Budesonide

BRAND NAME: ENTOCORT, UCERIS

Available in 3 mg MICROSIZED CAPSULES, 9 MG CAPSULES AS WELL AS SOME PRODUCTS FOR INHALATION

BACKGROUND

Most people have heard of steroid hormones and many people reading this have probably taken them. Corticosteroids are commonly prescribed to both people and pets as they have many desirable effects; in fact, their effects vary with dose so that one drug can be used to treat many different diseases. Much of their use relates to their anti-inflammatory properties but, as corticosteroids have a lot of potential side effects, there is always interest in ways to reap the corticosteroid benefits without the side effects.

When the skin is inflamed, for example, a corticosteroid creme or ointment can be applied to the site of the inflammation. The inflammation is treated but very little of the hormone enters the body. But what about intestinal inflammation? Wouldn't it be great to have a salve that could be applied to inflamed intestinal lining without its being absorbed into the body? This is where budesonide comes in.

Budesonide is a corticosteroid designed to be taken orally, and treat inflamed intestinal mucosa as if it were a topical. It is absorbed into the body but promptly de-activated by the liver so that it is not seen by the rest of the body and side effects are minimized. Budesonide is made to treat intestinal inflammation in patients who are not tolerant of more traditional steroids such as prednisolone or dexamethasone.

Of course, no plan is perfect. The problem with this seemingly ideal treatment plan is that budesonide is a very strong corticosteroid (about fifteen times stronger than prednisolone). This means that even the minimal amount that does get absorbed can be significant and it appears that the more inflamed the bowel lining is, the more budesonide is absorbed into the body. Appropriate dosing is very important with this medication so as not to defeat the purpose of steroid side effect prevention.

HOW THIS MEDICATION IS USED

Budesonide is typically given once daily for the treatment of inflammatory bowel disease. There is also an inhalational form that can be used in treating feline asthma.

SIDE EFFECTS

Corticosteroid side effects include excessive thirst, appetite and urination. Excessive effects include the signs of Cushing's Disease: hair loss on the trunk, pot-bellied appearance, and thin skin in more advanced stages. In cats particularly, steroid exposure can induce diabetes mellitus. For a more complete description see the section on Long-term Steroid Side Effects. Theoretically, the whole reason for using budesonide over a conventional corticosteroid is to avoid the above issues but if enough steroid is absorbed into the body, then these are the problems to watch for.

INTERACTIONS WITH OTHER DRUGS

Drugs that interfere with the liver's ability to remove budesonide will lead to increased corticosteroid activity in the body. Drugs that have this effect include: erythromycin (an antibiotic), cimetidine (an antacid), ketoconazole, fluconazole, and itraconazole (antifungals), and diltiazem (a heart medication).

If budesonide capsules are being used, their exterior covering relies on the acid of the stomach for dissolution. If the patient is also taking antacids, they should be separated from the budesonide by a couple of hours if possible. It is important not to open the budesonide capsule prior to administration.

CONCERNS AND CAUTIONS

Budesonide should be stored at room temperature.

Small animals require small doses of budesonide. A compounding pharmacy is frequently necessary to prepare an appropriately sized capsule.

Budesonide would seem to be ideal for a patient that is intolerant of corticosteroid side effects (such as a patient with diabetes mellitus, an active infection, or any other condition that might be exacerbated by corticosteroids) but one must be aware that budesonide is not fully without corticosteroid activity.

Budesonide should not be used in pregnancy.

Liver disease may increase the potential for corticosteroid side effects seen with budesonide.

For budesonide to work properly, the capsules should not be opened or crushed.