Prescribing Information

PrLOCACORTEN® VIOFORM®
(flumethasone pivalate 0.02% - clioquinol 3%)
Cream

Topical Corticosteroid with Antibacterial - Antifungal Agent

Paladin Labs Inc.  Date of Preparation:
6111 Royalmount Ave., suite 102  June 9, 2009
Montréal, Québec
H4P 2T4

Control #  130473

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**Actions and Clinical Pharmacology**

LOCACORTEN (flumethasone pivalate) is a moderately potent difluorinated corticosteroid ester with anti-inflammatory, antipruritic and vasoconstrictive properties. As it is a pivalate, its anti-inflammatory action is concentrated at the site of application. This local effect on diseased areas results in a prompt decrease in inflammation, exudation and itching.

VIOFORM (clioquinol), the antimicrobial component of LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol), is active against a broad spectrum of pathogenic microorganisms, including fungi (e.g., Candida, Microsporum, Trichophyton) and gram-positive bacteria (e.g., Staphylococci). Clioquinol has only a slight inhibitory effect on gram-negative bacteria. Clioquinol exerts a bacteriostatic, rather than a bactericidal action.

LOCACORTEN VIOFORM combines the antifungal and antibacterial effects of clioquinol with the anti-inflammatory and antipruritic effects of flumethasone.

**Indications and Clinical Use**

LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol) is indicated in the initial treatment of corticosteroid-responsive inflammatory skin disorders complicated by bacterial and/or fungal infections, with appropriate systemic antibiotics if necessary, such as: seborrheic dermatitis, atopic dermatitis, localized neurodermatitis, contact dermatitis, intertrigo, superficial forms of pyoderma (e.g., impetigo) and of dermatomycosis in which acute inflammation is a prominent feature.

The cream has a slightly drying effect primarily useful for moist, weeping lesions and in intertriginous areas.

**Contraindications**

Viral infections of the skin (e.g., chicken pox, skin eruptions following vaccination, herpes simplex, herpes zoster), tuberculosis of the skin, syphilis, rosacea, acne vulgaris, and perioral dermatitis.
Known hypersensitivity to flumethasone pivalate or to corticosteroids in general, to hydroxyquinolines, clioquinol or other quinoline derivatives, to iodine, as well as to any other components of LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol).

Application to ulcerated areas.

Application to the eye.

Use in children under 2 years of age.

Warnings

Use in Pregnancy and Lactation:
The safety of LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol) during pregnancy or lactation has not been established. Animal studies have shown that corticosteroids may induce fetal abnormalities in pregnant animals. The relevance of this finding to human use has not been elucidated. It is not known whether the active substances pass into breast milk when applied topically. Therefore, the potential benefit of LOCACORTEN VIOFORM during pregnancy (particularly in the first three months), or lactation, should be weighed against possible hazard to the fetus or the nursing infant.

Precautions

Application to relatively large and/or eroded areas, treatment for longer than 1 week, as well as use under occlusive dressings may lead to a marked increase in protein-bound iodine (PBI) and should therefore be avoided.

Provided the preparation is used as recommended, unwanted systemic effects are unlikely to occur. On basic medical grounds, the possibility of a clinically important effect on adrenocortical function should nevertheless be borne in mind, particularly if the preparation is used under occlusion, over large areas of the body, in pediatrics and in patients undergoing prolonged therapy.

If no improvement occurs within 1 week, therapy should be discontinued; it is then advisable to identify and treat the causative pathogens.

LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol) should not be used to treat bacterial or mycotic skin diseases in which acute inflammation is not present.

If, in exceptional cases, LOCACORTEN VIOFORM is applied in large amounts, the patient should be kept under regular medical supervision.

Patients should, as a general rule, be advised to inform subsequent physicians of the prior use of corticosteroids.

LOCACORTEN VIOFORM should not be allowed to come into contact with the conjunctiva.

LOCACORTEN VIOFORM should not be used in the external auditory canal if the eardrum is perforated.

In patients suffering from hepatic and/or renal failure, caution is indicated.
LOCACORTEN VIOFORM may turn yellow when exposed to air and may cause staining of the skin, nails, hair or fabrics.

**Interactions:**
Topical use of clioquinol, as well as other iodine-containing compounds, may increase the amount of protein-bound iodine (PBI) in patients with normal thyroid function and therefore may interfere with some thyroid function tests (such as PBI, radioactive iodine and butanol-extractable iodine). These tests should not be performed within a period shorter than 1 month following the use of LOCACORTEN VIOFORM. Other thyroid function tests, such as the T3 resin sponge test or the T4 determination, are unaffected by clioquinol.

The ferric chloride test for phenylketonuria may yield a false-positive result when clioquinol is present in the urine.

**Adverse Reactions**
Occasionally: signs of irritation such as burning sensation, itching, or skin rash at the site of application; hypersensitivity reactions.

Isolated cases: mild skin atrophy due to flumethasone pivalate.

If an exacerbation or an allergic type reaction occurs, treatment with LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol) should be discontinued.

Local adverse reactions reported during topical treatment with glucocorticoids include contact allergy, changes in skin pigmentation, and secondary infections. Topically applied glucocorticoids may give rise to striae rubrae distensae, telangiectasia, purpura, skin atrophy or steroid acne, especially if applied for prolonged periods of time, under occlusive dressings, to large areas or to permeable areas (e.g., face, axillae).
Symptoms and Treatment of Overdosage

Application to extensive or eroded areas of skin may lead to increased PBI values within 1 week. Elevated PBI values may also occur where relatively small areas of skin are treated for more than 1 week. If signs and symptoms resembling those of thyrotoxicosis occur, the preparation should be withdrawn at once.

Dosage and Administration

LOCACORTEN VIOFORM (flumethasone pivalate/clioquinol) should be applied to the affected areas in a thin layer 2 to 3 times daily.

Use of LOCACORTEN VIOFORM under occlusive dressings is not recommended as the resulting humid conditions may promote secondary infection with non-sensitive organisms and also may increase the possibility of elevated PBI.

Pharmaceutical Information

Drug Substances

Flumethasone pivalate

Chemical Name: 6α, 9-difluoro-11β, 17α-dihydroxy-16β-methyl-21-trimethylacetoxy-1,4-pregnadiene-3,20-dione

Molecular Formula: C_{27}H_{36}F_{2}O_{6}

Molecular Weight: 494.6

Description: Virtually white, odorless, fine crystalline powder.

Solubility: Slightly soluble in methanol and ethanol, very slightly soluble in chloroform and methylene chloride, and is insoluble in carbon tetrachloride and isooctane.
Clioquinol

**Chemical Name:** 5-chloro-7-iodo-8-quinolinol

**Molecular Formula:** C₉H₅ClINO

**Molecular Weight:** 305.5

**Description:** Practically white to faintly yellowish powder.

**Solubility:** Freely soluble in pyridine, soluble in dimethylformamide and hot ethyl acetate, sparingly soluble in dioxane, slightly soluble in ethanol, practically insoluble in water.

**Composition:**

LOCACORTEN VIOFORM (flumethasone pivalate and clioquinol) Cream:

The cream contains the medicinal ingredients flumethasone pivalate and clioquinol, and the non-medicinal ingredients cetyl alcohol, cetyl palmitate, glycerin, petrolatum, phenoxyethanol, sodium lauryl sulfate, stearyl alcohol, and water.

**Stability and Storage Recommendations:**

Protect from heat (store between 15-30 °C) and freezing.

**Availability of Dosage Forms**

^LOCACORTEN® VIOFORM® (flumethasone pivalate and clioquinol) Cream:

Each tube of off-white water-soluble cream contains flumethasone pivalate (0.02%) and clioquinol (3%). Available in 15 and 50 g tubes.
Information For The Consumer

Please read this information carefully before starting LOCACORTEN VIOFORM treatment.

What is LOCACORTEN VIOFORM?
The active ingredients of LOCACORTEN VIOFORM are flumethasone pivalate and clioquinol. Flumethasone pivalate belongs to a group of medicines called corticosteroids. Clioquinol is an anti-infective agent.

What is LOCACORTEN VIOFORM for?
In infected, inflammatory skin diseases, LOCACORTEN VIOFORM relieves symptoms such as itching and redness. It also stops the growth of bacteria and fungi that cause certain types of skin infections.

Before starting treatment with LOCACORTEN VIOFORM
Be sure to tell your doctor:
- if you have kidney or liver disease,
- if you have ever had any unusual or allergic reactions to corticosteroids, iodine or iodine-containing preparations, clioquinol or hydroxyquinolines, or any other substances, including foods and dyes,
- if you are pregnant or intend to become pregnant while using LOCACORTEN VIOFORM, or if you are breast-feeding.

In these cases your doctor will decide whether you may apply LOCACORTEN VIOFORM to your skin.

How to use LOCACORTEN VIOFORM
LOCACORTEN VIOFORM must be used as directed by your doctor. Do not use more of it, do not use it more often, and do not use it for a longer period of time than your doctor has specified.

Apply LOCACORTEN VIOFORM as directed in a thin layer to the affected areas only. Do not wrap or bandage the areas treated unless otherwise instructed by your doctor.

LOCACORTEN VIOFORM is for external use only. Do not take by mouth.

What side effects can LOCACORTEN VIOFORM HAVE?
Like all medicines, LOCACORTEN VIOFORM may cause some unwanted effects in addition to its desired effects. If redness, burning, itching or other signs not present before using LOCACORTEN VIOFORM occur during treatment, consult your doctor or pharmacist.

If there is no improvement or if your skin condition becomes worse after you have used LOCACORTEN VIOFORM for 1 week, see your doctor.

Remember that LOCACORTEN VIOFORM has been prescribed for your present medical problem only. Do not use it to treat other skin conditions without checking with your doctor first.
Other Precautions:
Do not use LOCACORTEN VIOFORM in the eyes and be very cautious when using it near the eyes. If it gets in the eyes accidentally, flush them at once with plenty of water.
LOCACORTEN VIOFORM may turn yellow when exposed to the air.
LOCACORTEN VIOFORM may stain hair, fabric, skin or nails.
LOCACORTEN VIOFORM is not recommended in children under 2 years of age.

Storage:
Protect from heat (store between 15-30 °C) and freezing.
Keep out of reach of children.
Selected Bibliography


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