Clindamycin Phosphate
Topical Solution USP, 1%
Rx only

DESCRIPTION
Clindamycin Phosphate Topical Solution USP, 1% contains clindamycin phosphate, USP, at a concentration equivalent to 10 mg clindamycin per milliliter.

Clindamycin phosphate is a water soluble ester of the semi-synthetic antibiotic produced by a 7(S)-chlooro-substitution of the 7(R)-hydroxyl group of the parent antibiotic licnomycy.

The solution contains isopropyl alcohol 50% v/v, propylene glycol, purified water and sodium hydroxide. Sodium hydroxide or hydrochloric acid may be added to adjust pH.

The structural formula is represented below:

The chemical name for clindamycin phosphate is Methyl 7-chloro-6,7,8-trideoxy-6-(1-methyl-trans-4-propyl-L-2-pyrrolidinecarboxamido)-1-thio-L-threo-α-D-galacto-octopyranoside 2-dihydrogen phosphate.

CLINICAL PHARMACOLOGY
Although clindamycin phosphate is inactive in vitro, rapid in vivo hydrolysis converts this compound to the antibacterially active clindamycin.

Cross resistance has been demonstrated between clindamycin and lincomycin.

Antagonism has been demonstrated between clindamycin and erythromycin.

Following multiple topical applications of clindamycin phosphate at a concentration equivalent to 10 mg clindamycin per ml in an isopropyl alcohol and water solution, very low levels of clindamycin are present in the serum (0-3 ng/mL) and less than 0.2% of the dose is recovered in urine as clindamycin.

Clindamycin activity has been demonstrated in comedones from acne patients. The mean concentration of antibiotic from acne patients. The mean concentration of antibiotic activity in extracted comedones after application of Clindamycin Phosphate Topical Solution USP, 1% for 4 weeks was 597 mcg/g of comedonal material (range 0-1490). Clindamycin in vitro inhibits all Propionibacterium acneus cultures tested (MICs 0.4 mcg/mL). Free fatty acids on the skin surface have been decreased from approximately 14% to 2% following application of clindamycin.

INDICATIONS AND USAGE
Clindamycin Phosphate Topical Solution USP, 1% is indicated in the treatment of acne vulgaris. In view of the potential for diarrhea, bloody diarrhea and pseudomembranous colitis, the physician should consider whether other agents are more appropriate. (See CONTRAINDICATIONS, WARNINGS and ADVERSE REACTIONS.)

CONTRAINDICATIONS
Clindamycin Phosphate Topical Solution USP, 1% is contraindicated in individuals with a history of hypersensitivity to preparations containing clindamycin or lincomycin, a history of regional enteritis or ulcerative colitis, or a history of antibiotic-associated colitis.

WARNINGS
Orally and parenterally administered clindamycin has been associated with severe colitis which may result in patient death. Use of the topical formulation of clindamycin results in absorption of the antibiotic from the skin surface. Diarrhea, bloody diarrhea, and colitis (including pseudomembranous colitis) have been reported with the use of topical and systemic clindamycin.

Studies indicate a toxin(s) produced by clostridia is one primary cause of antibiotic-associated colitis. The colitis is usually characterized by severe persistent diarrhea and severe abdominal cramps and may be associated with the passage of blood and mucus. Endoscopic examination may reveal pseudomembranous colitis. Stool culture for Clostridium difficile and stool assay for C. difficile toxin may be helpful diagnostically.

When significant diarrhea occurs, the drug should be discontinued. Large bowel endoscopy should be considered to establish a definitive diagnosis in cases of severe diarrhea.

Antiperistaltic agents such as opiates and diphenoxylate with atropine may prolong and/or worsen the condition. Vancomycin has been found to be effective in the treatment of antibiotic-associated pseudomembranous colitis produced by Clostridium difficile. The usual adult dosage is 500 milligrams to 2 grams of vancomycin orally per day in three to four divided doses administered for 7 to 10 days. Cholestyramine or colestipol resins bind vancomycin in vivo. If both a resin and vancomycin are to be administered concurrently, it may be advisable to separate the time of administration of each drug.

Diarrhea, colitis, and pseudomembranous colitis have been observed to begin up to several weeks following cessation of oral and parenteral therapy with clindamycin.

PRECAUTIONS
General
Clindamycin Phosphate Topical Solution USP, 1% contains alcohol base which will cause burning and irritation of the eye. In the event of accidental contact with sensitive surfaces (eye, abraded skin, mucous membranes), bathe with copious amounts of cool tap water. The solution has an unpleasant taste and caution should be exercised when applying medication around the mouth.

Clindamycin Phosphate Topical Solution USP, 1% should be prescribed with caution in atopic individuals.

Drug Interactions
Clindamycin has been shown to have neuromuscular blocking properties that may enhance the action of other neuromuscular blocking agents. Therefore it should be used with caution in patients receiving such agents.

Pregnancy
Teratogenic effects—Pregnancy Category B

Cholestyramine or colestipol resins bind vancomycin in vivo. If both a resin and vancomycin are to be administered concurrently, it may be advisable to separate the time of administration of each drug.

Cases of diarrhea, bloody diarrhea and colitis (including pseudomembranous colitis) have been reported as adverse reactions in patients treated with oral and parenteral formulations of clindamycin and rarely with topical clindamycin (see WARNINGS).

Abdominal pain and gastrointestinal disturbances as well as gram-negative folliculitis have also been reported in association with the use of topical formulations of clindamycin.

OVERDOSAGE
Topically applied Clindamycin Phosphate Topical Solution USP, 1% can be absorbed in sufficient amounts to produce systemic effects. (See WARNINGS.)

DOSEAGE AND ADMINISTRATION
Apply a thin film of Clindamycin Phosphate Topical Solution USP, 1% twice daily to affected area.

Keep all liquid dosage forms in containers tightly closed.

HOW SUPPLIED
Clindamycin Phosphate Topical Solution USP, 1% containing clindamycin phosphate equivalent to 10 mg clindamycin per milliliter is available in the following sizes:

30 mL applicator bottle — NDC 0603-1086-45
60 mL applicator bottle — NDC 0603-1086-49

Store at controlled room temperature 20° to 25°C (68° to 77°F) [see USP].

Protect from freezing.

Manufactured for:
QUALITEST PHARMACEUTICALS
Huntsville, AL 35811
500386-01
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