



**1st Lecture** 

### Irritable bowel syndrome (IBS)

### SN/4

### Define the Irritable bowel syndrome (IBS) ?

Is a gastrointestinal disorder characterized by chronic abdominal pain and altered bowel habits in the absence of organic cause.

### **Explain the pathophysiology of IBS ?**

1.Gastrointestinal Motility :

- Increased frequency and irregularity of luminal contractions
- Prolonged transit time in constipation-predominant IBS

2. Visceral Hypersensitivity: Perception in the gastrointestinal (GI) tract results from stimulation of various receptors in the gut wall. These receptors transmit signals via afferent neural pathways  $\rightarrow$  the dorsal horn of the spinal cord and ultimately  $\rightarrow$  the brain.

3. Intestinal Inflamation Lymphocytes release mediators (nitric oxide, histamine and proteases) capable of stimulating the enteric nervous system, leading to abnormal motor and visceral responses within the intestine.

4. Alteration In Fecal : Change in gut microbiota & Bacterial Overgrowth

5.Postinfectious 6.Food Sensitivity

7. Psychosocial Dysfunction : Psychosocial factors may influence the expression of IBS.

### Mention the signs and symptoms of IBS ?

- 1. Chronic abdominal Pain 2. Altered bowel habits 3. Diarrhea 4. Constipation
- 5. Others (Gastroesophageal reflux, dyspepsia, early satiety, dysphagia, nausea and noncardiac chest pain)

### **Explain the Rome III criteria of diagnosis?**

Recurrent abdominal pain or discomfort at least 3 days per month in the last 3 months associated with 2 or more of the following : 1- Improvement with defecation

- 2- Onset associated with a change in frequency of stool
- 3- Onset associated with a change in form (appearance) of stool

Subtypes of IBS		
<b>IBS with constipation</b> (The easiest type to treat)	<u>hard</u> or <u>lumpy</u> stools $\geq$ 25% / loose or watery stools $\leq$ 25% of bowel movements	
IBS with diarrhea	<u>loose</u> or <u>water</u> stools $\geq$ 25% / hard or lumpy stools <5% of bowel movements	
Mixed IBS	<u>hard or lumpy</u> stools $\geq 25\%$ / loose or watery stools $\geq 25\%$ of bowel movements	
Unsubtyped IBS	insufficient abnormality of stool consistency to meet the above subtypes	

### How to diagnose IBS ? Routine laboratory studies (complete blood count, chemistries) are

normal in IBS.



- **NO** red flag symptoms:
- Rectal bleeding
- Nocturnal or progressive abdominal pain
- Weight loss

### What is the management of IBS ?

IBS is a chronic condition with no known cure. The focus of treatment should be on relief of symptoms Therapeutic relationship Patient education Dietary modification Psychosocial therapies **MEDICATIONS:** Antidepressant medication

**2nd Lecture** 

### **Nutrition Education**

#### **Define the Nutrition Education ?**

It is the science of teaching the individual how to practice proper and correct nutrition in terms of:

1-Knowing the proper nutrition rules. 2-Knowing benefit of each nutrient.

3-More attention to quality and quantity of foods.

#### What are the Importance of nutrition education ?

1- Man doesn't have instinct nor inherit knowledge that leads him to know the effect of different foods on health

2- there is consensus that people's food choices, dietary practices, and physical activities behaviors influence health.

3- increased risk of chronic diseases.

4- nutrition education can increase the motivation, skills, and opportunities for people to engage in health promoting actions.

#### Mention some Aims of nutrition education.

To increase people's ability to know the following facts:

- The relationship between the body growth, qualities of and appearance, and the types of food they eat.
- Increased diversification in the food they eat, and enjoy its taste.
- Planning and preparing of meals rich in nutrients

#### List some Factors affected on human's food consumptions.

1-The healthy body and disease.	2-Psychological factors:	3-Food habits.
4-Economic levels.	5-Education level.	6-Religious beliefs

#### Enumerate some of the Nutrition Education strategy

Encouraging the targeted categories to consume Balanced diets according to the: 1- available sources. 2-Renew the dishes. 3- Local food and eating habits. 4- The presenting ways

#### What are the Steps of social change with brief explanation ?

Innovation : Create or develop a new idea

Diffusion : Delivery of new ideas through certain channels to members of the social system Contribute a better translation.

**Results** : Are those changes that occur within the social system due to the spread of these new ideas between its parts, and thus change has become a monument to connect.

#### What are the Classes of adopters?

1- Innovators 2-Early adopters 3-Early majority 4-late majority 5- laggards

#### List 4 Criteria which affect on diffusion of innovation.

1-Relative advantage of the new idea.	2- Complexity (easy in understanding and applying)
3- Compatibility (suitability)	4- Results observe-ability

**Define the ascites ?** it is a pathologic fluid accumulation within the peritoneal cavity.

## What is the most common causes of cirrhosis at the present time ?

chronic viral hepatitis & alcoholic liver disease.

### Talk about the pathogensis of ascitis ?

1-Increased hydrostatic pressure2-Decreased colloid osmotic pressure3-Miscellinious4-Increase in the permeability of peritoneal capillaries5-Leakage of fluid into the peritoneal cavity

In Cirrhotic Ascites, What is the most recent theory of ascites formation ? the "peripheral arterial vasodilation hypothesis," .This happens as a consequence of portal hypertension.

Noncirrhotic Ascites : Malignancy-related ascites depends on the location of the tumor

### Talk about the Pathophysiology of portal hypertension ?

involves the relationship between portal venous blood flow and the resistance to this blood flow within the liver (the portohepatic resistance) and within portosystemic collateral blood vessels (the portocollateral resistance) that form during the evolution of portal hypertension

### What is the Role of Increased Resistance to blood flow within the liver?

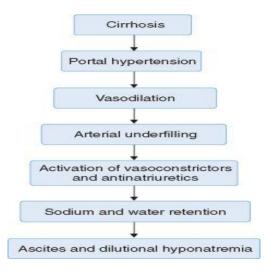
The three major categories of portal hypertension:

1) Prehepatic

2) Intrahepatic (A- presinusoidal , B- Sinusoidal , C- Postsinusoidal)

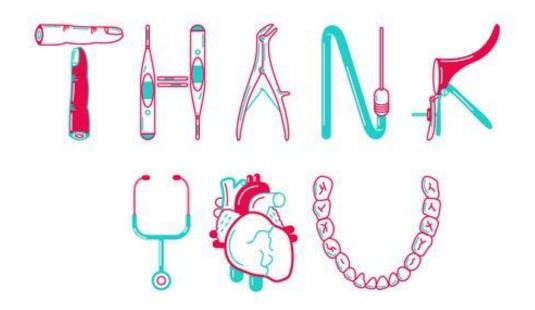
3) posthepatic

### Mention the sequence of events from cirrhosis to ascites ?



### How to mainatine portal hypertension?

maintained during collateral formation by increased portal inflow, and, as a consequence, portal hypertension persists even when all portal flow escapes through collaterals.



# DONE BY:

- 🖾 Ebtihal al-mshawi
- 🖾 Abdulrahman Alkaff

☑ Abdullah Alsahli☑ Sarah AlSalman

