

Immunosuppressants

Imuran (azathioprine) and Purinethol (6-mercaptopurine or 6-MP)

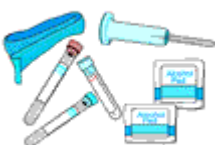


Introduction:

Inflammatory Bowel Diseases (IBD) such as Crohns disease and ulcerative colitis are caused by an overactive immune system that results in inflammation of the digestive tract. Medications that suppress the immune system are used to help control the disease. Azathioprine and 6-MP are two of those immunosuppressive drugs. 6-MP was originally used as a treatment for cancer as well as to prevent rejection of transplanted organs. Azathioprine is also used to prevent rejection in patients with organ transplants. Azathioprine is broken down into 6-MP. Both of these medications work by decreasing the number of white blood cells (WBC) in the body. The WBC's are the infection fighting cells that are responsible for the inflammation and symptoms associated with IBD. Although 6-MP and azathioprine do suppress the immune system, they are not steroids and do not have the same side effects as steroids.

What to expect:

If you are started on one of these medications, it usually means that your disease has been somewhat difficult to get under control. You are probably on a 5-ASA (mesalamine) type of medicine such as Rowasa, Pentasa, Asacol or sulfasalazine. You could be on antibiotics, such as Flagyl (metronidazole) or Cipro (Ciprofloxacin). You may already be on prednisone. Azathioprine and 6-MP may take up to 3 months before any improvement occurs so your current regimen of medications will either remain the same or be increased until we start to see the effect of these immunosuppressants.



Because these medications lower the number of WBC's (the medical term is leukopenia) we will monitor you closely for changes in your WBC count.

These drugs can also cause a drop in your red blood cells (which would indicate anemia) and platelets (blood clotting cells). Once you begin therapy, a complete blood count (CBC) that measures all these parameters should be drawn about 2 weeks after starting the medicine or whenever the dose of medicine is changed. It may take a few adjustments in the dose to get you on the right amount. Once you are on a stable dose of medication and your blood counts are okay, you can decrease the frequency of blood draws to every few months. It is very important that this blood be drawn: your white count can drop dangerously low and put you at risk for an infection. Please let your family doctor know that you are on these medicines in case you ever get sick from something that is unrelated to your IBD. It would be a good idea to wear a medic alert bracelet to identify you as a patient with Crohns disease who is using immunosuppressants.



The azathioprine and 6-MP are broken down by the liver, which is the filtering organ of the body. Because of this, it is also important to get blood tests that monitor the function of your liver. These can be done at the same time the other blood tests are drawn.

Side effects:

The most *common* side effect of these medicines is a lowering of the WBC. It may only require a slight adjustment in the dose of your medication to alleviate this problem. But that is why it is important to get blood counts drawn as prescribed.

The most *serious* side effect, but one that is less common is pancreatitis. This occurs in about 5% of patients. It usually occurs soon after starting the medicine. The symptoms of pancreatitis are nausea, vomiting, stomach and/or back pain. If this should happen to you, please let us know right away. Usually, the pancreatitis goes away when you stop the medicine, but if you should get pancreatitis, it may mean that you cannot take either of these medicines again.

Sometimes nausea or a loss of appetite can occur when you take this medicine. It may require a "getting used to" period and will improve after a short time. If nausea occurs, sometimes taking the medicine at night, before you go to bed is helpful. Rarely, the liver may become overwhelmed by the work it does to filter these medicines. You usually do not know this is a problem until the blood work results come back. Rarely, your skin or the whites of your eyes may become yellow ("yellow jaundice"). This will usually improve with a change in the dose of medicine. But it will be necessary to monitor these liver function tests until they are back to normal.

Things to know:

If you take allopurinol (for gout), it may be necessary to adjust the dose of the azathioprine or 6-MP. If another doctor prescribes allopurinol for you, you must let us know, so we can adjust the Imuran or 6-MP accordingly.

If you drink large quantities of milk, it may effect how the 6-MP or azathioprine works. Do not take this medicine at the same time you drink milk.

If you have ever had a serious reaction to either 6-MP or azathioprine (such as pancreatitis) you should probably not take the other drug.

6-MP and azathioprine have been known to cause certain cancers when used in very high amounts as antirejection drugs and chemotherapy agents, but because the dose used in IBD is much lower, the risk of cancers is very low.

If you take an immunosuppressant such as Imuran or 6-MP, please be cautious when receiving vaccines. Certain live vaccines (such as yellow fever vaccine) can actually make you sick with the disease you are trying to prevent. Other vaccines, such as the hepatitis vaccine, may not be as effective because the immunosuppressant may prevent your body from responding the way that it is supposed to. Talk to your family doctor, or call us if you have any questions.

Although there are many precautions to be taken with these medications, they are generally safe and well tolerated and are quite effective in maintaining remission of Crohns and colitis. They have also been shown to be effective in preventing the recurrence of Crohns disease in patients who require intestinal surgery.

Pregnancy

There is much controversy about the use of these immunosuppressants before and during pregnancy. The decision to use 6-MP or azathioprine during this time is a personal decision, but the risks and benefits should be carefully looked at.

Generally speaking, this class of immunosuppressants is relatively safe to use during pregnancy. The risk for birth defects is minimal. For a woman taking one of these immunosuppressants during pregnancy and whose disease is under good control, the chance of miscarriage in the first trimester is the same compared to a woman who is pregnant, who is not taking one of these medicines, but whose IBD is active. We prefer the mother to be healthy at the start of the pregnancy: "Healthy Mother, Healthy Baby". If you are thinking seriously about having a baby, please ask to see our "Pregnancy and IBD" packet.