



CLIENT TEACHING GUIDELINES

Oral and Topical Antifungal Drugs

General Considerations

- ✔ If you have a condition or take a medicine that suppresses your immune system (eg, bone marrow or organ transplant, leukemia, lymphoma, diabetes mellitus, HIV infection, cancer chemotherapy, corticosteroid therapy), you need to avoid exposure to molds and fungi when possible. For example, aspergillus organisms, which can be in the air, dust, soil, and other environments, can cause serious illness and death. To minimize exposure, you should avoid areas of building construction or renovation, avoid cleaning carpets or potentially moldy areas, and avoid potted plants and live flowers.
- ✔ With skin lesions, wash hands often and do not share towels, hairbrushes, or other personal items.
- ✔ With vaginal yeast infections, do not use over-the-counter medications repeatedly without consulting a physician or other health care provider. Recurrent infections may indicate inadequate treatment, reinfection, or a bacterial infection (for which an antifungal drug is not effective), and a different treatment may be needed.
- ✔ With histoplasmosis and other potentially serious fungal infections, avoid or minimize future exposure to chicken, pigeon, and bat excreta.
- ✔ For people who work with plants (eg, roses, sphagnum moss) or baled hay, sporotrichosis can be prevented by wearing gloves and long sleeves and avoiding injuries that cause breaks in the skin.

Self-Administration

- ✔ Use antifungal drugs as prescribed.
- ✔ With topical skin preparations, wash and dry the area before each application of medication.
- ✔ With vaginal antifungal preparations:
 - ✔ Read instructions carefully, with prescribed and over-the-counter drugs.
 - ✔ Insert high into the vagina (except during pregnancy).
 - ✔ Continue use through menstruation.
 - ✔ Wear a minipad to avoid staining clothing; do not use a tampon.
 - ✔ Wash applicator with mild soap and rinse thoroughly after each use.
 - ✔ Avoid sexual intercourse while using the drug.
- ✔ With flucytosine, take capsules a few at a time over 15 minutes to decrease nausea and vomiting.
- ✔ With oral ketoconazole, take with food to decrease gastrointestinal upset. However, do not take with antacids or drugs such as ranitidine (Zantac) or omeprazole (Prilosec). If one of these drugs is required, take it approximately 2 hours after a dose of ketoconazole.
- ✔ With itraconazole capsules, take after a full meal for best absorption. With the oral suspension, take on an empty stomach, usually by swishing in the mouth and then swallowing it.
- ✔ With nystatin suspension for mouth lesions (thrush), swish the medication around in the mouth for a few minutes (to increase drug contact with the lesions), then swallow the medication.
- ✔ With oral fluconazole (Diflucan), itraconazole (Sporanox), ketoconazole (Nizoral), or terbinafine (Lamisil), notify a health care provider of unusual fatigue, loss of appetite, nausea, vomiting, jaundice, dark urine, pale stools, fever, abdominal pain, or diarrhea. These may be signs of liver damage or other adverse drug effects. Drug therapy may need to be discontinued.
- ✔ With griseofulvin, avoid prolonged exposure to sunlight or sunlamps; the drug may cause photosensitivity.

PRINCIPLES OF THERAPY

Nonpharmacologic Treatment

Some fungal infections are asymptomatic or resolve spontaneously without treatment. In addition, candidal infections of blood or urine often respond to the removal of predisposing factors, such as antibacterial drugs, corticosteroids or other immunosuppressive drugs, and indwelling IV or bladder catheters.

Choice of Drug

Drug therapy for potentially serious fungal infections should be planned in consultation with an infectious disease specialist when possible. In general, drug selection is determined mainly by the type of fungal infection. For example, drugs that are effective in candidiasis are not usually effective in dermatophytic infections, and vice versa. For serious infections, am-

photericin B is usually the first drug of choice, especially for invasive aspergillosis and systemic infections in immunocompromised hosts. However, fluconazole and itraconazole are increasingly being used for first-line treatment of some infections. If an azole drug has equivalent effectiveness in a particular infection, it may be preferred over amphotericin B because it is easier to administer and less toxic. The systemic azoles are also used for initial therapy in less acutely ill patients and as long-term treatment after a brief initial course of amphotericin B. However, all azoles are contraindicated during pregnancy. The newer drug, caspofungin, is currently approved only for second-line treatment of invasive aspergillosis.

Dosage and Routes of Administration

Dosages depend on illness severity, with high amounts required for systemic infections, especially in immunocompromised hosts.