

Medications

In addition to liquid diets, there are also medicines that may help. Here is a general list of currently available treatments for Crohn's disease in children, including how they work and when they might be used.

5-ASAs (5-aminosalicylic acid)

This medicine may be used to help reduce inflammation. It is usually used for mild to moderate symptoms. It is useful to help lessen symptoms and restore health (induction of remission), but is not useful for keeping your symptoms from returning (maintaining remission). It may take 4–8 weeks before you start to feel better.

5-ASAs are usually taken daily, either orally or rectally (as an enema or suppository). They are considered a safe treatment option when used long-term.

Examples of 5-ASAs include: mesalamine, balsalazide, olsalazine and sulfasalazine.

Corticosteroids

Corticosteroids are also used to help reduce inflammation. They help lessen symptoms and restore health (induction of remission) in moderate and severe Crohn's disease. They are not, however, meant to be used long-term due to side effects.

Corticosteroids may start relieving symptoms within 1–3 weeks. Remission (having no symptoms) may be reached within 6–8 weeks.

Usually your doctor will want to see you again in 2–3 weeks after you have started taking corticosteroids, to see how you are doing and whether you are getting good results from the medicine or if you are still having any problems.

Corticosteroids are taken by an intravenous tube, orally or rectally (eg, an enema). The most commonly reported side effect is infection. Other related problems include bone mineral loss (which may be treated with supplements of calcium and vitamin D), slowing of growth in children, increased appetite, weight gain, disturbed sleep pattern, a so-called 'moon-shaped face' due to fluid retention in the skin (called Cushing's syndrome), or acne.

Examples of corticosteroids include: prednisone, methyl prednisolone and hydrocortisone.

For disease at the end of the small intestine, or right side of the colon, budesonide (a glucocorticosteroid drug) may be used and is considered to have fewer safety concerns.

Immunosuppressants

Two-thirds of people with IBD (Crohn's disease and ulcerative colitis) will take an immunosuppressant at some point. These medicines help keep down inflammation by lowering the activity of the immune system. Immunosuppressants are most helpful for keeping symptoms from returning (maintenance of remission) and are 'steroid-sparing', meaning they can help reduce the dose of corticosteroids needed. They are often used to treat moderate to severe Crohn's disease.

Immunosuppressants take a while to start working (approximately 2–4 months), so they are often taken along with corticosteroids. They are either taken by mouth, or orally (thiopurines such as azathioprine or 6-mercaptopurine, also known as 6-MP) or as injections (methotrexate).

It is important to keep taking your medication, as there are good benefits. However, some people may have to stop because of side effects. It is important to discuss this with your doctor first. Side effects may include: nausea, myelosuppression (lowering the bone marrow's ability to make blood cells, which can require frequent blood tests) or risk of infection such as viral herpes (eg, cold sores). Thiopurines also have a risk of pancreatitis (inflammation of the pancreas). Treatment with azathioprine or 6-mercaptopurine may also bring about a slight increased risk of lymphoma (cancer of the lymphatic system). Regular monitoring, therefore, is important.

If you have any of these problems, or any other symptoms while taking this medicine, contact your doctor right away. Your doctor will also probably want to monitor you regularly while you are taking this medicine.

Examples of immunosuppressants include: azathioprine, 6-mercaptopurine (6-MP) and methotrexate.

Anti-TNF α

Current anti-TNF drugs are used for moderate to severe Crohn's disease. They work quickly (generally within 2–4 weeks) and can be helpful in people with inflammation limited to the gut wall and also if you have a fistula. They may also be used in people in whom other treatments haven't worked well.

Anti-TNFs can be taken as either subcutaneous injections (given at home) or through a drip (given in the hospital).

Before taking this medicine, your doctor will ask to screen you for tuberculosis with a chest X-ray and/or a skin test. There is a risk of infection, although it is lower than that associated with steroid use. There may also be an allergic reaction causing joint pain, rash, or a short-term (transient) reaction or fever. Other possible problems include heart failure in the elderly (watch for swollen ankles or shortness of breath) or skin problems.

If you are taking anti-TNF medicine and experience any symptoms such as night sweats, cough or shortness of breath, contact your doctor.

There have been rare reports of cancers associated with biological therapy, but it is not yet known whether these were due to these medicines or to other medicine given at the same time. Research is ongoing to look at both possibilities.

Examples of anti-TNFs (in Europe) include: infliximab and adalimumab.

Medical devices

- **Apheresis (leukocytapheresis)**

Cells of the immune system called white blood cells (or leukocytes) defend the body against infections. In people with active IBD types of leukocytes called granulocytes and monocytes are often increased or over active. Large numbers of these cells enter the wall of the intestines and can release substances that cause bowel injury and stimulate inflammation. It is believed that the watery diarrhoea seen in severe IBD is a result of injury to the absorptive epithelium which makes it unable to absorb water.

- Apheresis, or leukocytapheresis, is performed with a medical device that selectively binds excess or activated granulocytes and monocytes from the blood. Blood is pumped from a vein in one arm (via a simple venopuncture) through a column containing cellulose acetate beads or a filter. This binds granulocytes and monocytes while the rest of the blood passes right through and is infused back into the body through the other arm. The outcome is a reduction in the number of inflammatory cells that can move from the blood into the intestinal wall. As a result, the symptoms of IBD are relieved, and the bowel gets a chance to heal.
- The treatment lasts for 1 hour and is usually given once a week for 5 weeks. It can be performed in hospital or in an outpatient setting.
- Leukocytapheresis involves mainly adults with IBD – there is some debate as to whether it is suitable for children. It can be used to reduce symptoms during a severe flare up, or in moderate to severe active IBD in which satisfactory effects have not been achieved with corticosteroids or other immunosuppressive therapy.
- Some temporary side effects can occur, such as low blood pressure, palpitations, and hot flushes; however, little is known about the long-term side effects of apheresis.
- The biological processes through which leukocytapheresis affects the course of disease remain largely unknown, and it is difficult to draw conclusions from the existing clinical trial data on how effective the treatment really is.

