PRESCRIBING INFORMATION

Pr BETNESOL®

(betamethasone sodium phoshate)

Enema 5 mg/100 mL

Topical Corticosteroid

Paladin Labs Inc. 6111 Royalmount Avenue, Suite 102 Montreal, Quebec H4P 2T4

Control No.: 129529

Date of Preparation: May 1, 2009

PRESCRIBING INFORMATION

Pr BETNESOL®

(betamethasone sodium phoshate)

Enema 5 mg/100 mL

Topical Corticosteroid

INDICATION AND CLINICAL USE

BETNESOL® (betamethasone sodium phosphate) ENEMA is indicated for local use as a retention enema in ulcerative colitis.

CONTRAINDICATIONS

Systemic infections, live virus immunization, hypersensitivity.

PRECAUTIONS

Following administration of BETNESOL® (betamethasone sodium phosphate) ENEMA, there is some systemic absorption of the steroid, which can be a therapeutic advantage, as combined systemic and local therapy can be beneficial, certainly in some cases. However, adrenal function can be affected; thus it is necessary to take such precautions as apply during and after systemic therapy.

In patients on corticosteroid therapy subjected to unusual stress, increased dosage of rapidly acting corticosteroids before, during and after the stressful situation is indicated. Corticosteroid treatment may reduce the response of the pituitary-adrenal axis to stress and relative insufficiency may persist for up to 1 year after withdrawal or prolonged therapy.

While on corticosteroid therapy patients should not be vaccinated against smallpox because of potential complications. Conversely, patients with vaccinia should not receive corticosteroid therapy. Other immunization procedures should not be undertaken in patients

who are on corticosteroids, especially on high doses, because of possible hazards of neurological complications and a lack of antibody response. Patients without a definite history of chickenpox should be advised to avoid close contact with chickenpox or herpes zoster. If exposed to chickenpox or herpes zoster, patients should seek urgent medical attention. If the patient is a child, then the parents must be aware that exposure to chickenpox must be avoided. Passive immunization with varicella/zoster immunoglobulin (VZIG) is needed by exposed nonimmune patients who are receiving systemic corticosteroids or who have used them within the previous 3 months. VZIG should be given not later than 10 days from exposure to chickenpox. If a diagnosis of chickenpox is confirmed, the illness warrants specialist care and urgent treatment. A diagnosis of chickenpox should be considered in any patient receiving corticosteroids who presents with a fever or systemic illness. Corticosteroids should not be stopped and a dose increase may be necessary.

If corticosteroids are indicated in patients with latent tuberculosis or tuberculin reactivity, close observation is necessary as reactivation of the disease may occur. During prolonged corticosteroid therapy, these patients should receive chemoprophylaxis.

Corticosteroids may mask some signs of infection and new infections may appear during their use. There may be impaired resistance to and inability to localize infection when corticosteroids are used. If corticosteroids have to be used in the presence of bacterial infections, institute appropriate vigorous anti-infective therapy.

Use corticosteroids cautiously in patients with ocular herpes simplex because of possible corneal ulceration and perforation. Corticosteroids may worsen diabetes mellitus, osteoporosis, hypertension, glaucoma and epilepsy.

Prolonged use of corticosteroids may produce posterior subcapsular cataracts, glaucoma with possible damage to the optic nerves, and may enhance the establishment of secondary ocular infections due to fungi or viruses.

Corticosteroid therapy may cause hyperacidity or peptic ulcer. Since appearance of peptic ulcer may be asymptomatic until perforation or hemorrhage occurs, take x-rays when treatment is prolonged or when there is gastric distress. An ulcer regimen including an antacid should be considered as a prophylactic measure during prolonged therapy.

Use the lowest possible dose of corticosteroid to control the condition under treatment, and when dosage reduction is possible, the reduction should be gradual.

Average and large doses of hydrocortisone or cortisone can cause elevation of blood pressure, salt, and water retention, and increased potassium excretion. These effects are less likely to occur with the synthetic derivatives except when used in large doses. Because of the possibility of fluid retention, care must be taken when corticosteroids are administered

to patients with congestive heart failure. Dietary salt restriction and potassium supplementation may be necessary. All corticosteroids increase calcium excretion.

Drug induced secondary adrenocortical insufficiency may be minimized by gradual dosage reduction. This type of relative insufficiency may persist for months after discontinuation of therapy, therefore, in any stress situation occurring during that period, reinstitute hormone therapy. If the patient is receiving steroids already, the dosage may have to be increased. Since mineralocorticoid secretion may be impaired, salt and/or a mineralocorticoid should be administered concurrently.

Use steroids with caution in nonspecific ulcerative colitis if there is a probability of impending perforation, abscess or other pyogenic infection; diverticulitis, fresh intestinal anastomoses; active or latent peptic ulcer; renal insufficiency; hypertension; osteoporosis; and myasthenia gravis. Fat embolism has been reported as a possible complication of hypercortisonism.

There is an enhanced effect of corticosteroids on patients with hypothyroidism and in those with cirrhosis.

In patients with liver failure, blood levels of corticosteroid may be increased, as with other drugs which are metabolized by the liver.

Psychic derangements may appear when corticosteroids are used, ranging from euphoria, insomnia, mood swings, personality changes, and severe depression, to frank psychotic manifestations. Also, existing emotional instability or psychotic tendencies may be aggravated by corticosteroids.

Care should be taken when there is a history of severe affective disorders (especially a previous history of steroid psychosis), steroid myopathy or peptic ulceration.

Steroids may increase or decrease motility and number of spermatozoa in some patients.

Advise patients to inform subsequent physicians of the prior use of corticosteroids.

Use in Geriatrics

The risks and benefits of corticosteroid therapy for the elderly patient should be carefully weighed, considering the more serious consequences of the common side effects in old age, especially osteoporosis, diabetes, hypertension, susceptibility to infection and thinning of the skin.

Use in Pediatrics

Systemic corticosteroids may cause growth retardation in infancy, childhood and adolescence. Treatment should be limited to the minimum dosage for the shortest possible time.

Growth and development of infants and children on prolonged corticosteroid therapy should be carefully observed.

Use in Pregnant Women

Since adequate human reproduction studies have not been done with corticosteroids, the use of these drugs in pregnancy or women of childbearing potential requires that the possible benefits of the drug be weighed against the potential hazards to the mother and embryo or fetus. Infants born of mothers who have received substantial doses of corticosteroids during pregnancy should be carefully observed for signs of hypoadrenalism.

Administration of corticosteroids to pregnant animals can cause abnormalities of fetal development including cleft palate and intrauterine growth retardation. The relevance of these findings in humans has not been established, however, patients should avoid extensive use in pregnancy.

Use in Lactating Women

Since adequate human reproduction studies have not been done with corticosteroids, the use of these drugs in nursing mothers requires that the possible benefits of the drug be weighed against the potential hazards. Corticosteroids are excreted in small amounts in breast milk and infants of mothers taking pharmacological doses of steroids should be monitored carefully for signs of adrenal suppression.

Drug Interactions

Corticosteroids may reduce the effects of anticholinesterases in myasthenia gravis, cholecystographic x-ray media, salicylates and nonsteroidal anti-inflammatory drugs (NSAIDs).

Estrogens may potentiate the effects of glucocorticoids, whereas phenytoin, phenobarbital, ephedrine and rifampin may reduce the effects of glucocorticoids. Dosage adjustments may be required in these cases.

Increase or decrease the action of concomitantly administered anticoagulants.

Increase renal clearance of acetylsalicylic acid (ASA).

Test Interactions

Corticosteroids may suppress reactions to skin tests.

ADVERSE REACTIONS

The following adverse events have been reported following the systemic (other betamethasone sodium phosphate dosage forms) and/or local (such as BETNESOL® ENEMA) use of betamethasone sodium phosphate.

Fluid and Electrolyte Disturbances: sodium retention; fluid retention; congestive heart failure in susceptible patients; potassium loss; hypokalemic alkalosis; hypertension; benign intracranial hypertension; psychic instability.

Musculoskeletal: muscle weakness; steroid myopathy; loss of muscle mass; osteoporosis; vertebral compression fractures; aseptic necrosis of femoral and humeral heads; pathologic fracture of long bones.

Gastrointestinal: peptic ulcer and possible subsequent perforation and hemorrhage; pancreatitis; abdominal distention; ulcerative esophagitis.

Dermatologic: impaired wound healing; thin fragile skin; petechiae and ecchymoses; erythema; increased sweating; may suppress reactions to skin tests.

Neurological: convulsions; increased intracranial pressure with papilledema (pseudotumor cerebri) usually after treatment; vertigo; headache.

Endocrine: menstrual irregularities, development of Cushingoid state; suppression of growth in children; secondary adrenocortical and pituitary unresponsiveness, particularly in times of stress, as in trauma, surgery or illness; decreased carbohydrate tolerance; manifestations of latent diabetes mellitus; increased requirements for insulin or oral hypoglycemic agents in diabetes.

Ophthalmic: posterior subcapsular cataracts; increased intraocular pressure; glaucoma; exophthalmos.

Metabolic: negative nitrogen balance due to protein catabolism.

Other: hypersensitivity, thromboembolism; features of hypercortisolism, aseptic osteonecrosis.

DOSAGE AND ADMINISTRATION

Normally, one BETNESOL® (betamethasone sodium phosphate) ENEMA is used nightly, for 2 to 4 weeks. More prolonged treatment is permissible in patients showing progressive improvement. If the response is inadequate, it is undesirable to persist with medical treatment to a point where surgical measures are unduly delayed.

PHARMACEUTICAL INFORMATION

DRUG SUBSTANCE

Common Name: betamethasone (as sodium phosphate)

Chemical Name: 9-Fluoro-11β, 17, 21-trihydroxy-16β-methylpregna-1,4-diene-3,

20-dione 21-(disodium phosphate)

Molecular Formula: $C_{22}H_{28}FNa_2O_8P$

Molecular Weight: 516.40

COMPOSITION

Each disposable plastic bag of 100 mL contains 5 mg betamethasone (as betamethasone sodium phosphate) in buffered solution.

STABILITY AND STORAGE RECOMMENDATIONS

Store below 25°C. Protect from light.

AVAILABILITY OF DOSAGE FORMS

BETNESOL® (betamethasone sodium phosphate) ENEMA: Each disposable plastic bag of 100 mL contains 5 mg betamethasone (as betamethasone sodium phosphate) in buffered solution. Boxes of 7x100 mL.