Difference Between IBS and Crohn’s

www.differencebetween.com

Key Difference – IBS vs Crohn’s

IBS and Crohn’s disease are two illnesses that affect the gastrointestinal tract. Irritable bowel syndrome or IBS is defined as a functional derangement of the intestines that gives rise to altered bowel habits and abdominal pain whereas Crohn’s disease is an inflammatory bowel disease characterized by the transmural inflammation of the colonic mucosa. Although the colon is inflamed in the Crohn’s disease, no such inflammatory processes are observed in IBS. This can be considered as the key difference between IBS and Crohn’s.

What is IBS?

Irritable bowel syndrome or IBS is defined as a functional derangement of the intestines that gives rise to altered bowel habits and abdominal pain. The hallmark feature is the absence of any inflammatory processes in the colonic structures.

Clinical Features

- Alteration of the bowel habits – this can be either constipation or diarrhea
- Abdominal pain
- Clear or white mucorrhea
- Sexual dysfunction
- Dyspepsia
- Nausea, vomiting
- Urinary frequency and urgency
- Fibromyalgia
- Worsening of the symptoms during the perimenstrual period

Diagnosis

The diagnosis of IBS is based on the following criteria.

The patient should be having abdominal pain for a minimum duration of 3 months with at least two of the following clinical features.
The pain should be related to the defecation
Change in the frequency of defecation
Change in the texture of the feces

The presence of additional symptoms such as mucorrhea and abdominal bloating cements the diagnosis.

There are main four varieties of IBS

- IBS-D: diarrhea is more prominent
- IBS-C: constipation is prominent
- IBS-M: mixed diarrhea and constipation
- IBS-U: clinical presentation is not similar to any of the above three categories

Figure 01: Gastrointestinal System

Management

Nonpharmacological management includes
- Dietary modifications such as increasing the fiber content of the diet and decreasing the amount of psyllium compounds to minimize the flatulence
- Drinking more water
- Decreasing the consumption of legumes can prevent abdominal bloating

**Pharmacological Intervention**

- Anticholinergics such as dicyclomine
- Antidiarrheals such as loperamide
- Tricyclic antidepressants
- Prokinetics
- Bulk-forming laxatives

**What is Crohn’s?**

Crohn’s disease is an inflammatory bowel disease characterized by the transmural inflammation of the colonic mucosa. Usually, only some regions of the colon are inflamed giving rise to skip lesions rather than a continuous involvement.

**Clinical Picture**

**Diarrhea**

Diarrhea in Crohn’s disease is due to the excessive secretion of the fluids and the impaired absorption of fluids by the inflamed bowel mucosa. In addition to that, the malabsorption of bile salts by the inflamed terminal ileum also contributes for the aggravation of diarrhea.

**Fibrostenotic Disease**

The obstruction of the gastrointestinal tract due to small bowel strictures or colonic strictures can rise to symptoms such as abdominal pain, constipation, nausea, and vomiting.

**Fistulizing Disease**

The transmural inflammation of the GIT can be the cause of sinus tracts, serosal penetration, and fistulae such as enteroenteric fistulae. The penetration of the bowel by the inflammatory lesions leads to the leakage of colonic substances into the peritoneal cavity resulting in peritonitis and other associated complications.
Local Complications of Crohn’s Disease

- Watery diarrhea due to the stimulatory effects on colonic water and electrolyte absorption
- The reduced concentration of bile acids interrupts the absorption of fat thus resulting in steatorrhea
- Long-term steatorrhea can lead to osteoporosis, malnutrition and clotting abnormalities
- Formation of gallstones
- Nephrolithiasis (formation of kidney stones)
- Vitamin B12 malabsorption

Crohn’s disease increases the risk of colon cancers, lymphomas and squamous cell carcinomas of the anus.

Morphology

Macroscopy

Mostly the right side of the colon is affected by the Crohn’s disease. There is a segmental distribution of the lesions. Usually, the rectum is spared.

Microscopy

There is a transmural involvement with the occurrence of fissures and noncaseating granulomas.

Diagnosis

The clinical history and examination play a vital role in the diagnosis of CD.

Endoscopy reveals the presence of the presence of aphthous ulcers that give rise to a cobblestone appearance. Abdominal and pelvic scanning can be used to identify any abscesses.

Management

There is no definite cure for the Crohn’s disease. The aim of treatment is the suppression of inflammatory processes that give rise to the clinically manifested signs and symptoms.
Anti-inflammatory Drugs

Corticosteroids such as prednisolone

Aminosalicylates

- Immune system suppressors such as azathioprine and biological agents such as infliximab
- Antibiotics
- Analgesics
- Antidiarrheals
- Iron and vitamin B12 supplements

In some cases, surgical removal of the damaged parts of the colon is required.

What are the similarities between IBS and Crohn’s?

- Both are diseases of the GI tract
- Diarrhea is a common symptom seen in both conditions
## What is the difference between IBS and Crohn’s?

<table>
<thead>
<tr>
<th>IBS vs Crohn’s</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritable bowel syndrome is defined as a functional derangement of the intestines that gives rise to altered bowel habits and abdominal pain.</td>
<td>Crohn’s disease is an inflammatory bowel disease characterized by the transmural inflammation of the colonic mucosa.</td>
</tr>
</tbody>
</table>

### Colonic Mucosa

| There is no inflammation of the colonic mucosa.          | Colonic mucosa is inflamed. |

### Constipation

| Constipation is observed as a symptom sometimes. | Constipation is not a symptom. |

## Summary – IBS vs Crohn’s

Crohn’s disease is an inflammatory bowel disease characterized by the transmural inflammation of the colonic mucosa. A functional derangement of the intestines that gives rise to altered bowel habits and abdominal pain is identified as the irritable bowel syndrome. Inflammation is observed only in Crohn’s disease and not in IBS.

## References:


## Image courtesy

1. “Crohn’s Disease” By BruceBlaus – Own work (CC BY-SA 4.0) via Commons Wikimedia
How to Cite this Article?

