VEGADERM

Instructions for the medicinal product

Trade name: Vegaderm.
International Nonproprietary Name: Betamethasone + Clotrimazole + Gentamicin.
Dosage form: Ointment.
Composition: Each gram contains:
Betamethasone Dipropionate BP eq. to Betamethasone 0.1 % w/w;
Clotrimazole BP 1.5 % w/w;
Gentamicin Sulfate BP eq. to Gentamicin 0.1 % w/w.
Pharmacotherapeutic group: Anti inflammatory, antibacterial and antifungal.
ATC Classification: D07XC01.
Pharmacologic property:
Pharmacodynamics:
As active ingredients, Vegaderm ointment contains betamethasone, gentamicin & clotrimazole.
Betamethasone, is a synthetically fluorinated adrenocorticosteroid for topical use in dermatology, which has potent anti-inflammatory, immunosuppressive and anti-proliferative effects. It is a synthetic analogue of prednisolone that exhibits high degree of corticosteroid actions with negligible mineralocorticoid effect. The exact mechanism of topical corticosteroid activity is not known, however, it is thought that it is actually a combination of anti-inflammatory, immunosuppressive and anti-proliferative effects, of which the non-specific, anti-inflammatory effect is the most important. Corticosteroids actually reduce the formation, release and activity of chemical mediators of inflammation (quinines, histamines, lyposomal enzymes and prostaglandines). Since for the beginning of an inflammatory response, which is mediated by the above mentioned mediators, presence of leukocytes and macrophages is necessary, corticosteroids also inhibit the migration of cells to the site of injury and reduce vasodilatation and increased permeability of blood vessels in that area. This vasoconstrictive effect decreases extravasation of serum and formation of oedema. Corticosteroids also exhibit immunosuppressive effect on types III and IV hypersensitivity reactions by inhibiting toxic activity of antigen-antibody complex which deposits on the wall of blood vessels, causing allergic skin vasculitis. Corticosteroids also inhibit the activity of lymphokines, the target cells and macrophages which together cause allergic reaction, e.g. occurrence of allergic contact dermatitis. Besides, corticosteroids prevent the access of sensitised T-lymphocytes and macrophages to target cells.
Clotrimazole has a broad antimycotic spectrum of action in vitro and in vivo, which includes dermatophytes, yeasts, moulds, etc. The mode of action of clotrimazole is fungistatic or fungicidal depending on the concentration of clotrimazole at the site of infection. In-vitro activity is limited to proliferating fungal elements; fungal spores are only slightly sensitive. Primarily resistant variants of sensitive fungal species are very rare; the development of secondary resistance by sensitive fungi has so far only been observed in very isolated cases under therapeutic conditions.
Gentamicin is an aminoglycoside antibiotic with marked bactericidal activity. It inhibits protein synthesis in bacteria by binding to a specific receptor protein in 30S subunit of bacterial ribosomes, and interferes with the initial complex between mRNA and 30S subunit, by inhibiting protein synthesis. Erroneous reading of DNA occurs, which results in the formation of non-functional proteins. Bacteria responsive to gentamicin, such as: certain strains of streptococci (alfa- and beta-haemolytic streptococcus), Staphylococcus aureus (coagulase-positive, coagulase-negative and certain penicillinase producing strains), and gram-negative bacteria: Pseudomonas aeruginosa, Aerobacter aerogenes, E. coli, Proteus vulgaris and Klebsiella pneumoniae.
Pharmacokinetics:
The extent of percutaneous absorption of locally administered betamethasone is influenced by many factors, including the vehicle, epidermal condition, and presence of occlusion. Topically applied corticosteroids, can be to a lesser degree, also absorbed through normal, intact skin. However, presence of inflammatory processes on the skin increases the absorption and so does the use of occlusive dressings. Once absorbed through the skin, topically applied corticosteroids exhibit similar pharmacokinetic properties as those administered systemically. Systemic absorption, following local application, is about 12 to 14%. About 64% of betamethasone is reversibly bound to plasma proteins; distribution volume is 1.4 L/kg. Betamethasone is metabolised in the liver, the half-life is 5.6 h and metabolites are primarily excreted in the bile and smaller quantity by the kidneys (only about 5%).
Pharmacokinetic investigations after dermal application have shown that clotrimazole is minimally absorbed from the intact or inflamed skin into the human blood circulation. The resulting peak serum concentrations of clotrimazole were below the detection limit of 0.001 mcg/ml, suggesting that clotrimazole applied topically is unlikely to lead to measurable systemic effects or side effects.
Gentamicin is absorbed in insignificant amounts through intact skin; absorption through damaged skin is up to 5%. As is the case with other aminoglycosides, gentamicin poorly binds to plasma proteins and is excreted almost entirely by glomerular filtration.
Indications for use:
_ Skin diseases responsive to local therapy with corticosteroids which have or may develop primary or secondary bacterial infection. Infected allergic and non-allergic skin diseases: acute, subacute and chronic types of contact allergic dermatitis and occupational dermatitis, seborrheic dermatitis, diaper dermatitis, atopic dermatitis (neurodermatitis), intertrigo, eczematous nummular dermatitis, dyshidrotic dermatitis, pyodermatous acute non-allergic dermatitis, acute photodermatitis, x-ray dermatitis, infected dermatitis caused by insect bites;
_ Infected dermatoses such as psoriasis vulgaris, exfoliative dermatitis, lichen ruber planus, etc.
_ Vegaderm ointment is used on skin lesions infected by bacteria responsive to gentamicin.
Contraindications:
_ should not be used in patients hypersensitive to betamethasone, clotrimazole, gentamicin or any of the excipients;
_ skin tuberculosis;
_ vaccinia;
_ varicella;
_ perioral dermatitis;
_ rosacea;
_ children under 2 years old.
Precautions: I trimester of pregnancy, children.
Pregnancy and Nursing Mother:
Local application of vegaderm ointment in pregnant women is allowed only if, to the physician's opinion, benefit for a pregnant woman outweighs possible risks to the foetus. In these cases the therapy should be short and limited to a small body surface.
Upon doctor's decision, Vegaderm ointment can be used in nursing mothers, but the preparation should not be applied on the breast skin before nursing.
Dosage and directions for use:
Vegaderm ointment is for topical application only. Ointment is beneficial in the treatment of chronic dermatoses, e.g. dry, lichenified and scaly lesions, i.e. in cases when occlusive effect of ointment as vehicle is required. The required amount of ointment is applied to the affected skin in a thin layer and gently rubbed in twice daily. On parts of skin with thick stratum corneum and on which the preparation is easily removed (e.g. palms and soles of the feet) treatment should be repeated more frequently.
The treatment should not exceed 3 weeks. In the chronic skin conditions, to prevent relapses, treatment should continue for some time even after the disappearance of all symptoms, under constant supervision of a physician.
Side-effects:
Topical administration of betamethasone may reduce collagen content in the subcutaneous tissue and cause atrophic changes in the skin, irreversible striae, ecchymoses, telangiectasia, follicullitis, hypertrichosis and allergic contact dermatitis. Prolonged therapy may lead to development of rash, pruritus, local hyper pigmentation or depigmentation of the skin, depigmentation of the hair, and inhibition of sebaceous glands function. Secondary skin infections may occur due to depression of immunity system. Systemic side effects of topical administration of betamethasone are due to absorption of the drug into circulation. They occur very rarely, in most cases upon overdosage and usually withdraw immediately upon discontinuation of treatment.
Local reactions to gentamicin are usually manifested as hypersensitivity skin reactions characterised by rash, pruritus, erythema, swelling and other signs of irritation that have not existed before the therapy was started.
Overdose:
When betamethasone is applied to large surfaces of damaged, and therefore more permeable skin over longer period of time (more than three weeks), under the occlusive dressing, and if it is used in children for longer period of time or in patients with hepatic insufficiency, increased absorption into circulatory system and manifestation of systemic effects may occur - suppression of hypothalamic-pituitary- adrenal axis with growth retardation and intracranial hypertension (occurring only in children), hyperglycemia, glycosuria, and Cushing's syndrome. Manifestations of suppression of the above mentioned axis in children include growth retardation, delayed weight gain, lower plasma and urine cortisol concentration and lack of response to ACTH stimulation. Manifestations of intracranial hypertension include bulging fontanelles, headaches, and bilateral papilledema.
Over use or prolonged administration of gentamicin may lead to exacerbation of lesion due to overgrowth of fungi or unsusceptible bacteria. Consequently, appropriate antifungal or antibacterial treatment might be needed.
Therapy in case of overdose is symptomatic with usual measures for maintenance of normal body functions. The therapy should be immediately discontinued. The symptoms of withdrawal are very rare (fever, myalgia, arthralgia, weakness). If they do occur, substitute systemic administration of corticosteroids is required.
Drug interaction:
None stated.
Cautions:
If upon the first application of Vegaderm ointment hypersensitivity reaction occurs on the skin (itching, burning, redness), administration should be immediately discontinued. Vegaderm ointment should not be used under occlusive dressing, except if necessary. Prolonged use of ointment on the face is not recommended due to possible occurrence of rosacea-like dermatitis, perioral dermatitis and acne. Vegaderm ointment should not be applied in the eye and periorbital region due to possible development of cataract, glaucoma, fungal eye infections and exacerbation of herpes. Vegaderm ointment is not used in the treatment of varicose ulcers in the lower leg (ulcus cruris).
Children: Due to larger skin surface to total body weight ratio and under-developed stratum corneum, increased absorption of betamethasone and gentamicin may occur in children during topical application. This may lead to manifestation of systemic toxicity. The preparation should not be used under the diapers because these garments (especially those made of plastic) work like occlusive dressing and increase absorption. Consequently, this preparation should be administered to children with great caution and for the shortest period of time possible. Children, patients with hepatic insufficiency, and patients requiring long-term topical application of ointment, especially if occlusive dressings are indispensable, should be carefully monitored because, due to increased absorption of betamethasone, systemic manifestations may occur. These patients should be periodically tested for the functioning of hypothalamic pituitary-adrenal axis (the test of urine and plasma free cortisol, and ACTH stimulation test). If suppression of the above mentioned axis occurs, the therapy should be discontinued or given less frequently or substituted with less potent corticosteroid. Rarely, symptoms of withdrawal may occur (fever, myalgia, arthralgia, weakness) which require administration of systemic corticosteroid substitute therapy. Certain parts of the body, e.g. groins, axillae and perianal region, where natural occlusion exists, are more susceptible to the development of striae during therapy with ointment; application to these parts should be very limited.
In cases of fungal superinfection of skin lesions, additional topical application of antimycotic is needed. It should be remembered that a long-term local therapy with gentamicin could cause development of microorganisms resistant to aminoglycosides. Therefore, topical administration is not recommended in immunocompromised patients or other high-risk groups of patients. If during treatment resistance or superinfection develops, administration of gentamicin should be discontinued and appropriate treatment applied.
Effects on ability to drive and use machines:
There is no evidence that Vegaderm ointment have effect on the ability to drive and use machines.
Presentation:
30 gm alu tube in a monocarton, insert enclosed.
Storage:
Keep in dry place, protected from light at a temperature below 30°C. Keep out of reach of children.
Shelf life:
Labeled. Do not use after expiry date.
Distribution condition:
Non- prescribed medicine.

Vegapharm

Manufactured for:
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