

Inflammatory Bowel Disease (IBD) and Cancer



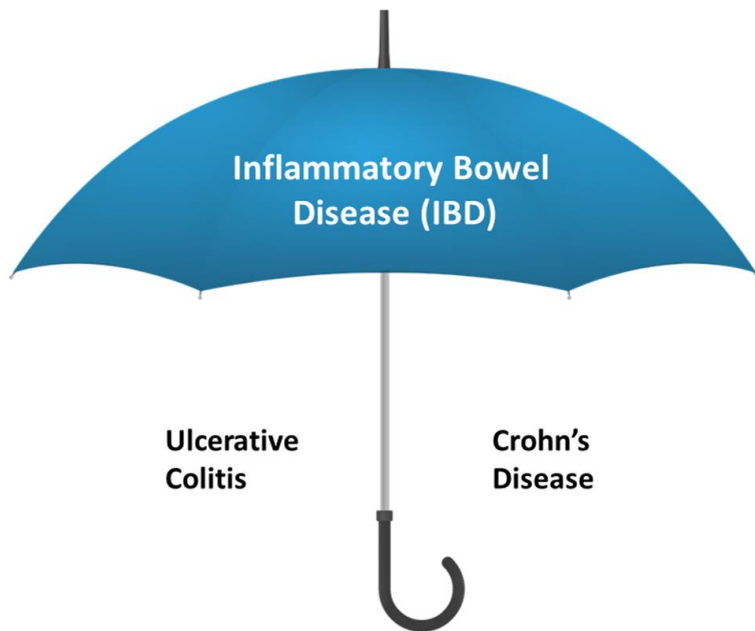
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About IBD



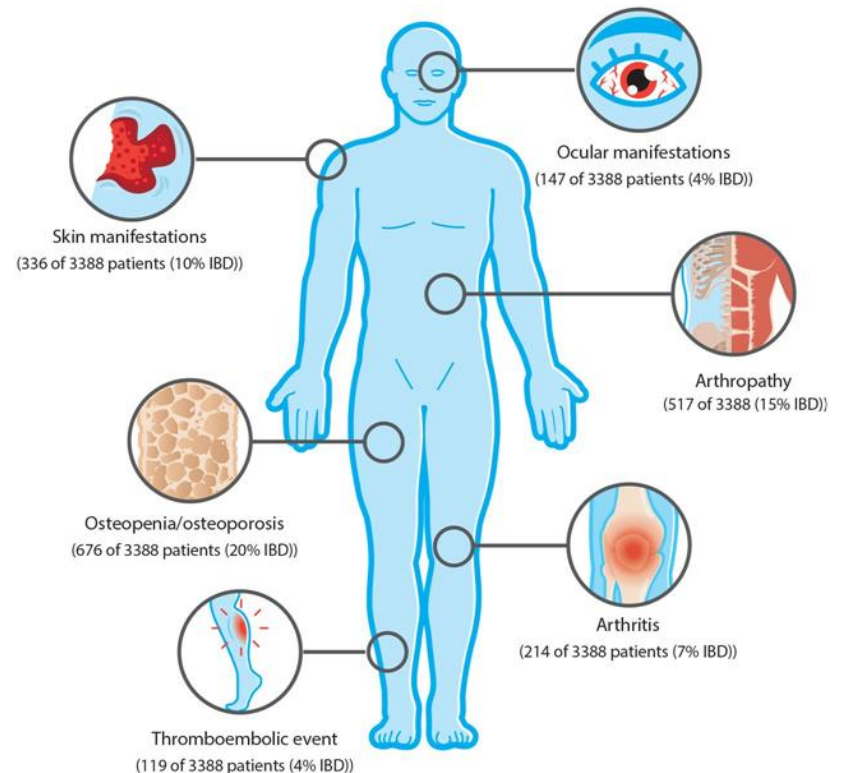
- Inflammatory Bowel Disease (IBD) is an umbrella term for the autoimmune diseases that affect the Gastrointestinal (GI) tract.
- Ulcerative colitis (UC) and Crohn's Disease are the two main diseases.
- They cause chronic inflammation of the intestines that can lead to serious complications.
- IBD is diagnosed most often in teens and young adults but can occur in children and older adults.
- Approximately 1.6 million Americans are currently living with IBD.

UC vs Crohn's Disease

| | Ulcerative Colitis | Crohn's Disease |
|-----------------|--|--|
| Site of Disease | Rectum and colon | Any part of the digestive system from the mouth to the anus, most commonly in the small bowel |
| Pathology | Ulcerations are shallow affecting the mucosa and submucosa | Inflammation is transmural, affecting the full thickness of the bowel; crypt abscesses and granulomas are seen |
| Symptoms | Bloody diarrhea, abdominal pain, weight loss, fever, fatigue | Abdominal pain, diarrhea, weight loss, fever, fatigue |
| Complications | Heavy/persistent bleeding and diarrhea causing anemia and fluid/electrolyte losses, bowel perf, toxic megacolon | Strictures, fistulas, fissures, abscesses, aphthous ulcers, perianal disease, growth delays in children, malabsorption and malnutrition, including deficiencies of vitamins and minerals |
| Endoscopic view | Damaged areas are continuous starting at the rectum and spreading further into the colon; friable, bleeding tissue | Cobblestone appearance- damaged areas appear in patches that are next to areas of healthy tissue; seen mostly in ileum and R colon |

Extraintestinal Manifestations

- Extraintestinal Manifestations are complications that occur outside the GI tract.
- These include mouth ulcers, eye problems, arthritis/bone, skin problems and primary sclerosing cholangitis (PSC).
- PSC is a chronic disease that causes scarring of the bile ducts. It is not always associated with IBD.
- Patients sometimes present with an extraintestinal manifestation instead of an intestinal symptom.



See more at

www.crohnscolitisfoundation.org/what-is-ibd/extraintestinal-complications-ibd

Diagnosing IBD

- Blood tests
 - CBC- anemia and infection
 - CMP - malnutrition and liver/bile duct problems
 - ESR/CRP - inflammatory markers
 - Stool tests
- Imaging
 - Small bowel series, CT, MRI
- Endoscopic evaluation and biopsies
 - EGD
 - Colonoscopy
 - Flexible sigmoidoscopy
 - ERCP
 - Capsule endoscopy
 - Chromoendoscopy

IBD and IBS

- IBD and IBS (Irritable Bowel Syndrome) are not the same thing.
- Sometimes these are used incorrectly, even by healthcare professionals.
- They have similarities such as digestive symptoms and can both run in families.
- Approximately 15% of the population has IBS which means 15% of people with IBD can also have IBS.
- People with IBS can get IBD or colorectal cancer but are at average risk for both.
- Younger adults are often misdiagnosed with IBS when they may have mild IBD, colorectal cancer or intestinal carcinoids.

IBD and IBS, Not the Same Thing

| IBD | IBS |
|---|--|
| Classified as a disease | Classified as a syndrome, defined as a group of symptoms |
| Can cause destructive inflammation and permanent harm to the intestines | Does not cause inflammation; rarely requires hospitalization or surgery |
| The disease can be seen during diagnostic imaging | There is no sign of disease or abnormality during an endoscopic exam |
| Increased risk for colon cancer | No increased risk for colon cancer or IBD |
| Common symptoms: abdominal pain, anemia, bleeding, diarrhea and weight loss | Common symptoms: abdominal pain, constipation and/or diarrhea, mucus in the stool and bloating |

From the Crohn's and Colitis Foundation www.crohnscolitisfoundation.org/what-is-ibd/ibs-vs-ibd

Treatment for IBD

- The two goals of therapy are the achievement of remission (induction) and the prevention of disease flares (maintenance).
- The care of a patient with IBD can be either medical or surgical in nature or, in many patients, a combination of both.

- Medscape



Medications for IBD

- **Aminosalicylates (5-ASA)** – sulfasalazine, balsalazide, mesalamine and olsalazine are anti-inflammatory medications.
- **Corticosteroids** - prednisone, prednisolone and budesonide affect the body's ability to begin and maintain an inflammatory process.
- **Immunomodulators** - azathioprine, 6-mercaptopurine (6-MP), and methotrexate modify the activity of the immune system so that it cannot cause ongoing inflammation.
- **Biologic therapies** - adalimumab, certolizumab pegol, golimumab and infliximab target an inflammatory protein called tumor necrosis factor (TNF); natalizumab and vedolizumab work by blocking certain types of white blood cells from getting into inflamed tissues.
- **Antibiotics** - ciprofloxacin and metronidazole may be used for some people w/ Crohn's for complications such as abscesses, fistulas and pouchitis.

Surgical Treatment for IBD

- Surgery is recommended when medications can no longer control symptoms, when there is an intestinal obstruction, when other complications arise and when precancerous cells are found.
- The goal of surgery for UC is to remove the colon and rectum to cure colonic disease and prevent cancer.
- The goal of surgery for Crohn's Disease is to conserve as much bowel as possible while removing the source of inflammation/ complication.

Surgical Treatment for UC

- Total proctocolectomy is the surgery of choice. The colon and rectum are removed with either the creation of an internal pouch or an end ileostomy.
- An ileal pouch anal anastomosis (IPAA) is done by creating an internal pouch, called a J pouch, from the last part of the small intestine. It is connected to the anus to serve as a reservoir for stool. Patients will often have surgery in 2 stages and have a temporary loop ileostomy for a few months.
- The pouch acts as the new rectum but is not as effective. Patients with an internal pouch can get inflammation in the pouch (pouchitis) and cancer (though rare).
- An end (permanent) ileostomy is created by bringing the end of the small intestine through the abdominal wall onto the skin to divert stool.

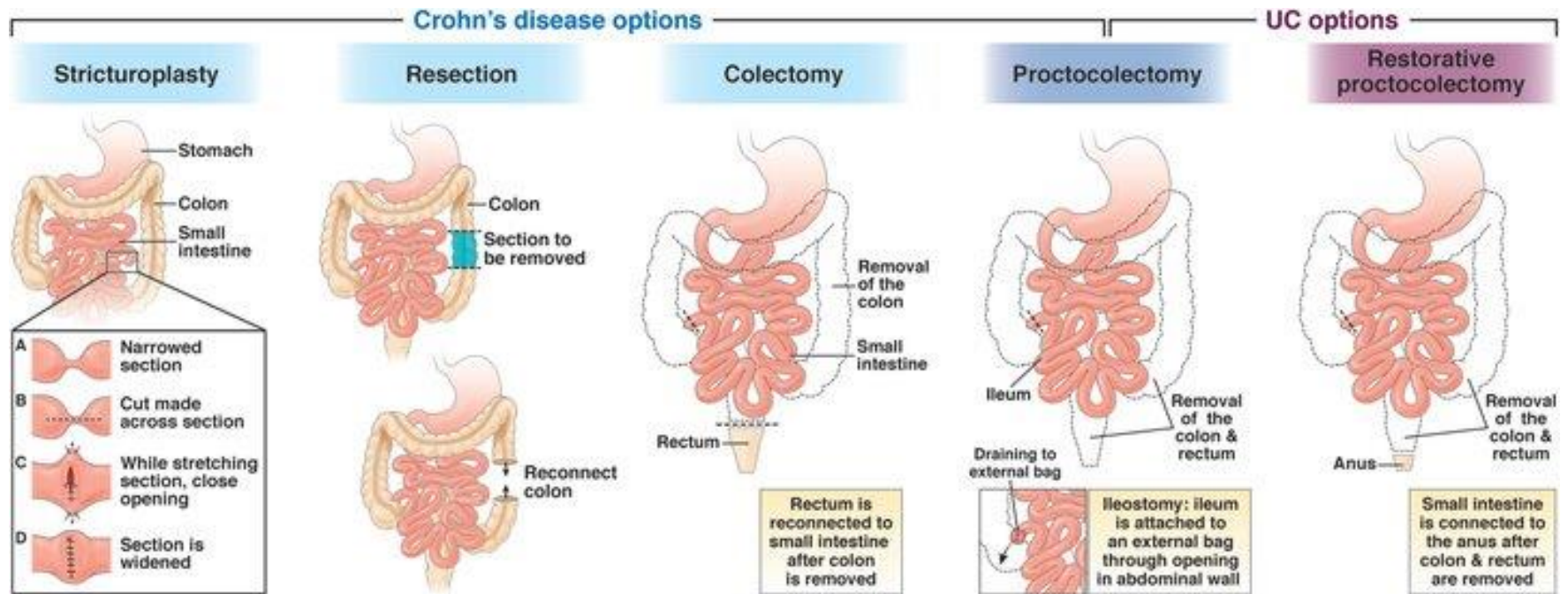
See www.crohnscolitisfoundation.org/

Surgical Treatment for Crohn's Disease

- Surgery depends on the reason for surgery, severity of illness and location of the disease in the intestines.
- Surgeries include:
 - Proctocolectomy
 - Colectomy
 - Small and large bowel resection
 - Strictureplasty
 - Fistula removal

See www.crohnscolitisfoundation.org/

Surgical Treatment for IBD



From the American Gastroenterological Association (AGA)

IBD and Cancer Risk

IBD and Cancer Risk

- Inflammation of the colon can cause continuous turnover of cells in the intestinal lining, which increases the chance of irregularities that may lead to cancer. - Crohn's and Colitis Foundation
- Some of the medications used to treat IBD can increase the risk for certain cancers.
- Colorectal cancer, is the most common cancer risk, but people with IBD can also be at increased risk for bile duct cancer, small bowel cancer, skin cancer and lymphoma.

IBD and Increased CRC Risk

- 8 to 10 year history of ulcerative colitis or Crohn's disease in the colon, [Crohn's colitis](#).
- Severe and/or extensive colon inflammation
- Dysplasia, or changes in cells that are precursors of cancer, in the colon or rectum
- Primary Sclerosing Cholangitis
- Family history of colorectal cancer

IBD and Other GI Cancers

- Primary Sclerosing Cholangitis is associated with a significantly increased risk of malignancy, mainly cholangiocarcinoma, gallbladder carcinoma, hepatocellular carcinoma and colorectal cancer.¹
- Crohn's disease is a risk factor for adenocarcinoma in the small bowel.

¹Fung, B. M., Lindor, K. D., & Tabibian, J. H. (2019). Cancer risk in primary sclerosing cholangitis: Epidemiology, prevention, and surveillance strategies. *World journal of gastroenterology*, 25(6), 659–671. <https://doi.org/10.3748/wjg.v25.i6.659>

Cancers Linked to Medications used to Treat IBD

- Skin Cancer (non-melanoma and melanoma) rates are higher for IBD patients taking immunosuppressive medications (ex. azathioprine, 6-mercaptopurine, methotrexate and anti-TNF agents) compared to the general population.
- There is a risk for lymphoma for a small percentage of patients on immunomodulators.

Surveillance for Cancer

- Surveillance reduces mortality by detecting colorectal cancer in early stages.
- Patients who have had symptoms for eight years or longer should get a colonoscopy every one to two years.
- Patients with PSC, not related to IBD, should speak to their doctor about undergoing annual surveillance colonoscopies.
- [Regular colonoscopies](#) can find precancerous tissue (high grade dysplasia) and early cancers, making it easier to treat.

Advances in Cancer Screening

- There have been several advances in technology that can be used during a colonoscopy to improve the quality of surveillance and help identify cancer or precancerous lesions in the colon.
- A chromoendoscopy may be done to help physicians find polyps or precancerous changes during a colonoscopy.
- During a chromoendoscopy, a blue liquid dye is sprayed into the colon to highlight and detect slight changes in the lining of the intestine.

Nursing Implications:

- Know the risk factors for the different types of cancers associated with IBD.
- Educate your patients on the appropriate follow up and surveillance.
- Consult a GI Oncology Nurse Navigator for patients diagnosed with GI cancer.

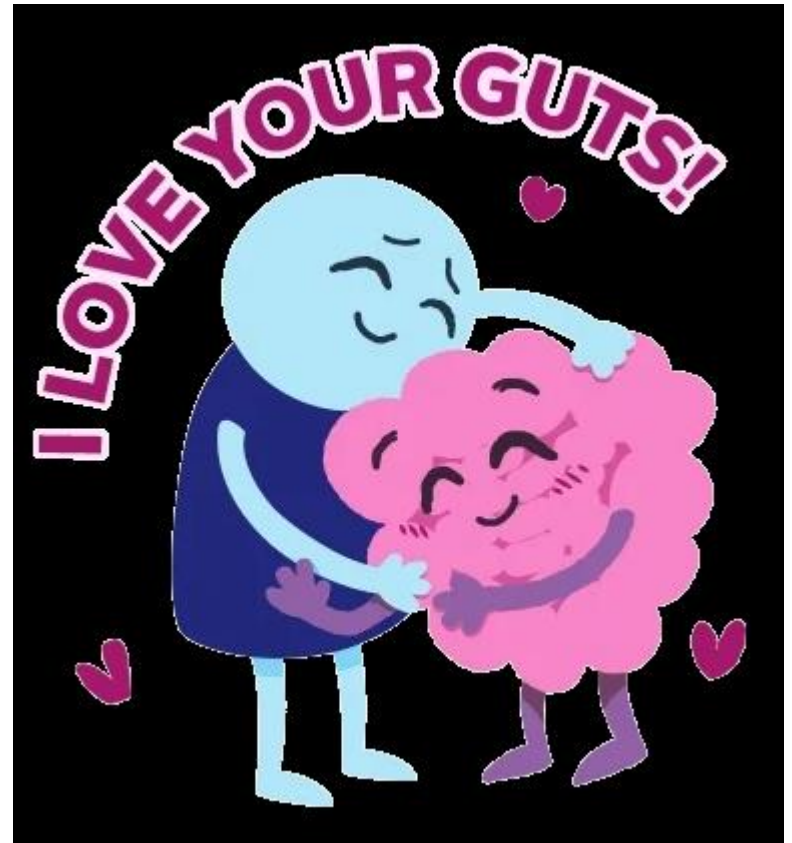
Resources

- American Cancer Society www.cancer.org
- American College of Gastroenterology
<https://gi.org/topics/inflammatory-bowel-disease/>
- American Gastroenterological Association
<https://gastro.org/practice-guidance/gi-patient-center/topic/inflammatory-bowel-disease-ibd/>
- American Society for Gastrointestinal Endoscopy (ASGE)
www.asge.org/home/for-patients
- American Society of Colon & Rectal Surgeons
<https://fascrs.org/patients/diseases-and-conditions>
- Crohn's and Colitis Foundation
www.crohnscolitisfoundation.org/
- GI Cancers Alliance www.gicancersalliance.org/

Crohn's and Colitis Week is December 1-7

Crohn's & Colitis Awareness Week was created in 2011 by U.S. Senate Resolution 199, "A resolution supporting the goals and ideals of Crohn's & Colitis Awareness Week, December 1-7." Crohn's & Colitis Awareness Week is designed to bring together the IBD community around a shared goal—to raise awareness and educate the public about IBD as part of our mission to see a future free of Crohn's and colitis. Go to the [Crohn's and Colitis Foundation](#) for more information.

Add a Sticker to your Social Media Posts



<https://giphy.com/CrohnsColitisFoundation>