

## INFORMATION ON THE USE OF PREDNISOLONE

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### Abstract

Prednisolone is a corticosteroid medication used to treat a wide range of inflammatory and autoimmune conditions. It mimics the effects of cortisol, a hormone naturally produced by the adrenal glands, and works by suppressing inflammation and modulating the immune response. Hyperemia, swelling, itching, urticaria, rash, steroid reactions, purpura, telangiectasias, itching, irritation and drying of the skin may occur in the areas where the drug is applied, especially when the drug is used in patients who cannot personally absorb the components of the drug.

**Keywords:** Corticosteroids, Hyperemia, glucocorticosteroids (GKS), histamine, prostaglandins, leukotrienes, liposomal enzymes, Inflammatory and autoimmune diseases, Allergic conditions, Respiratory diseases, Skin disorders, Endocrine disorders.

### Introduction

**Pharmacological properties.** Prednisolone is a synthetic glucocorticosteroid, a drug for local use. It has an anti-inflammatory, anti-allergic, anti-edematous effect. It inhibits the release of inflammatory mediators (histamine, prostaglandins, leukotrienes, liposomal enzymes). Reduces the inflammatory reaction of the skin, reduces vasodilatation and increased permeability of blood vessels at the site of inflammation, reduces itching and pain at the applied site.

**Application.** It is used in the complex treatment of inflammatory and allergic skin diseases of non-microbial etiology: urticaria, eczema, allergic and seborrheic dermatitis, psoriasis, lupus erythematosus, erythroderma.

**Method of administration and doses.** The ointment is thinly applied to the damaged areas of the skin and rubbed 1-3 times a day. The duration of the treatment course depends on

the character of the disease and the effectiveness of the treatment, and usually it is 6-14 days. The drug cannot be used for more than 14 days. When the drug is prescribed to children older than 1 year, it is necessary to limit the total duration of treatment to 3-7 days and to deny measures that increase the absorption of corticosteroids (heating, fixation and occlusive bandages).

Side effects. Hyperemia, swelling, itching, urticaria, rash, steroid reactions, purpura, telangiectasias, itching, irritation and drying of the skin may occur in the areas where the drug is applied, especially when the drug is used in patients who cannot personally absorb the components of the drug. During long-term treatment, secondary skin damage, atrophic changes, and hypertrichosis may develop. When the ointment is used for a long time, especially in areas of large damage, hypercortisolism can develop as a manifestation of the resorptive effect of prednisolone. In such cases, the drug should be discontinued.

Circumstances where it is not possible to use. Hypersensitivity to the components of the drug, Cushing's syndrome, chicken pox, vaccination period, herpes simplex, traumatic or ulcerative lesions, bacterial, viral and fungal skin diseases, skin tuberculosis, manifestations of syphilis on the skin, skin tumors, simple herpes, pink herpes, children under 1 year old, pregnancy, breastfeeding period can not be used. Interaction of drugs. When prednisolone is applied topically, drug interactions have not been described. During the treatment period, vaccination against chicken pox or other types of immunization should not be carried out, especially when the drug is used for a long time on large areas of the skin surface. Special instructions. The drug should be prescribed in very small doses and for minimal short periods necessary to achieve the desired therapeutic effect. In cases of psychosis in the anamnesis, high doses are prescribed under the strict supervision of the doctor. With long-term use of the drug, it is dangerous to abruptly cancel it. The disease may worsen and the general condition of the patient may worsen. Therefore, the drug is gradually canceled. Ophthalmologist supervision and blood pressure monitoring are necessary during treatment. Treatment should be carried out under the supervision of a doctor. In order to reduce the development of adverse reactions, corticosteroids (KS) and nonsteroidal drugs should be used alternately. The maximum allowed area of the skin covering treated with KS should not exceed 20% of the body surface. KS should be used in short courses and not for prevention, but only for treatment. To prescribe prednisolone, it is necessary to take into account the daily secretory rhythm of glucocorticosteroids (GKS), the rhythm of the release of adrenal gland hormones: large doses are prescribed in the morning, medium doses are prescribed in the afternoon, and small doses are prescribed in the evening. The disease may worsen when applied to common and pink strawberries. It is necessary not to allow the drug to fall on the mucous membranes of the organs of vision. It should be used with caution in cases of immunodeficiency (including AIDS or HIV-infected patients). In children one year and older, it is necessary to limit the duration of the general treatment and to exclude measures that lead to increased resorption and absorption of the drug. Adrenocortical insufficiency may develop more rapidly in children. When using the drug for a long time, it is necessary to monitor body weight, height, and the amount of

cortisol in plasma in children. Use during pregnancy and breastfeeding. The drug cannot be used by pregnant women. Breastfeeding mothers are advised to stop breastfeeding during treatment. Influence on the ability to drive vehicles and other potentially dangerous mechanisms. This drug does not affect the ability to drive a car and work with mechanisms that require high concentration of attention. Keep the drug out of the reach of children and do not use it after the expiration date.

Overdose. In case of an overdose, side effects may increase. Symptoms of hypercortisolism may appear when prednisolone is used in large amounts for a long time. Symptoms: headache, heart failure, urticaria, rash, severe itching. Treatment is symptomatic. It is necessary to cancel the use of the drug and consult a doctor. In severe cases, urgent medical assistance is required.

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