

Fact Sheet

News from the IBD Help Center

CORTICOSTEROIDS

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 maintaining remission. To accomplish these goals, treatment is aimed at controlling the ongoing inflammation in the intestine—the cause of inflammatory bowel disease (IBD) symptoms.

Corticosteroids (often referred to simply as steroids but not to be confused with bodybuilding "steroids") were first introduced as therapy for IBD in the 1950s. Since that time, these powerful and fast-acting anti-inflammatory drugs have been frequently used in the treatment of acute flare-ups of disease. Corticosteroids reduce inflammation in both the intestine and throughout the body, including the joints, skin, and eyes. While 20%–30% of patients with acute symptoms of IBD will not respond to corticosteroids, most patients notice an improvement in symptoms within days of starting these medications.

Steroids are best suited for short-term control of IBD symptoms and disease activity, and they should not be used as primary therapy for long periods of time. Despite many patients experiencing improvement in symptoms with steroid use, corticosteroids are not effective in preventing complications or progression of disease. Other reasons for discouraging long-term steroid use are the side effects and risks, which increase with repeated or long-term use. The need for repeated courses of steroids often indicates that a patient's primary IBD medication regimen is insufficient and that a change in dosing or medication is likely needed.

Types of Steroids

There are several formulations of corticosteroids used in different situations.

Oral Preparations

- Prednisone (Deltasone[®]): is a common corticosteroid, administered as a pill.
- Budesonide (Entocort® EC): is a modified steroid, absorbed in the small intestine and colon. However, unlike
 prednisone, budesonide is rapidly metabolized by the liver, clearing 80%–90% of the medication and thereby
 reducing systemic exposure, side effects, and risks.
- Budesonide-MMX (Uceris™): is identical to budesonide, but with the addition of a special coating that protects the medication until it reaches the colon. By increasing medication delivery to the colon, this steroid is better suited for inflammation limited to the colon.

Rectal Preparations

Rectal preparations are used to treat localized inflammation of the anus, rectum, or sigmoid colon. They have the benefit of minimizing systemic (body-wide) exposure, with far fewer risks and side effects.

• Suppositories (hydrocortisone): can be very helpful for inflammation in the anus and rectum in both Crohn's disease and ulcerative colitis. Reduction of rectal inflammation (proctitis) can reduce the urgency and frequency of bowel movements associated with proctitis. Long-term use can be associated with weakening of the anorectal muscles, called steroid myopathy.

- Enemas (hydrocortisone, methylpredisone, Cortenema®): are helpful for inflammation higher than the rectum, which cannot be reached by suppositories. Like suppositories, steroid enemas can reduce inflammation of the distal colon and rectum with minimal systemic exposure, and subsequently less risk of side effects compared to prednisone.
- Rectal foams (hydrocortisone acetate, Proctofoam-HC®, Uceris™): are designed to improve retention of the drug within the rectum as well as distribution of the drug to the rectum and colon.

Side Effects

Corticosteroids exert their anti-inflammatory effect by suppressing immune system activity. As a result, steroids can leave individuals more susceptible to some infections, especially yeast infections of the mouth (thrush) or female reproductive organs, and urinary tract infections.

In addition, steroids also impact several other systems and can result in additional side effects. The risk and severity of these side effects are related to increasing dose and duration of steroid use. These side effects often resolve when the steroid is stopped or the dose is reduced. Exceptions are osteoporosis (weakening of the bones) and cataracts, which require additional treatment to correct should they occur. Side effects include:

- high blood pressure (hypertension)
- high blood sugar levels
- cataracts
- weight gain
- stretch marks
- acne
- growth disturbance in children

- rounding of the face ("moon face")
- increased facial hair
- insomnia (difficulty sleeping)
- mood swings
- psychosis and other psychiatric symptoms
- weakened bones (osteoporosis)

Because of these side effects, doctors frequently choose other medications as initial therapy.

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 are taking (even over-the-counter medications or complementary therapies) and any other medical condition you may have. For patients taking budesonide, avoid Cytochrome P450 3A4 inhibitors (e.g., ketoconazole, grapefruit juice), which may cause increased side effects.

Additional Considerations

Because corticosteroids cause the adrenal glands to slow or stop the natural production of the human steroid cortisol, they cannot be stopped abruptly. It takes some time for the adrenal glands to begin producing cortisol again. Gradually tapering the dose of corticosteroids allows the body to begin producing its own supply of cortisol again.

Corticosteroids are one of the oldest treatments available for IBD, but many newer drugs are now available. Be sure to talk to your doctor to learn all you can about steroids, and review what other options may be available to you to help minimize the need for further steroids.

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