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#### HYDROCORTISONE CREAM USP, 2.5% HYDROCORTISONE OINTMENT USP, 2.5%

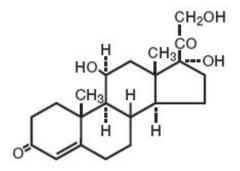
**Rx Only** 

#### DESCRIPTION

Each gram of Hydrocortisone Cream USP, 2.5% contains 25 mg of hydrocortisone in a cream base of cetyl alcohol, methylparaben, propylene glycol, propylparaben, purified water, sodium lauryl sulfate, and stearyl alcohol.

Each gram of Hydrocortisone Ointment USP, 2.5% contains 25 mg of hydrocortisone in ointment base of light mineral oil and white petrolatum.

Chemically, hydrocortisone is [Pregn-4-ene-3,20-dione,11,17,21-trihydroxy-, (11 $\beta$ )-] with the molecular formula (C<sub>21</sub>H<sub>30</sub>0<sub>5</sub>) and is represented by the following structural formula:



Its molecular weight is 362.47 and its CAS Registery Number is 50-23-7. The topical corticosteroids, including hydrocortisone, constitute a class of primarily synthetic steroids used as anti-inflammatory and antipruritic agents.

# CLINICAL PHARMACOLOGY

Topical corticosteroids share anti-inflammatory, antipruritic, and vasoconstrictive actions. The mechanism of anti-inflammatory activity of the topical corticosteroids is unclear. Various laboratory methods, including vasoconstrictor assays, are used to compare and predict potencies and/or clinical efficacies of the topical corticosteroids. There is some evidence to suggest that a recognizable correlation exists between vasoconstrictor potency and therapeutic efficacy in man.

#### Pharmacokinetics -

The extent of percutaneous absorption of topical corticosteroids is determined by many

factors including the vehicle, the integrity of the epidermal barrier, and the use of occlusive dressings. Topical corticosteroids can be absorbed from normal intact skin. Inflammation and/or other disease processes in the skin increase percutaneous absorption. Occlusive dressings substantially increase the percutaneous absorption of topical corticosteroids. Thus, occlusive dressings may be a valuable therapeutic adjunct for treatment of resistant dermatoses (see DOSAGE AND ADMINISTRATION).

Once absorbed through the skin, topical corticosteroids are handled through pharmacokinetic pathways similar to systematically administered corticosteroids. Corticosteroids are bound to plasma proteins in varying degrees. Corticosteroids are metabolized primarily in the liver and are then excreted by the kidneys. Some of the topical corticosteroids and their metabolites are also excreted into the bile.

## INDICATIONS AND USAGE

Topical corticosteroids are indicated for the relief of the inflammatory and pruritic manifestations of corticosteroid-responsive dermatosis.

## CONTRAINDICATIONS

Topical corticosteroids are contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

# PRECAUTIONS

#### General -

Systemic absorption of topical corticosteroids has produced reversible hypothalamicpituitary-adrenal (HPA) axis suppression, manifestations of Cushing's syndrome, hyperglycemia, and glucosuria in some patients. Conditions which augment systemic absorption include the application of the more potent steroids, use over large surface areas, prolonged use, and the addition of occlusive dressings.

Therefore, patients receiving a large dose of a potent topical steroid applied to a large surface area or under an occlusive dressing should be evaluated periodically for evidence of HPA axis suppression by using the urinary free cortisol and ACTH stimulation tests. If HPA axis suppression is noted, an attempt should be made to withdraw the drug, to reduce the frequency of application, or to substitute a less potent steroid. Recovery of HPA axis function is generally prompt and complete upon discontinuation of the drug. Infrequently, signs and symptoms of steroid withdrawal may occur, requiring supplemental systemic corticosteroids.

Children may absorb proportionally larger amounts of topical corticosteroids and thus be more susceptible to systemic toxicity (see PRECAUTIONS - Pediatric Use). If irritation develops, topical corticosteroids should be discontinued and appropriate therapy instituted.

In the presence of dermatological infections, the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

## Information for the Patient -

Patients using topical corticosteroids should receive the following information and instructions:

1. This medication is to be used as directed by the physician. It is for external use only. Avoid contact with the eyes.

2. Patients should be advised not to use this medication for any disorder other than for which it was prescribed.

3. The treated skin area should not be bandaged or otherwise covered or wrapped as to be occlusive unless directed by the physician.

4. Patients should report any signs of local adverse reactions, especially under occlusive dressing.

5. Parents of pediatric patients should be advised not to use tight-fitting diapers or plastic pants on a child being treated in the diaper area, as these garments may constitute occlusive dressings.

#### Laboratory Tests

The following tests may be helpful in evaluating the HPA axis suppression:

Urinary free cortisol test ACTH stimulation test

#### Carcinogenesis, Mutagenesis, Impairment of Fertility -

Long-term animal studies have not been performed to evaluate the carcinogenic potential or the effect on fertility of topical corticosteroids.

Studies to determine mutagenicity with prednisolone and hydrocortisone have revealed negative results

#### Pregnancy

**Teratogenic Effects: Pregnancy Category C** - Corticosteroids are generally teratogenic in laboratory animals when administered systemically at relatively low dosage levels. The more potent corticosteroids have been shown to be teratogenic after dermal application in laboratory animals. There are no adequate and well-controlled studies in pregnant women on teratogenic effects from topically applied corticosteroids. Therefore, topical corticosteroids should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Drugs of this class should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time.

#### Nursing Mothers -

It is not known whether topical administration of corticosteroids could result in sufficient systemic absorption to produce detectable quantities in breast milk. Systemically administered corticosteroids are secreted into breast milk in quantities not likely to have a deleterious effect on the infant. Nevertheless, caution should be exercised when topical corticosteroids are administered to a nursing woman.

#### Pediatric Use -

Pediatric patients may demonstrate greater susceptibility to topical corticosteroidinduced HPA axis suppression and Cushing's syndrome than mature patients because of a larger skin surface area to body weight ratio.

Hypothalamic-pituitary-adrenal (HPA) axis suppression, Cushing's syndrome, and intracranial hypertension have been reported in pediatric patients receiving topical corticosteroids. Manifestations of adrenal suppression in pediatric patients include linear growth retardation, delayed weight gain, low plasma cortisol levels, and absence of response to ACTH stimulation. Manifestations of intracranial hypertension include bulging fontanelles, headaches, and bilateral papilledema.

Administration of topical corticosteroids to pediatric patients should be limited to the least amount compatible with an effective therapeutic regimen. Chronic corticosteroid therapy may interfere with the growth and development of pediatric patients.

## ADVERSE REACTIONS

The following local adverse reactions are reported infrequently with topical corticosteroids, but may occur more frequently with the use of occlusive dressings. These reactions are listed in an approximate decreasing order of occurrence: burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneiform eruptions, hypopigmentation, perioral dermatitis, allergic contact dermatitis, maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.

# OVERDOSAGE

Topically applied corticosteroids can be absorbed in sufficient amounts to produce systemic effects (see PRECAUTIONS).

#### DOSAGE AND ADMINISTRATION

Topical corticosteroids are generally applied to the affected area as a thin film from two to four times daily depending on the severity of the condition. Occlusive dressings may be used for the management of psoriasis or recalcitrant conditions. If an infection develops, the use of occlusive dressings should be discontinued and appropriate antimicrobial therapy instituted.

#### HOW SUPPLIED

Hydrocortisone Cream USP, 2.5% is available as follows: 20 g tube (NDC 45802-**004**-02)

1 oz. (28 g) tube (NDC 45802-**004**-03)

Hydrocortisone Ointment USP, 2.5% is available as follows: 20 g tube (NDC 45802-**014**-02)

1 lb. jar (NDC 45802-**014**-05)

## STORAGE

Store at 20-25°C (68-77°F) [see USP Controlled Room Temperature]. Keep out of the reach of children. Manufactured By Perrigo plc, Bronx, NY 10457 Distributed By Padagis Allegan, MI 49010 www.padagis.com Rev 01-22 1F300 RC JX2 Manufactured By Padagis® Yeruham, Israel Distributed By Padagis Allegan, MI 49010 www.padagis.com Rev 04-23 3K400 RC PH2

#### Principal Display Panel - Hydrocortisone Cream USP, 2.5% - 28 g

NDC 45802-004-03 Rx Only Hydrocortisone Cream USP, 2.5% NET WT 28 g

$\phi$	Each gram contains: 25 mg of hydrocortisone in a cream base of cetyl alcohol, methylparaben, propylene glycol, propylparaben, purified water, sodium lauryl sulfate, and stearyl alcohol. Usual Dosage: Apply 2 to 4 times a day; see insert.				±.
_	NDC 45802- <b>004</b> -03		Rx Only	55%	
	Hydrocortisone Crea	m USP, <mark>2</mark> .	.5%	Inc. 482, 444-33 Hydrocortisone Cream USP, 2358 GTIN 00345802004031 GODDE AYCC2	
	NET WT 28 g		Padagis™	NIC 4582, 904 03 Hydrocortison GTIN 003458	
	Keep out of reach of children. Store at 20-25°C (68-77°F) [see USP Controlled Room Temperature]. For lot number and expiration date, see crimp of tube or carton. Directions for puncturing tube seal: Remove cap. Turn cap upside down and place puncture tip onto tube seal; push down until seal is punctured. Screw cap back on to close.	Manufacturad By Perrigo plc Bronx, NY 10457 Distributed By Allegan, M 49010 www.padagis.com Rev 01-22 1F364 RC C7	3 45802-004-03 1	$\phi$	T
HIUC 4502 0 GTIN 000	NDC 45802- <b>004</b> -03		Rx Only		
GTIN 0034 580 2004 4031	Hydrocortisone Crea	m USP, <mark>2</mark> .	5%		
	NET WT 28 g		Padagis™		

The following image is a placeholder representing the product identifier that is either affixed or imprinted on the drug package label during the packaging operation.

S/N [insert product's serial number] Lot [insert product's lot number] Exp [insert product's expiration date]

# Principal Display Panel - Hydrocortisone Ointment USP, 2.5% - 20 g

NDC 45802-014-02 Rx Only Hydrocortisone Ointment USP, 2.5% NET WT 20 g

	<b>Each gram contains:</b> 25 mg of hydrocortisone in an ointment base of light mineral oil and white petrolatum. <b>Usual Dosage:</b> Apply 2 to 4 times a day; see insert.		
	NDC 45802- <b>014</b> -02	Rx Only	ea se
	Hydrocortisone Ointment USP, 2.59	<b>%</b>	WC (1982,014.02 Hydrocontisone Ointment USP, ASS NET WT 209 Serialization Area
	NET WT 20 g	Padagis.	KET (1992)
	Keep out of reach of children.       Manufactured By Padagis®         Store at 20-25°C (68-77°F) [see USP Controlled Room Temperature].       Image: Controlled Room Temperature].         For lot number and expiration date, see crimp of tube or carton.       Directions for puncturing tube seal: Remove cap. Tum cap upside down and place puncture to not tube seal; push down until seal is punctured. Screw cap back on to close.       Manufactured By Padagis®         Manufactured By Padagis@       Image: Controlled Room Temperature].       Image: Controlled Room Temperature].         Directions for puncturing tube seal: Remove cap. Tum cap upside down and place puncture to not tube seal; push down until seal is punctured. Screw cap back on to close.       Manufactured By Padagis@	3 45802-014-02 3	
	NDC 45802- <b>014</b> -02	Rx Only	
AREA	Hydrocortisone Ointment USP, 2.59	<b>%</b>	
	NET WT 20 g	Padagis.	

The following image is a placeholder representing the product identifier that is either affixed or imprinted on the drug package label during the packaging operation.

S/N [insert product's serial number]
Lot [insert product's lot number]
Exp [insert product's expiration date]

HUMAN PRESCRIPTION DRUG	ltem Co	de (Source)	NDC	45802-004
TOPICAL				
Moiety				
edient Name		Basis of Streng	gth	Strength
(7BPJ) (HYDROCORTISONE - UNII:W4	X0X7BPJ)	HYDROCORTISONE		25 mg in 1 g
	TOPICAL Moiety redient Name	TOPICAL <b>Moiety</b>	TOPICAL Moiety redient Name Basis of Streng	TOPICAL  Moiety redient Name Basis of Strength

Inactive Ingredients	
Ingredient Name	Strength
WATER (UNII: 059QF0KO0R)	
STEARYL ALCOHOL (UNII: 2KR89I4H1Y)	
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)	
CETYL ALCOHOL (UNII: 936JST6JCN)	
SODIUM LAURYL SULFATE (UNII: 368GB5141J)	
METHYLPARABEN (UNII: A2I8C7HI9T)	
PROPYLPARABEN (UNII: Z8IX2SC10H)	

#### Packaging

#	ltem Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:45802-004- 02	1 in 1 CARTON	01/31/2007	
1		20 g in 1 TUBE; Type 0: Not a Combination Product		
2	NDC:45802-004- 03	1 in 1 CARTON	03/31/2006	
2		28 g in 1 TUBE; Type 0: Not a Combination Product		

Marketing In	formation		
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA085025	03/31/2006	

# HYDROCORTISONE

hydrocortisone ointment

Product Information						
Product Type	HUMAN PRESCRIPTION DRUG	Item Coc	de (Source	e) NDC	:45802-0	014
Route of Administration	TOPICAL					
Active Ingradient/Active	Maiaty					
Active Ingredient/Active	MOIELY					
Ingre	edient Name		Basis of	Strength	Strer	ngth
HYDROCORTISONE (UNII: W4X0X	7BPJ) (HYDROCORTISONE - UNII:W42	X0X7BPJ)	HYDROCOR	TISONE	25 mg	in 1 g
Inactive Ingredients						
	Ingredient Name			Str	ength	
PETROLATUM (UNII: 4T6H12BN9U)						

LIGHT MINERAL OI	_ (UNII: N6K5787QVP)
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P	ackaging			
#	ltem Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:45802-014- 02	1 in 1 CARTON	06/13/2006	
1		20 g in 1 TUBE; Type 0: Not a Combination Product		
2	NDC:45802-014- 05	454 g in 1 JAR; Type 0: Not a Combination Product	12/19/2006	
	05	110ddee		
		- Toddee		
M		Information		
M			n Marketing Start Date	Marketing End Date

Labeler - Padagis Israel Pharmaceuticals Ltd (600093611)

Revised: 4/2023

Padagis Israel Pharmaceuticals Ltd