MED438
KING SAUD UNIVERSITY

Family & Community Medicine

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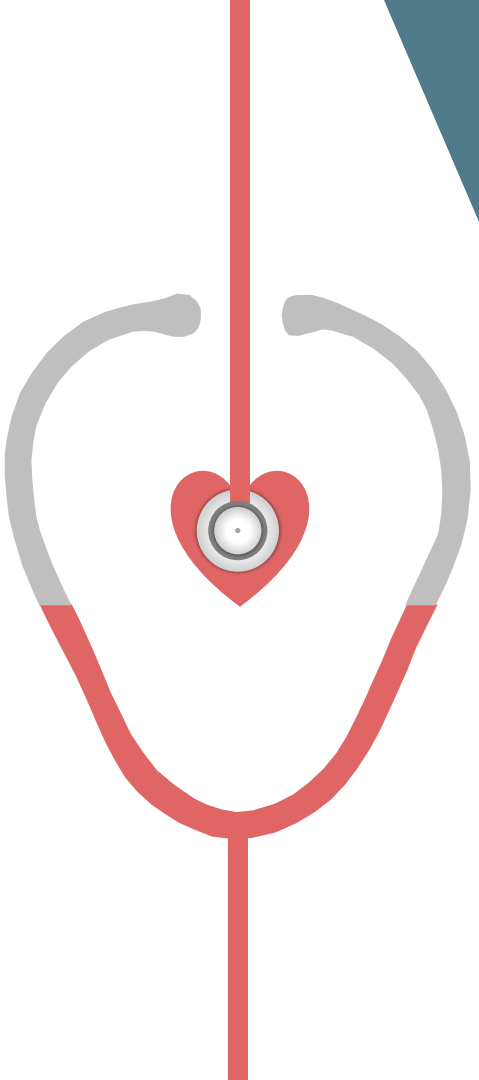
Irritable Bowel Syndrome

Editing file

- Important
- Original content
- Only in girls slides
- Only in boys slides
- Doctor's notes



OBJECTIVES:

01 Understand the hypothesis & explain the pathophysiology of IBS.

02 Common sign & symptoms.

03 Rome IV criteria of diagnosis.

04 IBS management.

Irritable Bowel Syndrome (IBS): is a gastrointestinal disorder characterized by chronic abdominal pain and altered bowel habits in the absence of any organic cause. **It is the most commonly diagnosed gastrointestinal condition**

Pathophysiology:

It remains uncertain, yet it is viewed as a disorder resulting from an interaction among a number of factors.

1 Gastrointestinal Motility

Motor abnormalities of the GI tract are detectable in some patients with IBS Abnormalities observed include:

- Increased frequency and irregularity of luminal contractions.

- Prolonged transit time in constipation-predominant IBS.

-If the Motility is slow ⟶ Constipation (Mainly on the left side. Overcome by high fiber intake/laxatives).
-If the Motility is Fast ⟶ Diarrhea.

2 Visceral Hypersensitivity

increased sensation in response to stimuli

Is a frequent finding in IBS patients. Perception in the gastrointestinal (GI) tract results from stimulation of various receptors in the gut wall.

These receptors transmit signals via afferent neural pathways to the dorsal horn of the spinal cord and ultimately to the brain.

3 Intestinal Inflammation

-↑ Numbers of lymphocytes have been reported in the colon and small intestine in patients with IBS.
-↑ In lymphocyte infiltration in the myenteric plexus in 9 patients and neuron degeneration in 6 patients.
-These cells release mediators (nitric oxide, histamine and proteases) capable of stimulating the ENS, leading to abnormal motor and visceral responses within the intestine.

4 Alteration in Fecal Microflora

- Change in gut microbiota: emerging data suggest that the fecal microbiota in individuals with IBS differ from healthy controls and varies with the predominant symptom.

-Bacterial Overgrowth.

5 Food Hypersensitivity

Some food helps aggravate/worsen the case, so most patients use a gluten-free diet which helped them out a lot, remain not understood.

6 Psychological Dysfunction

Psychosocial factors may influence the expression of IBS.

7 Postinfectious: E.coli

Distention: Various studies have shown that in patients with IBS, awareness and pain caused by balloon distention in the intestine are experienced at lower balloon volumes compared with controls.

Bloating: About half of patients with IBS (*mainly those with constipation*) have a measurable increase in abdominal girth associated with bloating (*sensation of abdominal fullness*).

It is unclear whether heightened sensitivity of the intestines to normal sensations is mediated by the local GI nervous system, by central modulation from the brain, or by some combination of the two.

Clinical feature:

- Younger patients and women are more likely to be diagnosed with IBS.
- 2:1 female predominance in North America though.
- In china males are more common to have IBS.

Signs & Symptoms

mnemonics:
Camila Ate Donuts with Cranberries

Chronic abdominal pain

Altered bowel habits

Diarrhea

Constipation

Other gastrointestinal symptoms

GERD, dysphagia, early satiety, intermittent dyspepsia, nausea, and non-cardiac chest pain.

Diagnostic Criteria (Rome III)

Recurrent abdominal pain on average at least 3 day/month in the last 3 months, associated with two or more of the following criteria:

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

Diagnostic Criteria (Rome IV)

MOST recent & Important criteria than rome III

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

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 before diagnosis.

IBS Subtypes

Managed by fibers/laxatives

IBS with constipation
Hard or lumpy stools ≥25%
Loose or watery stools
<25% of bowel movements.

1

*Managed by Imodium(loperamide) *

IBS with diarrhea
Loose or watery stools
≥25% Hard or lumpy stools
<25% of bowel movements.

2

Mixed IBS
Hard or lumpy stools ≥25%
Loose or watery stools
≥25% of bowel movements.

3

Unsubtyped IBS
Insufficient abnormality of stool consistency to meet the above subtypes.

4

Diagnostic Approach

Patients are identified as having a symptom complex compatible with IBS based upon the Rome III criteria.
Routine laboratory studies (CBC, chemistries) are normal in IBS.

NO RED FLAGS SYMPTOMS (Age >40): *We don't worry about Rome criteria*

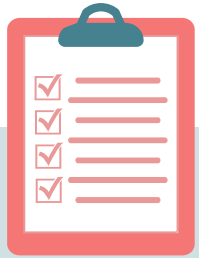
- Rectal bleeding.
- Nocturnal or progressive abdominal pain.
- Weight loss. (>10% in 6 months)
- Anemia.

Management

IBS is a chronic condition with no known cure.
The focus of treatment should be on *relief of symptoms* and in *addressing the patient's concerns*.

- Therapeutic relationship.
- Patient education.
- Dietary modification.
- Psychosocial therapies.
- Antidepressants (eg. SSRI).
- Symptomatic relief of pain.

Quiz!



1 Which one of the following is the most commonly diagnosed gastrointestinal condition:

A) IBD.
B) IBS.
C) Colitis.
D) Pancreatitis.

2 Which CRITERIA is the recent criteria that is used in diagnosis of IBS:

A) Rome criteria I.
B) Rome criteria II.
C) Rome criteria III.
D) Rome criteria IV.

3 Increased numbers of which one of the following cells have been reported in the colon and small intestine in patients with IBS:

A) Macrophages.
B) Monocytes.
C) Lymphocytes.
D) Neutrophils.

4 Which one of the following used to manage the symptoms for a patient with IBS:

A) Dietary modification.
B) Antidepressant medications.
C) Psychosocial therapies.
D) All of the above.

Answers: 1) B, 2) D, 3)C, 4) D

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Give us your feedback!