# CHANGES IN BOWEL HABITS

MAJED ALZAIN

TALAL ALHUQAYL

HASSAN ALSHAMMARI

HAMAD ALKHUDHAYRI

MOHAMMED NASR

**Supervisor: DR M.BATAIS**

# OBJECTIVES

1. Define constipation and diarrhea
2. Discuss the definition, etiology and classification of irritable bowel syndrome (IBS)
3. Explain how to diagnose IBS
4. List the alarm symptoms and differential diagnosis
5. Provide a comprehensive management plan and follow up for patients with IBS
6. Recognize when to refer to specialist
7. Demonstrate history taking and physical examination for patients presented with history suggestive of IBS. i.e Role play.

# QUIZ:

**1-What causes IBS?**

A- stress and depression.
B- Bad diet.
C- it's not known.

## 2- IBS is a diagnosis of exclusion:

A- True
B- False

## 3- What is the best way of diagnosing IBS?

A- By excluding other causes. (A diagnosis of exclusion)

B- By Rome IV criteria.

C- By excluding the presence of red flags.

D- By Rome IV criteria and excluding the presence of red flags.

**4-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- Mucus secretion

C- Abdominal bloating or subjective distention

D- Frequent nausea

## 5. Management of IBS includes:

A- Lifestyle modification

B- Pharmacological therapy

C- Dietary advice

D- All of the above

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# DIARRHEA

- Diarrhea is defined as the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the individual). (WHO)

- Approach?

- Differential diagnosis?

| | |
|---|---|
| Endocrine disorders | Hyperthyroidism<br>Adrenal insufficiency<br>Carcinoid tumors<br>Medullary thyroid cancer |
| Gastrointestinal disorders | Inflammatory bowel disease<br>Irritable bowel syndrome<br>Celiac disease<br>Ischemic colitis<br>Microscopic colitis<br>Short bowel syndrome<br>Malabsorption<br>Bowel obstruction or constipation with overflow<br>Diverticulitis |
| Malignancy or Neoplasms | Gastrinoma<br>VIPoma<br>Lymphoma |
| Dietary | Lactose intolerance<br>Fructose intolerance<br>Gluten intolerance<br>Food allergies |
| Medications<br><br>*note this list is not all inclusive | Antibiotics<br>Laxatives<br>Antacids containing magnesium and calcium<br>Chemotherapy<br>Colchicine<br>Proton-pump inhibitors<br>Mannitol<br>Nonsteroidal anti-inflammatory drugs<br>Angiotensin-converting enzyme inhibitors<br>Cholesterol-lowering medications<br>Lithium |
| Other Iatrogenic Causes | Graft-versus-host disease<br>Radiation therapy<br>Gastrografin and barium contrast |

# CONSTIPATION

- Constipation is defined as infrequent passage of hard stools. Or as three or fewer bowel movements per week.
- Patients may complain of straining, a sensation of incomplete evacuation and either perianal or abdominal discomfort.
- Differential diagnosis?

**Table 2. Selected Causes of Secondary Constipation**

| Medications | Medical conditions |
|---|---|
| Common | Common |
| Antacids, especially with calcium | Cerebrovascular disease |
| Iron supplements | Depression |
| Opioids | Diabetes mellitus |
| Less common | Hypothyroidism |
| Anticholinergic agents | Irritable bowel syndrome |
| Antidiarrheal agents | Less common |
| Antihistamines | Anal fissures |
| Antiparkinsonian agents | Autonomic neuropathy |
| Antipsychotics | Cognitive impairment |
| Calcium channel blockers | Colon cancer |
| Calcium supplements | Hypercalcemia |
| Diuretics | Hypokalemia |
| Nonsteroidal anti-inflammatory drugs | Hypomagnesemia |
| Sympathomimetics | Immobility |
| Tricyclic antidepressants | Multiple sclerosis |
| | Parkinson disease |
| | Spinal cord injury |

*Information from reference 17.*

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# WHAT IS IBS ?

- It is a life-long (chronic) functional "not structural" disorder of the digestive system that affect the large intestine. It is characterized by the presence of abdominal pain or discomfort with altered bowel habits for at least 6 months, in the absence of a specific organic pathology.

# PREVALENCE

- Prevalence in the general population is estimated to be between 10 % and 20 %.
- IBS most often affects people between the ages of 20 and 30 years. andIt is twice as common in women as in men
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# ETIOLOGY

- The causes of irritable bowel syndrome have not been adequately defined, but Factors that appear to play a role :

- Disturbed colonic motility.
- Nervous system (Gut hypersensitivity).
- Inflammation in the intestines : Some IBS patients have an increased number of immune-system cells in their intestines. This immune-system response is associated with pain and diarrhea.
- Severe infection(gastroenteritis)
- Microbial imbalance in the gut (dysbiosis).
- Changes in bacteria in the gut (microflora)

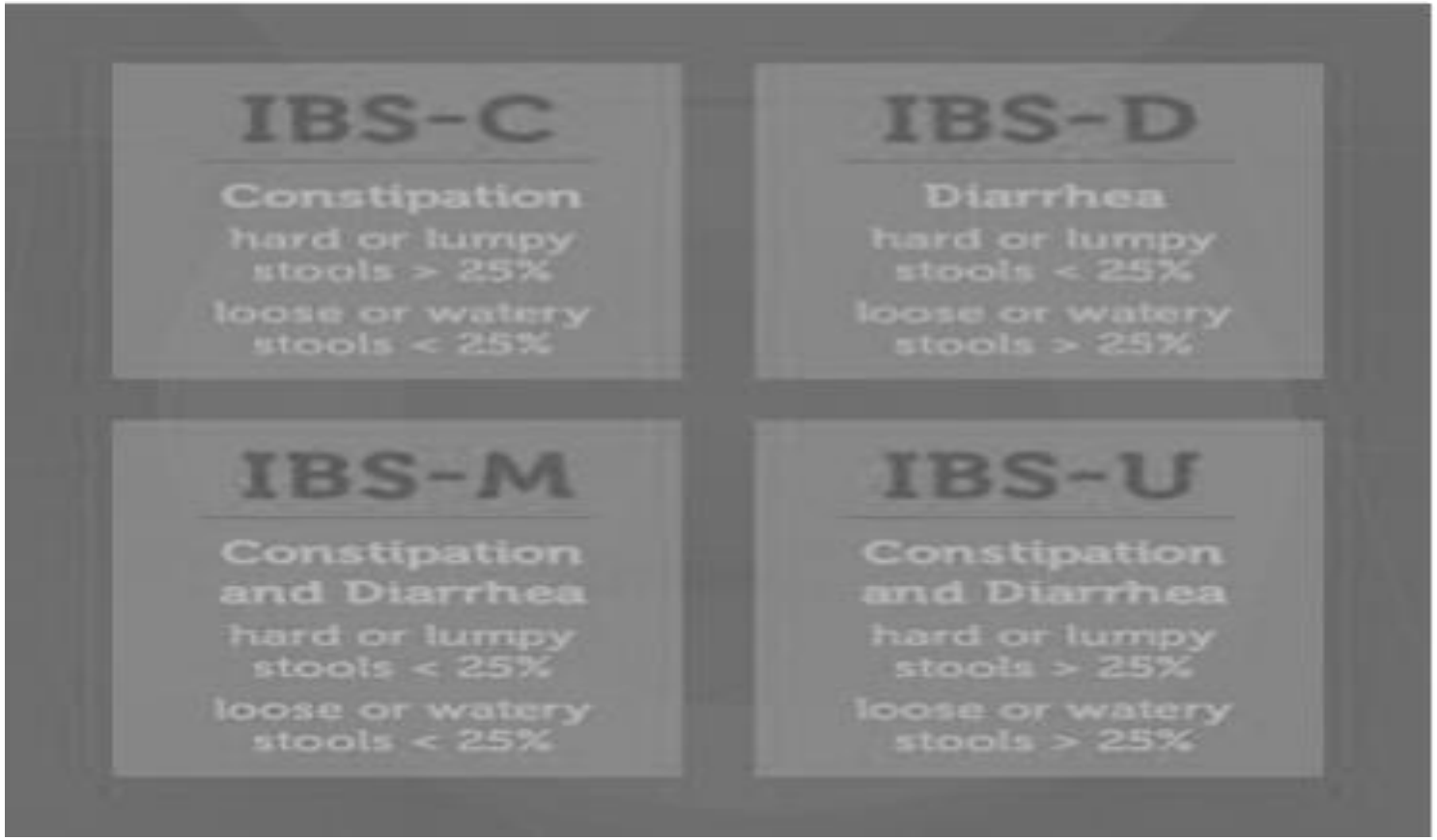
# CLASSIFICATION OF IBS

- Classifying patients with IBS into specific subtypes based on predominant bowel habits is useful as it helps focus treatment on the predominant, and often, the most bothersome symptom.

- IBS is classified into four subtypes:

1. IBS with constipation (IBS-C)
2. IBS with diarrhea (IBS-D)
3. Mixed IBS (IBS-M)
4. Unspecified IBS (IBS-U)

# CLASSIFICATION OF IBS



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# HOW TO DIAGNOSE IBS?

By History and Investigations

We have 2 criteria:

1. Rome IV criteria (2016)

2. NICE Guideline (2017)

# 1. ROME IV CRITERIA (2016)

- - 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.

- - Criteria fulfilled for the last 3 months with symptom onset at least 6 months
- before diagnosis.

- Also the patients shouldn't have any warning signs and symptoms.

# WHAT ARE THE WARNING SIGNS ?

Patient has none of the following warning signs:

- Age ≥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

# OTHER SUPPORTING SYMPTOMS FOR DIAGNOSING IBS:

- Mucus in stool (Mucorrhea)
- Abdominal bloating or subjective distention.
- IBS can be associated with depression and anxiety.

# 2. NICE GUIDELINE (2017)

Abdominal pain or discomfort for at least 6 months that is either:

★ Relieved by defecation.

★ Associated with altered bowel habit (frequency or stool form).

- This should be accompanied by at least 2 of the following 4 symptoms:

1) Altered stool passage (straining, urgency, incomplete evacuation)
2) Abdominal bloating, distension, tension or hardness.
3) Symptoms made worse by eating
4) Specific foods passage of mucus.

# WHAT ARE THE DIFFERENTIAL DIAGNOSIS OF IBS ?

- Inflammatory bowel disease.
- Colon cancer.
- Others ( Gastroenteritis, Peptic ulcer disease, Celiac …etc)

- How can we differentiate between IBD, IBS and Colon cancer ?

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# MANAGEMENT:

- This should include information on general lifestyle, physical activity, diet and symptom-targeted medication

Dietary and lifestyle advice :

1. Encourage people with IBS to identify and to create relaxation time.
2. Assess the physical activity levels; people with minimal activity should be given brief advice to encourage them to increase their activity levels.
3. Have regular meals & avoid leaving long gaps between eating.
4. Drink at least 8 cups of fluid per day, especially water
5. Restrict tea and coffee to 3 cups per day.
6. Limit intake of high-fibre food

# PHARMACOLOGICAL THERAPY

- Decisions should be based on the nature and severity of symptoms.
- Antispasmodic agents should be taken as required, alongside dietary and lifestyle advice
- CONSTIPATION : LAXATIVES
- DIARRHEA : LOPERAMIDE

# CONT.

- Patients should adjust their doses according to the clinical response, with the aim of achieving a soft, well-formed stool.
- Consider tricyclic antidepressants (TCAs) as second-line treatment if first line have not helped.
- Consider (SSRIs) only if TCAs are ineffective.
- Take into account the possible side effects & follow up people taking either of these drugs for the first time at low doses after 4 weeks and then every 6–12 months.

# FOLLOW UP

- Should be agreed between the healthcare professional & the patient based on the response to interventions.
- Emergence of any 'red flag' symptoms during management and follow-up should prompt further investigation and/or referral to secondary care.

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# WHEN TO REFER TO SPECIALIST?

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

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# VIDEO FOR PHYSICAL EXAMINATION

# ROLE PLAY

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# REFERENCES:


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# ANY QUESTIONS?

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