

ANTIBIOTICS

Medical treatment for Crohn's disease and ulcerative colitis has two main goals: *achieving* remission (the absence of symptoms) and, once that is accomplished, *maintaining* remission (prevention of flare-ups). To accomplish these goals, treatment is aimed at controlling the ongoing inflammation in the intestine—the cause of IBD symptoms.

Antibiotics are frequently used as a primary treatment approach in IBD, even though no specific infectious agent has been identified as the cause of these illnesses. However, researchers believe that antibiotics can help control symptoms of IBD by reducing intestinal bacteria and by directly suppressing the intestine's immune system.

Antibiotics are effective as long-term therapy in some people with IBD, particularly Crohn's disease patients who have fistulas (abnormal channels between two loops of intestine, or between the intestine and another structure—such as the skin) or recurrent abscesses (pockets of pus) near their anus. Patients whose active disease is successfully treated with antibiotics may be kept on these as maintenance therapy as long as the medications remain effective.

Although helpful in people with Crohn's disease, antibiotics generally are not considered useful for those with ulcerative colitis, either for maintaining remission or in acute situations. Clinical trials have not shown that antibiotics have value in treating severe ulcerative colitis. The exception is *toxic megacolon*, a condition that places people at high risk for perforation. This life-threatening complication is characterized by a distended abdomen and an extremely inflated colon.

ORAL MEDICATIONS

Although there are several antibiotics that may be effective for certain people, the two most commonly prescribed in IBD are:

- Metronidazole (Flagyl®)
- Ciprofloxacin (Cipro®)

Both metronidazole and ciprofloxacin are broad-spectrum antibiotics that by definition fight a wide range of bacteria. Metronidazole is the most extensively studied antibiotic in IBD. As a primary therapy for active Crohn's, this drug has been shown to be superior to placebo (sugar pill) and equal to sulfasalazine—especially when the illness affects the colon.

Metronidazole also has been shown to reduce the recurrence of Crohn's for the first three months after ileum resection surgery. In more than 50 percent of those treated, metronidazole can be effective in managing perineal Crohn's (disease involving the pelvic area). Metronidazole also is used to suppress an overgrowth of *C. difficile*, a type of bacteria that causes inflammation.

Another indication for metronidazole is in people who develop “pouchitis” after ileal-pouch anal anastomosis surgery. In this procedure, after the colon is removed, an internal pouch is formed from the patient's ileum (the lowest part of the small intestine)—averting the need for an external appliance. Sometimes the pouch becomes severely inflamed; hence the term “pouchitis.”

Ciprofloxacin is commonly used to treat active Crohn's disease and pouchitis. *It is also far safer than metronidazole.*

ALTERNATIVE METHODS OF DELIVERY

Both metronidazole and ciprofloxacin are available in intravenous (IV) forms and may be used as such when needed.



SIDE EFFECTS

METRONIDAZOLE: Common side effects may include nausea, vomiting, loss of appetite, a metallic taste, diarrhea, dizziness, headaches, and discolored urine (dark or reddish brown). Another side effect of long-term use is tingling of the hands and feet, which may persist even after the drug is discontinued. If you develop such tingling, notify your doctor immediately. The medication should be stopped and not restarted.

CIPROFLOXACIN: Side effects may include headaches, nausea, vomiting, diarrhea, abdominal pain, rash, and restlessness, all of which are rare.

DRUG INTERACTIONS

People taking several different medicines, whether prescription or over-the-counter, should always be on the lookout for interactions between drugs. Drug interactions may decrease a medication's effectiveness, intensify the action of a drug, or cause unexpected side effects. Before taking any medication, read the label carefully. Be sure to tell your doctor about all the drugs you're taking (even over-the-counter medications or complementary therapies) and any medical condition you may have.

SPECIAL CONSIDERATIONS

- Metronidazole affects the breakdown of alcohol, which may result in nausea and vomiting. Therefore, avoid alcohol in any form while on this medication and until at least two days following the last dose.
- Ciprofloxacin can interact with antacids (such as Rolaids and Tums), so do not take both within the same few hours. It also interacts similarly with vitamin and mineral supplements that contain calcium, iron, or zinc. Taking antacids or these vitamins and minerals too close to a dose of ciprofloxacin can greatly reduce the effects of the antibiotic.
- Let your doctor know if you are pregnant before taking metronidazole or ciprofloxacin. They are often prescribed during pregnancy, but make sure to discuss these medications with your doctor first.
- Avoid exposure to the sun while on these antibiotics. When you go outside, wear sunscreen during daylight hours—and avoid tanning booths.
- Antibiotics can decrease the effectiveness of oral contraceptive medications (birth control pills).
- Antibiotics can dangerously interfere with the anticoagulant medication warfarin (Coumadin®), making the blood too thin and increasing the risk of bleeding. Adjustments in the dose of warfarin may be required if antibiotics are started. Be sure to inform any physician prescribing antibiotics for you if you are taking warfarin.

The Crohn's & Colitis Foundation of America provides information for educational purposes only. We encourage you to review this educational material with your health care professional. The Foundation does not provide medical or other health care opinions or services. The inclusion of another organization's resources or referral to another organization does not represent an endorsement of a particular individual, group, company or product.