

Fact Sheet

News from the IBD Help Center

ANTIBIOTICS

Medical treatment for Crohn's disease and ulcerative colitis has two main goals: achieving remission (control or resolution of inflammation leading to symptom resolution) and then maintaining remission. These goals should be achieved with as few side effects and as little risk as possible.

Antibiotics are often used in the management of IBD, both to treat disease-related intestinal infections, and occasionally to address intestinal inflammation or disease complications. Infections can mimic the symptoms of an IBD flare. Therefore, your doctor will often check for a variety of intestinal infections when there is a change in your symptoms. The most frequent intestinal infection associated with IBD is *Clostridium difficile* (*C. diff*), a bacteria that can be acquired anywhere and requires antibiotic treatment. In addition, *Girardia lambia*, as well as a select group of other parasites and bacteria, can also cause infections. These intestinal infections most often require a stool sample for detection.

In some situations, antibiotics are occasionally used to manage the inflammation or complications of IBD. While no specific infectious agent has been identified as a cause of Crohn's disease or ulcerative colitis, many researchers believe that antibiotics can help control symptoms of IBD by reducing intestinal bacteria, subsequently reducing the drive of the immune system in the intestine.

In Crohn's disease, antibiotics may also be used in patients who have abscesses (pockets of pus) or fistulas (tunneling from affected bowel to another structure like the skin, bladder, or another loop of bowel), as these features are impacted by bacteria. Antibiotics may also be used after surgery in Crohn's disease for three months or more to help prevent recurrence of disease. Finally, in individuals who have a "J-pouch" after colectomy (surgical procedure to remove part of the colon) for ulcerative colitis, inflammation can develop in the pouch (pouchitis). Pouchitis is often effectively managed with antibiotics.

Medication Details

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

- Metronidazole (Flagyl®)
- Ciprofloxacin (Cipro®)
- Vancomycin (Vancocin®)
- Rifaximin (Xifaxan®)

Both metronidazole and ciprofloxacin are antibiotics that fight a wide range of bacteria inside and outside of the intestines. Vancomycin is frequently used for treatment of *C. difficile* colitis. Rifaximin is not absorbed by the body and thus only acts on bacteria in the intestines. These medications are frequently given orally but in some situations may be administered with an IV.

Side Effects and Special Considerations

Though generally very well tolerated, antibiotics may cause common side effects including nausea, vomiting, loss of appetite, rash, diarrhea, dizziness, and headaches. There are some side effects specific to each medication:

Metronidazole:

- May cause metallic taste and discolored urine (dark or reddish brown), which resolves when medication is completed.
- With long-term use, there is a risk of a neuropathy causing a 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.
- 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:

- Tendonitis (pain and inflammation of the tendons), particularly in the Achilles tendon (that connects the calf muscles to the heel of the foot), and rupture of Achilles' tendon have been reported with long-term use, though this is rare.
- Ciprofloxacin can interact with antacids (such as Rolaids and Tums) and become less effective. Your doctor may advise you not to take both within the same few hours. It also interacts similarly with vitamin and mineral supplements that contain calcium, iron, or zinc.
- Avoid exposure to the sun while on ciprofloxacin. When you go outside, wear sunscreen during daylight hours—and avoid tanning booths.

Vancomycin

- Some individuals will experience what is known as red-man syndrome, where individuals experience flushing, redness of the skin, and itching on the face, neck and upper body.

Rifaximin

- Side effects are not common, but can include muscle tightening and joint pain.

Pregnancy

Let your doctor know if you are pregnant before taking antibiotics. They are often prescribed during pregnancy, but make sure to discuss these medications with your doctor first. Rifaximin, despite being poorly absorbed, is usually not given to pregnant women.

Preventing Infection Following Antibiotics

Despite treating infections, after receiving a course of antibiotics you may be more susceptible to new bacterial infections. All humans have trillions of bacteria living in the intestines, lungs, and on the skin, frequently in a harmonious and symbiotic relationship. Antibiotics can also eradicate good or helpful bacteria in the process of treating harmful infections. In some situations, especially after *C. difficile* colitis, the use of a probiotic can replenish helpful gut bacteria. All probiotics are not alike and even though they are over the counter, patients with IBD should not use probiotics without discussing it first with their physician.

Drug Interactions

People taking several different medicines, whether prescription or over-the-counter, should always consider interactions between drugs. Drug interactions may decrease or increase a medication's effectiveness, or cause unexpected side effects. Before taking any medication, ask your doctor and your pharmacist if there are any reactions to note with your existing medications. Be sure to include over-the-counter medications and complementary or alternative therapies when discussing your medications.

One special note is for people taking the blood thinning anticoagulant warfarin (Coumadin®). Antibiotics can dangerously interact with these medications, making the blood too thin and increasing the risk of bleeding. Adjustments in the dose of warfarin may be required. Be sure to inform any physician prescribing antibiotics that you are taking warfarin.

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June, 2017