

THIABENDAZOLE w/ CAPTAN Topical Ointment

Treatment option for Ringworm

Uses of Thiabendazole

Imidazoles may have antibacterial, antifungal, antiprotozoal, and anthelmintic activity. The anthelmintic thiabendazole is an imidazole with antifungal properties that is used to treat or control infections caused by susceptible parasites, fungi and bacteria.

ANTIFUNGAL ACTIVITY

Imidazoles alter the cell membrane permeability of susceptible yeasts and fungi by blocking the synthesis of ergosterol (demethylation of lanosterol is inhibited), the primary cell sterol of fungi. Other enzyme systems are also impaired, such as those required for fatty acid synthesis. Because of the drug-induced changes of oxidative and peroxidative enzyme activities, toxic concentrations of hydrogen peroxide develop intracellularly. The overall effect is cell membrane and internal organelle disruption and cell death. The cholesterol in host cells is not affected by the imidazoles, although some drugs impair synthesis of selected steroids and drug-metabolizing enzymes in the host. Because imidazoles impair synthesis, a lag time to efficacy occurs.

Topically applied imidazoles (clotrimazole, miconazole, econazole) are used for local dermatophytosis. Thiabendazole is included in some otic preparations for treatment of the molds *Microsporum* and *Tricophyton* in cats and dogs. Thiabendazole has been tried as a topically applied preparation against various types of body ringworm. It is an effective antifungal agent and reportedly clears ringworm lesions as rapidly as systemically administered griseofulvin.

Captan is a general use pesticide that belongs to the phthalimide class of fungicides and may have some added effect when applied topically to dermatophytosis.

Dosing Information

- * Apply once daily to affected areas.
- * Can be used around the eyes and head safely.
- * Lesions resolve within 7-10 days in most cases.
- * The preparation is easier to apply when warm prior to application.