**Irritable Bowel Syndrome**

* **It is an idiopathic functional disorder of the whole gastrointestinal tract, characterized by abdominal pain or distension with disturbed bowel function. It’s a chronic, relapsing and often life-long disorder.**
* Although it causes discomfort it’s a benign condition that poses no serious threat to the patient’s health.
* It’s the **most common** functional disorder of the GI tract.
* 70-80% of the cases are managed by Family physicians. Very few are referred to academic centers (where most of the trials on IBS have taken place).
* Pathogenesis of IBS is still not fully understood.

**Prevalence:**

* A UK Family Physician encounters 8 IBS patients /week.
* In the United States, IBS affects 10 -15% of the populations.
* The prevalence is underestimated because not all patients present to the primary care clinic.
* Its more common in women, and over 50% of the patients suffer from anxiety and depression.

**Pathophysiology:**

No single factor – pointers towards an integrated model

1. **Motility Disorder**
* Sensitivity of the gut to unpleasant stimuli
1. **Visceral Causes**
2. **The Enteric Nervous system**
* The higher centers in the CNS can influence the sensations arising in the gut.
* The gut contains almost as many neuro-transmitters as the brain itself.
* 5HT3 and 5HT4 transmitters: Change in peristaltic response, colonic motility and fluid secretions.
1. **Brain-Gut interaction**
* Increasing evidence that information may be processed differently by patients with IBS compared with normal people.
* IBS patient’s thalamic activity is different from the non-IBS individuals.
* The threat of unpleasant stimuli results in enhanced frontal lobe activity.
1. **Post-infective IBS**
* One-third of the patients with IBS appear to have suffered some kind of acute GI infective episode in the month before.
1. **History of Sexual and physical abuse**
2. **IBS and Psychopathology**
* Newly presenting IBS patients—significant anxiety, depression or other psychiatric dysfunction, as well as acute or ongoing social or domestic difficulties.

**Sign/Symptoms**

* ***GI Symptoms:***
* **Change in bowel habits**
* **Cramping and pain relieved by defecation**
* Bloating
* Abdominal Distention
* Stool Frequency
* Urgency
* Feeling of incomplete evacuation
* Mucus in stool
* ***Non-GI Symptoms:***
* **Anxiety and Depression**
* Lethargy
* Back ache
* Nocturia
* Frequency in micturition
* Urgency of micturition
* Incomplete bladder emptying
* Dyspareunia
* ***Alarming Symptoms:***
* Weight loss
* GI blood loss
* Anemia
* Fever
* Frequent nocturnal symptoms

**Diagnosis:**

1. **Manning Criteria**
* This is an older criteria not used today.
* Abdominal distension.
* Abdominal pain relieved by bowel movement.
* Looser stools with the onset of pain.
* More frequent bowel movements at onset of pain.
* Mucus per rectum
* Feeling of incomplete emptying.
1. **Rome III Criteria**
* Recurrent abdominal pain or discomfort at least 3 days per month during the previous 3 months. PLUS 2 or more of the following:
	+ Relieved by defecation
	+ Onset associated with a change in stool frequency
	+ Onset associated with a change in stool form or appearance

**Differential Diagnosis:**

1. Ulcerative Colitis
2. Crohn’s disease
3. Malabsorption, particularly with coeliac disease
4. Malignancy (Ovarian, Colon, etc.)
5. Hypothyroidism
6. Hypochondriasis
7. Co-existent organic disease

**Investigations:**

* Often not needed.
* Absolute indications (Red flag) are really referred to a gastroenterologist.
* Relative indications for test:-
	+ Atypical history - e.g. no relation to defecation.
	+ Age over 40
	+ Family history of IBD or bowel cancers.
	+ CBC,
	+ ESR
	+ Red cell folate
	+ Stool analysis/occult blood
	+ Lactose intolerance breath test in selected cases & Coeliac disease antibodies
	+ Referral for sigmoidoscopy/colonoscopyibodies

**Management:**

* **General Principles**
1. Caring doctor-patient relationship.
2. Explaining the diagnosis followed by reassurance.
3. Avoiding aggravating factors including certain drugs.
4. Dietary treatment
5. Drugs for specific symptoms
6. Psychological / Behavior therapy
* **Patient Education**
1. Establish a strong patient-doctor relationship
2. Take their symptoms seriously and do not dismiss any of them.
3. Reassurance, Explanation, Advice!!!
4. Patient’s education:
	* Addressing patient’s fear
	* Providing specific diagnosis
	* Recommend a patient’s diary
	* Shift the visits from eliminating symptoms to solving problems
* **Conservative Management**
* Dietary Modifications
	+ **Avoid aggravating foods** such as: caffeinated beverages, spicy food, alcohol, sorbitol containing candies, citrus food in fructose intolerance, milk products in lactose intolerance.
	+ **Increase dietary fibers and water intake**.
	+ The use of bulking agents such as hydrophilic colloid psyllium.
* Stress Management
	+ Treat the underlying condition if present such as anxiety, depression, somatization disorder, etc.
	+ Behavioral therapy:
		- * + Relaxation technique
				+ Hypnosis to reduce pain perception
				+ Cognitive behavior therapy in patients with somatization disorders.
	+ Psychotherapy: controlled studies have found psychotherapy + medication to be superior to medication alone in reducing bowel symptoms.
* **Medical Therapy**

Focus on most troublesome symptom first

1. Mebeverine
2. Alverine
3. Dicyclomine
4. Tegaserod – 5HT4 partial agonist-withdrawn
5. Amitryptyline / Loperamide/Fiber

**Referral to a Specialist**

* Consider referral of those:
1. Over 40 years with symptoms of recent onset.
2. Change in symptoms.
3. Rectal bleeding
4. Weight loss
5. Family History of IBD or gut malignancy
6. Altered bowel habits not fulfilling Rome 3 criteria.
7. Anemia
8. Fever
9. Continuous diarrhea
10. Patient not satisfied with the diagnosis of IBS

**Prognosis**

* IBS has no organic disease and no mortality.
* Chronic, yet often remitting condition.