



INFLAMMATORY BOWEL DISEASE CLINIC

Oral Corticosteroids

• Prednisone • Budesonide (Entocort®) •

Corticosteroids have an anti-inflammatory effect on the body by interfering with the inflammatory process. They also have an immunosuppressive effect, by reducing the activity and effectiveness of the immune system. Corticosteroids are used to reduce inflammation and induce remission when an individual is having a flare of their IBD, but should never be used long-term as maintenance therapy.

Indications:

- The use of oral corticosteroids should be restricted to inducing (“bringing about”) disease remission or treating a flare of your inflammatory bowel disease. They should not be used as a long-term maintenance medication.
- If you have required multiple cycles of oral corticosteroids to treat your IBD or are unable to taper off your oral corticosteroid, you may require changes to your medications. Your physician or nurse practitioner should talk to you about your treatment options which may include immunosuppressants, biological therapy, or clinical drug trials.

Important Potential Side Effects:

- Psychiatric: Sleep disturbances, mood swings, depression, psychosis
- Skin: Acne, hirsutism (excessive hair growth in females on the face and body), thinning of the skin, impaired wound healing
- Cardiovascular: Elevated blood pressure, irregular heart rhythm, worsening of congestive heart failure
- Endocrine: Fluid and/or sodium retention, abnormal blood glucose (blood sugar), electrolyte abnormalities including low potassium, cushingoid state (moon face, purple abdominal skin streaking, upper back hump)
- Gastrointestinal: Increased appetite with resulting weight gain, intestinal perforation
- Ophthalmic: Cataracts, glaucoma, increased eye pressure
- Bones and Joints: Avascular or aseptic necrosis (primarily affecting the hip), loss of bone density (osteopenia), osteoporosis

Certain side effects are more common, while others are rare. Your physician, nurse practitioner, or nurse can provide you with more information and answer your questions.

Prevention of Adverse Events and Management of Side Effects:

- Before starting this medication, you should inform your healthcare provider if you have a history of any problems or concerns with your heart (including congestive heart failure and heart attack), diabetes, liver (including hepatitis and cirrhosis), nervous system, osteoporosis, seizures, thyroid, or chronic or recurrent infections.
- If you currently have or have previously had a psychiatric condition or disorder that has required medication or other treatment, please ensure your gastroenterologist or nurse practitioner is aware before you start oral corticosteroids.
- Corticosteroids should **NEVER** be discontinued abruptly– the dose should be tapered down over a number of days or weeks to avoid withdrawal syndrome and secondary adrenal insufficiency. Symptoms of adrenal insufficiency include: low blood pressure, fainting, dizziness, low blood sugar, nausea, anorexia or lack of appetite, fatigue, joint pain and/or swelling, muscle pain or aching, fever, shortness of breath, or skin reactions such as blistering or peeling.
- When taking corticosteroids, periods of increased stress on the body (example: surgery, dental procedure) may require you to take a higher medication dose for a specific period of time to prevent adrenal insufficiency. If you have recently stopped corticosteroid therapy in the past year and experience a period of increased stress on your body (example: surgery, dental procedure), inform the attending physician, nurse practitioner or dentist immediately as you may require a short course of corticosteroids to prevent adrenal insufficiency.
- Speak with your physician or nurse practitioner prior to receiving any vaccinations when taking or contemplating corticosteroid therapy. Vaccinations may need to be delayed until you are done your tapering corticosteroid course or you may need to be vaccinated prior to starting the corticosteroids if medically appropriate, in order to prevent complications and ensure an adequate immune response.
- As corticosteroids may increase blood glucose (blood sugar) levels, you must closely monitor your blood glucose if you are diabetic when taking this medication. Adjustments may be required to your insulin and/or oral hypoglycemic agents to maintain tight glycemic control; speak with your healthcare provider if you are having difficulties keeping your blood glucose in goal range.
- Due to an increased risk for cataracts or glaucoma, you should have yearly eye exams performed by an optometrist or ophthalmologist, particularly if you have required multiple courses of corticosteroids.
- Oral corticosteroids may enhance the anti-clotting effect of warfarin (a blood thinner prescribed for the treatment and prevention of blood clots) and you may require more frequent blood work monitoring and/or warfarin dose adjustments. Seek prompt medical attention for any unusual bleeding or bruising.

- Budesonide (Entocort®) can interact with grapefruit juice and should be avoided.
- Do not use Echinacea or cat's claw (herbal remedies) when taking this medication.
- Additional calcium and Vitamin D should be taken to prevent bone loss associated with corticosteroid therapy. You can speak with your pharmacist to purchase the following recommended dietary supplements:
500 mg elemental calcium twice a day (or as instructed by your healthcare provider)
1000 IU Vitamin D once a day (or as instructed by your healthcare provider)
- Avoid taking oral corticosteroids with dairy products, iron supplements, and antacids.
- To minimize the risk of sunburn and skin damage while taking corticosteroids, you should use a sunscreen with a minimum sun protection factor (SPF) of 30, and limit exposure to sunlight and UV light.
- Tell your gastroenterologist or nurse practitioner about all medications you are taking or start during corticosteroid therapy, as dosage adjustments or additional blood work monitoring may be required.

Symptoms to Report:

- **Contact your gastroenterologist, nurse practitioner, or nurse immediately if you have any symptoms of active infection** such as: fever (greater than 100.5°F or 38.5°C), chills, feeling generally unwell, body aches, fatigue, flu-like symptoms, tooth pain/ache or tooth infection, very sore throat, persistent or worsening cough and/or nasal congestion, drainage from your nose or mucus in your chest that is yellow or green, sores that are draining pus or will not heal, very bad abdominal pain, pain with urinating (peeing), rectal pain or swelling, vaginal discharge, or any other signs of infection. Be aware that corticosteroids may mask the severity and presentation of typical infection symptoms.
- You may experience sleep disturbances (including insomnia), mood swings, and nervousness when taking this medication. If your symptoms are significant, or if you or others around you are concerned about the severity of your symptoms, you should contact your healthcare provider immediately. **If your symptoms are severe or worsening, you should go immediately to the nearest emergency department or activate your emergency response system.**
- If you begin to experience headaches or have a worsening in the usual severity of your headaches while taking this medication, you should contact your healthcare provider immediately as this may indicate an elevation in your blood pressure. Other symptoms that may indicate elevated blood pressure include facial flushing and fluid retention.
- Report any new onset of joint pain—particularly hip pain— that may or may not be associated with movement or weight-bearing.