REXOLONE SYRUP

Name and Strength of Active Ingredients:

Each 5ml contains:	
Prednisolone	3mg
Preservative:	
Sodium Benzoate	0.1% w/v

Product Description

Light pink liquid with raspberry flavour.

Pharmacodynamics

Prednisolone is extensively bound to plasma proteins. It is excreted in the urine as free and conjugated metabolites, together with an appreciable proportion of unchanged prednisolone. Prednisolone crosses the placenta and small amounts are excreted in the breast milk.

Pharmacokinetics

Prednisolone is readily absorbed from the gastro-intestinal tract. Peak plasma concentrations of prednisolone are obtained in 1 or 2 hours after administration by mouth, and it has a usual-plasma half-life of 2 to 4 hours. Its initial absorption, but not its overall bioavailability is affected by food.

Indications

For the treatment of adrenal insufficiency.

- Immunosuppressant.
- Anti-inflammatory.
- Suppressive treatment of allergic reaction

Recommended Dose

<u>Adult</u>

Initially: 10-20mg (16.7-33.3ml) daily, once or in divided doses (severe disease, up to 60mg daily in divided doses)

Maintenance: 2.5-15mg (4.17-25ml) daily, once or in divided doses.

Children

Initially: 0.2-2mg/kg (0.33-3.33ml/kg) body weight daily in divided doses Tapering: Gradually reduce by 2.5mg (4.17ml) to maintenance.

Route of Administration

Oral

Contraindications

Unless considered life-saving, it is contraindicated in patients with gastric ulceration, psychoses and severe psychoneurosis, osteoporosis, acute infections, and vaccination with live vaccines. Patients with active or doubtfully quiescent tuberculosis should not be given corticosteroid except, very rarely, as adjuncts to treatment with anti-tubercular drugs. Patients should receive chemoprophylaxis if corticosteroid therapy is prolonged. Hypersensitivity to any of the ingredient of Rexolone.

Warning and Precautions

Use in Geriatrics:

Use with caution in the presence of congestive heart failure or hypertension, diabetes mellitus, epilepsy, glaucoma, infectious diseases, ocular herpes simplex, chronic renal failure and uraemia in elderly persons. Geriatric patients, especially postmenopausal women, may also be more likely to develop glucocorticoid-induced osteoporosis. Side effect will be more serious in elderly, thus close supervision is required particularly in long term treatment.

Use in Pediatrics:

Because infections such as chickenpox or measles may be more serious (or even fatal) in children receiving immunosuppressant doses of corticosteroids, extra care to avoid exposure to these infectious is recommended. Chronic use of corticosteroids or corticotropin may suppress growth and development of the pediatric or adolescent patient and should be undertake with caution. Growth retardation may be irreversible so prolonged or continuous treatment rarely justified. Pediatric patients may be at increased risk of developing osteoporosis, vascular necrosis of the femoral heads, glaucoma or cataracts during prolonged therapy. Children and adolescents receiving prolonged therapy should be closely monitored. Pediatric dosage is determined more by the severity of the condition and the response of the patient than by age or body weight. Also, for treatment of adrenocortical insufficiency, pediatric dosage is preferably determined in terms of mg per square meter of body surface area. Determination of pediatric dosage in terms of mg per kg of body weight (mg/kg) increases the possibility of overdose, especially in very young, short or heavy children. Caution should be also be used in children and adolescents receiving rectal dosage forms because of possible systemic absorption that can affect growth.

Withdrawal:

During prolong therapy adrenal atrophy may develop and persist for years after stopping. Too rapid reduction of dosage, following a prolonged course (7 days or more), can lead to acute adrenal insufficiency, hypotension or death. Therefore, withdrawal must always be gradual, tapered off over weeks or months depending on dosage and duration of therapy.

Scleroderma renal crisis:

Caution is required in patients with systemic sclerosis because of an increased incidence of (possibly fatal) scleroderma renal crisis with hypertension and decreased urinary output observed with a daily dose of 15mg or more prednisolone.

Interactions with Other Medicaments

Concurrent administration of barbiturates, carbamazepine, phenytoin, primidone, or rifampicin may enhance the metabolism and reduce the effects of corticosteroids. Concurrent use with potassium-depleting diuretics, such as thiazides or frusemide, may cause excessive potassium loss. There may be an increased incidence of gastrointestinal bleeding and ulceration when given with NSAID. Response to anticoagulants may be altered by corticosteroids and requirements of antidiabetics and antihypertensives may be increased. Corticosteroids may decrease serum concentrations of salicylates and may decrease the effect of antimuscarinics in myasthenia gravis.

Co-treatment with CYP3A inhibitors, including cobicistat-containing products, is expected to increase the risk of systemic side-effects. The combination should be avoided unless the benefit outweighs the increased risk of systemic corticosteroid side-effects, in which case patients should be monitored for systemic corticosteroid side-effects.

Pregnancy & Lactation

Use in pregnancy:

Corticosteroids cross placenta in animal studies, large cortisol doses administered early in pregnancy produced cleft palate, stillborn fetuses and decreased fetal size. Chronic maternal ingestion during the first trimester has shown a 1% incidence of cleft palate in humans. If use in pregnancy, or in women of child-bearing potential, weight benefits against the potential hazards to the mother and fetus. Carefully observe infants born of mothers who have received substantial corticosteroids doses during pregnancy for signs of hypoadrenalism.

Use in Lactation:

Corticosteroids appear in breast milk and could suppress growth, interfere with endogenous corticosteroid production or cause unwanted effects in the nursing infant.

Side Effects

Metabolic effects leading to osteoporosis, nitrogen depletion and hyperglycaemia with accentuation or precipitation of diabetic state. Increase appetite, delayed wound healing and increased susceptibility to all kinds of infection, Cushing's syndrome, growth retardation in children and acute adrenal insufficiency are not uncommon. Other adverse effects include amenorrhoea, hyperhidrosis, skin thinning, mental and neurological disturbances, intracranial hypertension, acute pancreatitis, aseptic necrosis of bone, increased coagulability of the blood that leads to thromboembolism, peptic ulceration and less frequently electrolyte disturbances.

Symptoms and Treatment of Overdose

Symptoms:

There are two categories of toxic effects from the therapeutics use:

Acute adrenal insufficiency due to too rapid corticosteroid withdrawal after long term use resulting in fever, myalgia, arthralgia, malaise, anorexia, nausea, skin desquamation, orthostatic hypotension, dizziness, fainting, dyspnea and hypoglycemia.

Cushingoid changes from continued use of large doses resulting in moon-faced, central obesity, striae, hirsutism, acne, ecchymoses, hypertension, osteoporosis, myopathy, sexual dysfunction, diabetes, hyperlipidemia, peptic ulcer, increased susceptibility to infection and electrolyte and fluid imbalance. Reports of acute toxicity or death are rare.

Treatment:

Recovery of normal and pituitary may require up to 9 months. Gradually tapper the steroids under the supervision of a physician. Frequent lab tests are necessary. Supplementation is required during periods of stress (eg. illness, surgery, injury). Eventually reduce to lowest dose that will control the symptoms or discontinue the corticosteroid completely. For large, acute overdoses, treatment include gastric lavage or emesis and usual supportive measures.

Storage Condition Keep container tightly closed. Store below 30°C. Protect from heat and light.

Dosage Forms and Packaging Available Oral liquid in 100ml bottle.

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Manufactured by & Product Registration Holder KCK Pharmaceutical Industries Sdn. Bhd.

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