

AMINOSALICYLATES

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. The aminosalicylate (5-ASA) drugs are a first line of therapy for both achieving and maintaining remission. However, because each person's disease is different, there is no "one-size-fits-all" treatment for IBD. Medical therapy must be tailored to the needs of the individual patient.

Aminosalicylates are compounds that contain 5-aminosalicylic acid (5-ASA). These drugs, which can be given either orally or rectally, interfere with the body's ability to control inflammation. They are effective in treating mild-to-moderate episodes of ulcerative colitis and Crohn's disease, as well as preventing relapses and maintaining remission.

ORAL MEDICATIONS

Sulfasalazine (Azulfidine®), the first aminosalicylate to be widely used for IBD, is effective in achieving and maintaining remission in people with mild-to-moderate disease. The active portion of the drug, 5-ASA, is bonded to sulfapyridine, a compound that delivers 5-ASA to the intestine but comes with disagreeable side effects in some patients, such as headache, nausea, and rash. However, sulfasalazine is inexpensive and effective for the many patients who can tolerate it. Researchers have also developed newer oral drugs that deliver 5-ASA without sulfapyridine. These include:

- mesalamine (Asacol®, Pentasa®, Lialda®)
- olsalazine (Dipentum®)
- balsalazide (Colazal™)

Up to 90 percent of people who cannot tolerate sulfasalazine are able to take other 5-ASAs.

ALTERNATIVE METHODS OF DELIVERY

In addition to conventional oral preparations, there are several other ways to deliver 5-ASA to the bowel. Patients with Crohn's disease or ulcerative colitis may have bowel inflammation in different locations, which is why the various 5-ASAs have been designed to be released in different areas of the bowel:

- **LOCAL MESALAMINE PREPARATIONS** are effective precisely because they bypass the stomach to avoid early digestion, and then release close to the inflamed section of the bowel. There, the medication coats the inflamed bowel lining, thus decreasing the inflammation.
- **ENEMA FORMULATIONS** (Rowasa®) allow mesalamine to be applied directly to the left colon. Rowasa is effective in mild-to-moderate colitis that affects only the left side of the colon. Up to 80 percent of patients with left-sided disease benefit from using this therapy once a day.
- **SUPPOSITORIES** (Canasa®) deliver mesalamine directly from the rectum up to the sigmoid colon (the lower part of the large intestine). A high proportion of patients with ulcerative proctitis—ulcerative colitis that is limited to the rectum and the lower end of the colon—will respond to mesalamine suppositories. These are usually given in single or twice-daily doses. A combination of mesalamine enemas and pills may be more effective than pills alone.
- **ORAL, DELAYED-RELEASE PREPARATIONS** (Pentasa) can release 5-ASA directly to the small intestine and colon, or to the ileum (the lower part of the small intestine) and/or the colon (Asacol), or to the colon only (Dipentum, Colazal, sulfasalazine).



SIDE EFFECTS

- **SULFASALAZINE:** Side effects may include headache, nausea, loss of appetite, vomiting, rash, fever, and decreased white blood cell count. Sulfasalazine can also decrease sperm production and function in men while they are taking the medication (sperm count becomes normal after the medication is discontinued). It has been rarely associated with inflammation of the pancreas (pancreatitis).
- **MESALAMINE:** Side effects may include abdominal pain and cramps, diarrhea, gas, nausea, hair loss, headache, and dizziness. People with kidney disease should use caution when taking mesalamine, as some studies have found that the medication may be linked to kidney problems. Patients on long-term Mesalamine therapy may be monitored regularly for any signs of decreased kidney function. Pancreatitis is rare side effect of mesalamine use.
- **OLSALAZINE:** Diarrhea is the most common side effect. It can be reduced by taking the medication with food. Less common side effects may include headache, rash, and fatigue. Even rarer are hair loss, pancreatitis, or inflammation of the tissue surrounding the heart (pericarditis).
- **BALSALAZIDE:** The most common side effects are headaches and abdominal pain. Less common are nausea, diarrhea, and vomiting.

Note: Similar rates of most of the side effects listed above have been seen in patients who received placebo (sugar pills) instead of balsalazide in clinical trials.

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. However, there are very few important drug interactions with these medications, with the exception of sulfasalazine.

SPECIAL CONSIDERATIONS

- Sulfasalazine cannot be used by people who are allergic to or cannot tolerate sulfa drugs (approximately one-third of people being treated). Other sulfa-containing drugs should be used with caution while taking sulfasalazine.
- Not only is every patient different, but a patient's therapeutic needs may change over time. Be sure to communicate regularly with your doctor, and stay informed about all of the medical and surgical options available to you.
- Patients who stop their 5ASAs are likely to suffer a relapse. Only stop your medication with the approval of your doctor.
- 5-ASAs are generally safe during pregnancy and nursing.
- Because IBD is a chronic condition, it is advisable to stay on your medications even when you are feeling well.

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