Candida α, clotrimazole exhibits fungistatic and fungicidal activity against isolates of *Malassezia furfur*. The primary activity of clotrimazole is against dividing and growing organisms.

In vitro, clotrimazole exhibits fungicidal and fungistatic activity against isolates of *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Epidermophyton floccosum*, *Microsporum canis*, and Candida species including Candida albicans. In general, the in vitro activity of clotrimazole corresponds to that of itraconazole and griseofulvin against the mycelia of dermatophytes ( *Trichophyton mentagrophytes*, and *Epidermophyton floccosum*), and to that of the polyenes (amphotericin B and nystatin) against budding fungi (*Candida albicans* in vitro and in vivo). In the *in vitro* mouse killing homogenate testing system, clotrimazole and miconazole were equally effective in preventing the growth of the pseudomycelia and mycelia of Candida albicans.

Each gram of clotrimazole cream USP contains 10 mg clotrimazole, dispersed in a vanishing cream base of cetyl esters wax, 2-octyldodecanol, polysorbate 60, purified water, sorbitan monostearate, and benzyl alcohol (1%) as preservative.

**DESCRIPTION**

Clotrimazole is an antifungal agent that is used for the treatment of dermal infections caused by various species of *Candida*, *Malassezia furfur*, *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Epidermophyton floccosum*, *Microsporum canis*, and *Candida* species including *Candida albicans*. It is available in ointments and solutions. Clotrimazole is a broad-spectrum antifungal agent that is used for the treatment of dermal infections caused by various species of *Candida*, *Malassezia furfur*, *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Epidermophyton floccosum*, *Microsporum canis*, and *Candida* species including *Candida albicans*. It is available in ointments and solutions. Clotrimazole is also available as a nonprescription item which is indicated for the topical treatment of the following dermal infections: tinea pedis, tinea cruris, and tinea corporis due to *Candida* species; tinea versicolor due to *Malassezia* species; and tinea nigra due to *Microsporum canis*. Clotrimazole is also available as a nonprescription item which is indicated for the topical treatment of the following dermal infections: tinea pedis, tinea cruris, and tinea corporis due to *Candida* species; tinea versicolor due to *Malassezia* species; and tinea nigra due to *Microsporum canis*.

**INDICATIONS AND USAGE**

Clotrimazole is indicated for the topical treatment of candidiasis due to *Candida* species, tinea pedis, tinea cruris, and tinea corporis due to *Malassezia furfur*, and tinea nigra due to *Microsporum canis*. Clotrimazole is also available as a nonprescription item which is indicated for the topical treatment of the following dermal infections: tinea pedis, tinea cruris, and tinea corporis due to *Candida* species; tinea versicolor due to *Malassezia* species; and tinea nigra due to *Microsporum canis*.

**CONTRAINDICATIONS**

Clotrimazole is contraindicated in individuals sensitive to its components. Clotrimazole is also available as a nonprescription item which is indicated for the topical treatment of the following dermal infections: tinea pedis, tinea cruris, and tinea corporis due to *Candida* species; tinea versicolor due to *Malassezia* species; and tinea nigra due to *Microsporum canis*.

**WARNINGS**

Clotrimazole cream USP is not for ophthalmic use.

**PRECAUTIONS**

If irritation or sensitivity develops with the use of clotrimazole cream, treatment should be discontinued and appropriate therapy instituted.

**REFERENCES**

Using an *in vivo*-diphenylbenzyl)imidazole}; the molecular formula C$_{359}$N$_{331}$P/C$_{1114-6}$ is 359; a molecular weight of 344.84; and the structural formula:

Clotrimazole is an antifungal agent that is used for the treatment of dermal infections caused by various species of *Candida*, *Malassezia furfur*, *Trichophyton rubrum*, *Trichophyton mentagrophytes*, *Epidermophyton floccosum*, *Microsporum canis*, and *Candida* species including *Candida albicans*. In general, the in vitro activity of clotrimazole corresponds to that of itraconazole and griseofulvin against the mycelia of dermatophytes ( *Trichophyton mentagrophytes*, and *Epidermophyton floccosum*), and to that of the polyenes (amphotericin B and nystatin) against budding fungi (*Candida albicans* in vitro and in vivo). In the *in vitro* mouse killing homogenate testing system, clotrimazole and miconazole were equally effective in preventing the growth of the pseudomycelia and mycelia of Candida albicans.

Clotrimazole appears to be well absorbed in humans following oral administration and is eliminated mainly as inactive metabolites. Following topical and vaginal administration, however, clotrimazole appears to be minimally absorbed.

No single-step or multiple-step resistance to clotrimazole has developed during successive passages of Candida albicans and *Trichophyton mentagrophytes*. No appreciable change in sensitivity was detected after successive passage of isolates of *C. albicans*, *C. Krusei*, or *C. Pseudotropicalis* in liquid or solid media containing clotrimazole. Also, resistance could not be developed in chemically reduced mutant strains of polyene-resistant strains of polyene-resistant isolates of *C. albicans*. Slight reversibility resistance was noted in these isolates of *C. albicans* tested by one investigator. There is a single report that records the clinical emergence of *C. albicans* strain with considerable resistance to fluconazole and miconazole, and with cross-resistance to clotrimazole, the strain remained sensitive to nystatin and amphotericin B.

In studies of the mechanism of action, the minimal fungicidal concentration of clotrimazole caused leakage of intracellular phosphorus compounds into the ambient medium with concomitant breakdown of cellular nucleic acids and accelerated potassium efflux. Both these events began rapidly and extensively after addition of the drug.
Information for Patients:

The patient should be advised to:
1. Use the medication for the full treatment time even though the symptoms may have improved.
2. Notify the physician if there is no improvement after four weeks of treatment.
3. Avoid the use of occlusive wrappings or dressings.
4. Avoid sources of infection or reinfection.

Drug Interactions

Cross-action or antagonism between clotrimazole cream, isoniazid, or pyrazinamide, or pyrimethamine or sulfa drugs of strains of C. albicans has not been reported.

Laboratory Tests

Routine analysis of hematocrit and hematocrit of Chinese hamsters at levels that have been exposed to clotrimazole have been normal (see CLINICAL PHARMACOLOGY).

Carcinogenesis, Mutagenesis, Impairment of Fertility

An 18-month oral dosing study with clotrimazole in rats has not revealed any carcinogenic effect.

Clotrimazole should not be administered to pregnant rats which had been exposed to clotrimazole as it has been associated with increased incidence of stillbirths and neonatal deaths.

Laboratory Tests

In pregnant rats with intravaginal doses up to 100 mg/kg, no abnormalities were noted in the offspring of these rats.

IN6.1) 4-1/2” x 9” FLAT 4-1/2” x 3/4” FOLDED
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ADVERSE REACTIONS

The following adverse reactions have been reported in connection with the use of this product:

- Erythema, stinging, blistering, peeling, edema, pruritus, urticaria, burning, and general irritation of the skin.

OVERDOSAGE

Acute overdosage with topical application of clotrimazole is unlikely and would not be expected to lead to a life-threatening situation.

DOSAGE AND ADMINISTRATION

Gently massage sufficient Clotrimazole Cream USP, 1% into the affected and surrounding skin areas twice a day, in the morning and evening.

Clinical improvement, with relief of pruritus, usually occurs within the first week of treatment with clotrimazole cream. The patient should be informed of the importance of completing the full course of therapy.

HOW SUPPLIED

Clotrimazole Cream USP, 1% is supplied in 15 g (NDC 51672-1275-1), 30 g (NDC 51672-1275-2), 45 g (NDC 51672-1275-6) and (2 x 45) g (NDC 51672-1275-7) tubes.

Store at 20˚-25˚C (68˚-77˚F) [see USP Controlled Room Temperature].

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