

Fact Sheet

News from the IBD Help Center

ANTIBIOTICS

Medical treatment for Crohn's disease and ulcerative colitis has two main goals: achieving remission (quickly healing the inflammation of the intestine, leading to an improvement in symptoms) and then maintaining remission (healing the inflammation of the intestine and feeling well in the longer term). These goals should be achieved with as few side effects and as little risk as possible.

Antibiotics are often used in the management of inflammatory bowel diseases (IBD) for many different reasons. Antibiotics treat infections that arise as a complication of the IBD itself, as a treatment of the infections that occur from the medications we use to treat the IBD, and sometimes to help treat the inflammation of the intestines that the disease itself causes. Infections can mimic the symptoms of an IBD flare. Therefore, your doctor will often check to see if an infection may be the cause of the change in your symptoms.

An infection that patients with IBD commonly suffer from is *Clostridium difficile* (*C. diff*). *C. diff* is a bacteria that attacks the intestines and can cause fever, abdominal pain, cramping, diarrhea, and bloody stools. This infection requires antibiotic treatment. In addition, *Giardia lamblia*, as well as some other parasites and bacteria, can cause infections that require antibiotic treatment.

In some situations, antibiotics are used to manage the inflammation or complications of IBD. While no specific infection is known to cause Crohn's disease or ulcerative colitis, many researchers believe that antibiotics can help control symptoms of IBD by reducing the amount of intestinal bacteria, or changing the bacterial makeup of the gut, which may then reduce the activity of an overactive immune system that is causing damage to the intestine.

In Crohn's disease, antibiotics may also be used in patients who have abscesses (pockets of pus) or fistulae (connection of diseased bowel to another body part like the skin, bladder, vagina, or another piece of bowel), as these complications are impacted by bacteria. Antibiotics may also be used after surgery in Crohn's disease 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. Depending on the type of infection being treated, these medications can be given orally or through the vein (intravenously).

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. It is always important to inform your prescribing physician of any side effect you may experience. There are some side effects specific to each medication:

Metronidazole:

- May cause metallic taste and discolored urine (dark or reddish brown), which resolves after taking the medication.
- With long-term use, there is a risk of neuropathy, a condition that causes a tingling feeling of the hands and feet. This condition 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, and other unpleasant symptoms. 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 the Achilles' tendon have been reported with long-term use, though this is rare.
- Ciprofloxacin can interact with antacids (such as Roloids® 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. This is rare and occurs when the medication is administered through an IV, or intravenously.

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, taking antibiotics may make you more susceptible to new bacterial infections.

All humans have trillions of bacteria living in the intestines, lungs, and on the skin that work together and cause no harm to the body. Antibiotics can also kill good or helpful bacteria and allow other bacteria, like *C difficile*, to take over. Your provider may recommend the use of a probiotic to try and replenish helpful gut bacteria; however, they are not FDA approved and their effectiveness is still in question and yet to be proven. Before taking a probiotic, it is very important to speak with your provider.

Drug Interactions

People taking several different medicines, whether prescription or over-the-counter, should always consider interactions between drugs. Drug interactions may change how well a medication works, or cause unexpected side effects, some more harmful than others. Before taking any medication, ask your doctor and 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 (supplements, herbals, vitamins, etc.) when discussing your medications.

One special note is for people taking the blood thinner warfarin (Coumadin®). Antibiotics can dangerously interact with this medication, 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.

Disclaimer: *The Crohn's & Colitis Foundation provides information for educational purposes only, which is current as of the print date. We encourage you to review this educational material with your health care professional as this information should not replace the recommendations and advice of your doctor. 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.*

October 2018