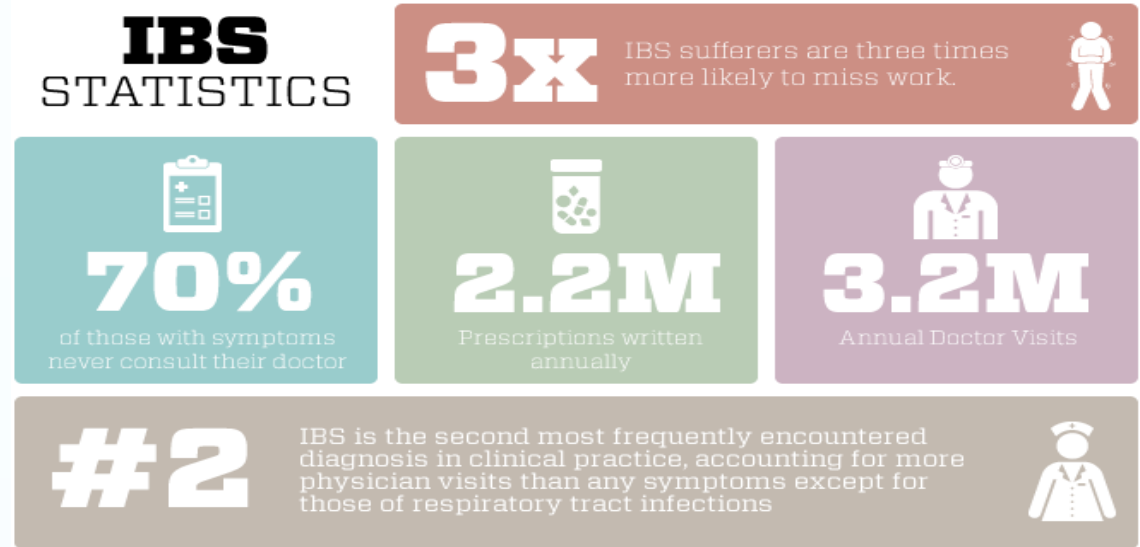


# Irritable Bowel Syndrome

functional disorder of the gastrointestinal tract characterized by chronic abdominal pain and altered bowel habits.



# Epidemiology:



- Globally 11%
- More common in young between the ages of 20 and 30 year.
- Young women are 2-3 times affected

# Etiology:



1. Stress and psychological issues, such as **anxiety** and **depression**.
2. Some medicines, such as **antibiotics**
3. infection in the digestive tract, such as **salmonella**.
4. Hormonal changes, such as during the menstrual cycle.
5. Genetics. IBS may be more likely to occur in people who have a family history of the disorder.
6. Inflammation of intestine

# Classification:

- 1. IBS with constipation (IBS-C):** hard or lumpy stools for  $\geq 25\%$  of bowel movements and loose (mushy) or watery stools for  $\leq 25\%$  of bowel movements.
- 2. IBS with diarrhoea (IBS-D):** loose (mushy) or watery stools for  $\geq 25\%$  of bowel movements and hard or lumpy stool for  $\leq 25\%$  of bowel movements.
- 3. Mixed IBS (IBS-M):** 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:** insufficient abnormality of stool consistency to meet criteria for IBS- C, IBS-D, or IBS-M

# How to diagnose IBS:

Healthcare professionals should consider assessment for IBS if the person reports having had any of the following symptoms for at least 6 months:

- **Abdominal pain or discomfort**
- **Bloating**
- **Change in bowel habit.**



## **The Rome IV Diagnostic Criteria\* for IBS**

Recurrent abdominal pain, on average, at least 1 day per week in the last 3 months, associated with 2 or more of the following:

1. Related to defecation
2. Associated with a change in frequency of stool
3. Associated with a change in form (appearance) of stool

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

# Management

```
graph LR; Management[Management] --- Diet[Diet modification]; Management --- Psychological[Psychological]; Management --- Pharmacological[pharmacological]
```

Diet modification

Psychological

pharmacological

# Management :

## 1- Diet changes :

a- eliminate milk product

b- eliminate food that causes gas (such as: beans)

c- Increasing dietary fiber ( to relieve constipation )

d- Avoid missing meals

e- reduce caffeine and alcohol intake .

f- drink a lot of fluid specially water at least 8 cups a day

g- people who have diarrhea should avoid sorbitol (an artificial sweetener found in sugar-free sweets )

## FOODS THAT MAY *TRIGGER* IBS SYMPTOMS

- Apples 
- Beans
- Broccoli 
- Cabbage
- Caffeine
- Cauliflower
- Gum, beverages, or foods sweetened w. fructose or sorbitol
- Chocolate 
- Dairy products 
- Fatty foods
- Margarine
- Nuts 
- Orange & grapefruit juices 
- Wheat products

**common foods that can trigger IBS symptoms of cramping and diarrhea include:**

- alcohol
- chocolate
- caffeinated drinks, such as coffee, tea, or soda
- dairy products, such as milk and cheese
- sugar-free (artificial) sweeteners, such as mannitol, sorbitol, xylitol, and maltitol
- chocolate
- nuts
- insoluble fiber, such as cereal
- foods containing fructose, such as honey and some types of fruits
- fried foods
- meals high in fat

**People with gas that is caused by IBS may find that triggers include foods like:**

- beans
- cabbage
- cauliflower
- broccoli
- peas, peanuts, and soybeans
- raisins
- onions
- insoluble fiber, such as cereal

## 2- Psychological therapies

a-Cognitive behavioral therapy [CBT]

b-Participation in a support group can also be valuable.

c- Hypnosis ( is a state of altered consciousness that allows you to focus away from your anxiety or stress)

## 3-pharmacological treatment:

a-**Anticholinergic medications:** ( ex :Dicyclomine) (block the nervous system stimulation of the gut , helping to reduce severe cramping and irregular contractions of the colon).

b- **Antidepressant** :Tricyclic agents (TCA) , selective serotonin reuptake inhibitors (SSRIs) may be recommended if you have both irritable bowel syndrome and depression. Common SSRIs (sertaline).

c-**Antidiarrheal drugs** :( loperamide )should be the **first choice** of antimotility agent for diarrhoea in people with IBS.

d- **Laxatives** : should be considered for the treatment of constipation in people with IBS.

# Follow up :

based on the response of the person's symptoms to interventions. This should form part of the annual patient review.

## **\* When to refer IBS patients to specialist?**

- More than minimal rectal bleeding
- Weight loss
- Unexplained iron deficiency anemia
- Nocturnal symptoms
- Family history of: Colorectal cancer ,IBD and Celiac disease

# MCQ:

1/ Which one of the following is **not** a symptom of IBS:

A/ Diarrhea

B/ Dyspepsia

C/ Rectal bleeding

D/ Constipation



# MCQ:

2-irritable bowel syndrome is more **common** in:

A/male

B/female

C/ male and female are equal

D/children

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C/who take ASPIRIN

D/none

# MCQ:

5-To diagnose IBS the symptoms has to be continuous for:

- a) 2 weeks
- b) 3 months
- c) 6 months
- d) 1 year

# Reference:

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Thank you