

## INTESTINAL COMPLICATIONS

The complications of Crohn's disease and ulcerative colitis (collectively known as inflammatory bowel disease, or IBD) are generally classified as either local or systemic. The term "local" refers to complications involving the intestinal tract itself, while the term "systemic" (or extraintestinal) refers to complications that involve other organs or ones that affect the patient as a whole.

Some intestinal complications of IBD occur in both ulcerative colitis and Crohn's disease, although they may occur more commonly in one than in the other. Not everyone with IBD will experience these complications. However, early recognition—and prompt treatment—are key. The intestinal complications of IBD tend to occur when the intestinal inflammation:

- is severe
- extends beyond the inner lining (mucosa) of the intestines
- is widespread
- is chronic (of long duration)

### LOCAL COMPLICATIONS OF ULCERATIVE COLITIS

- **PERFORATION (RUPTURE) OF THE BOWEL** Intestinal perforation occurs when chronic inflammation and ulceration of the intestine weakens the wall to such an extent that a hole develops in the intestinal wall. This perforation is potentially life-threatening because the contents of the intestine, which contain a large number of bacteria, can spill into the abdomen and cause a serious infection called peritonitis. In colitis, this complication is generally linked with another one, toxic megacolon (*see below*). In Crohn's, it may occur as a result of an abscess or fistula.
- **FULMINANT COLITIS** This complication, which affects less than 10% of people with colitis, involves damage to the entire thickness of the intestinal wall. When severe inflammation causes the colon to become extremely dilated and swollen, a condition called *ileus* may develop. The normal contractions of the intestinal wall stop temporarily, and abdominal distension occurs. As the condition progresses, the colon loses muscle tone and begins to expand. Abdominal X-rays reveal trapped gas inside the paralyzed sections of intestine. In patients with Crohn's disease, the condition is called *toxic colitis* and is rare.
- **TOXIC MEGACOLON** Considered the most serious complication of IBD, this is the most extreme (and potentially life-threatening) form of fulminant colitis. The colon dilates, losing its ability to contract properly and move intestinal gas along. Abdominal distension is severe and patients are acutely ill— with high white blood cell count, high fever, and pain and tenderness in the abdomen. Immediate medical attention is essential. The goal of treatment is to "decompress" the bowel in order to prevent rupture. A nasogastric tube may be used to suction out excess air. Surgery may be indicated if the patient does not improve within 24 hours. If the intestine ruptures, the risk of death is great. However, with prompt treatment, fewer than 4% die. Toxic megacolon is a relatively rare complication, occurring more commonly in elderly patients than in younger ones and in colitis patients than Crohn's patients.
- **INCREASED RISK OF COLORECTAL CANCER** About 5% to 8% of people with ulcerative colitis will develop colorectal cancer within 20 years after diagnosis of their disease. (For the general population, the risk of colorectal cancer is between 3% and 6%.) The risk of colorectal cancer increases with the duration and severity of the disease. A link between colorectal cancer and Crohn's disease is less strong, but it applies more to those whose disease affects the colon or those with Crohn's colitis (Crohn's disease that *only* affects the colon).



## LOCAL COMPLICATIONS OF CROHN'S DISEASE

- **INTESTINAL OBSTRUCTION** The most common complication of Crohn's disease, obstruction may arise from swelling and the formation of scar tissue. The result is thickening of the bowel wall and a narrowed intestinal passage. These narrowed areas are called *strictures*. Strictures may be mild or severe, depending on how much they obstruct the passage of the bowel's contents. Symptoms of intestinal obstruction include crampy abdominal pain, frequently associated with vomiting, and bloating. Medications may relieve the obstruction by reducing the local area of inflammation. If the obstruction is severe and does not respond to medical treatment, surgery may be required. Surgery also may be indicated if the blockage recurs frequently.
- **ABSCESSSES** An abscess is a localized pocket of pus caused by infection from bacteria. More common in Crohn's than in colitis, an abscess may form in the intestinal wall—sometimes causing it to bulge out. Visible abscesses, such as those around the anus, look like boils and treatment often involves lancing. Symptoms of an abscess include swelling, tenderness, pain, and fever. Once the abscess is drained, the symptoms resolve. Antibiotics are usually given to clear up the remaining infection.
- **FISTULAS** Deep sores or ulcers within the intestinal tract may turn into tracts—called fistulas—that connect different parts of the intestine. Fistulas also may tunnel into the surrounding tissues of the bladder, vagina, or skin. These abnormal passages, which affect about 30% of people with Crohn's disease, often become infected. If the fistula is small, antibiotics and other medical treatment may be adequate. Large or multiple fistulas, on the other hand, may require surgery, especially if they cause persistent symptoms.
- **FISSURES** These are tears or cracks in the lining of the anus which may be superficial or deep. Unlike fistulas, fissures are only in the area of the anus. They can cause mild-to-severe rectal pain and bleeding, particularly during bowel movements. Anal fissures are generally treated with topical creams or sitz baths.
- **MALABSORPTION & MALNUTRITION** Another complication in people with Crohn's disease is related to deficiencies in nutrients such as proteins, vitamins, and fats. Crohn's disease usually affects the small intestine, which is the part of the gut that absorbs most nutrients. Malabsorption and malnutrition usually do not develop unless the disease is extensive and of long duration—conditions that may contribute to inadequate dietary intake, intestinal loss of protein, and poor absorption of nutrients. Medical treatment is usually effective in the replacement of nutrients.
- **BILE SALT DIARRHEA** The ileum (lower end of the small intestine) is the part of the intestine most commonly involved in Crohn's disease. This is the principal area for intestinal absorption of bile acids, compounds that help transport and absorb fats. If these compounds become deficient, fat malabsorption and more diarrhea can result. Cholestyramine, which works by binding the bile acids, is the treatment of choice for this type of diarrhea.
- **SMALL INTESTINAL BACTERIAL OVERGROWTH (SIBO)** This is a condition in which excessive amounts of bacteria are present in the small intestine. These bacteria break down or digest food higher up than normal in the GI tract—a process that produces gas, abdominal pain, bloating, and diarrhea. SIBO, which also may occur in ulcerative colitis, usually resolves after a course of antibiotics.

**Many of these complications are rare—but if you notice a change in symptoms, be sure to see your doctor.**

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