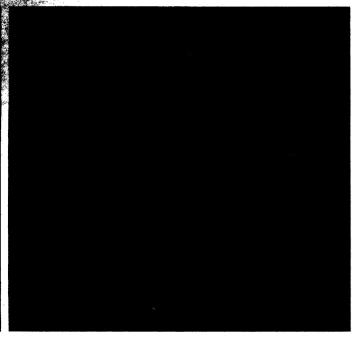


CYTOCHROME P450



OR WHAT'S IN A NAME...

The metabolism of fungi is almost identical to that of other eukaryotic organisms, such as humans. Therefore, trying to design a systemic drug that kills fungi without harming their human host means searching for infinitesimal differences in metabolic pathways.

Selective precision for the metabolic pathways in fungi, as distinct from those in humans, remains the key determinant for any systemic antimycotic, regardless of its point of biochemical interaction. This precision has been achieved to an exceptional degree with itraconazole, alias Sporanox*, because it selectively inactivates the fungal cytochrome P450 only.

Figure 1 is a simplified illustration of one of the pathways for the enzymatic ergosterol synthesis in fungal cell membranes. (Ergosterol is essential for the structural cohesion of these membranes). Pharmacologically one can disrupt this process at two distinct points. The first is where squalene is made into an oxide. Alternatively, one can interfere where lanosterol is converted into ergosterol, by inactivating **cytochrome P450**— a chemical catalyst that performs a vital function in the enzymatic reaction. The broadest research experience to date has been gathered with the latter approach. Importantly, in view of the close similarities between the enzymatic processes in fungi and humans, either approach must be highly selective in disrupting the fungal enzyme systems only.

Sporanox *

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standard dose in dermatomycoses: 1 capsule (100 mg) once daily for 15 days standard dose in vaginal candidosis: 2 x 2 capsules (400 mg) for 1 day only

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Properties: Sporanox (itraconazole), a triazole derivative, is orally active against infections with dermatophytes (*Trichophyton* spp., *Microsporum* spp., *Epidermophyton* floccosum), yeasts (*Candida* spp., *Pityrosporum* spp.), Aspergillus spp. and various other yeasts and fungi. Indications: Sporanox (firaconazole) is indicated for vulvovaginal candidosis, phyriasis versicolor, dermatophytoses, fungal keratitis and oral candidosis. **Dosage and administration:** Vulvovaginal candidosis: 2 capsules (200 mg) morning and evening for 1 day, Pi-

tyriasis versicolor: 2 capsules (200 mg) once daily for 7 zole) it days. - Tinea corporis, tinea cruris, tinea pedis, tinea manus: 1 capsule (100 mg) daily for 15 days; highly keratinized regions, as in plantar tinea pedis and palmar tinea manus, require 1 capsule (100 mg) daily for 30 days.

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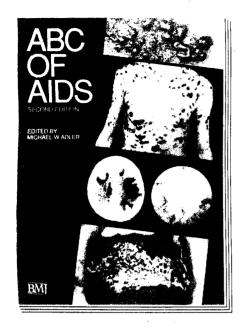
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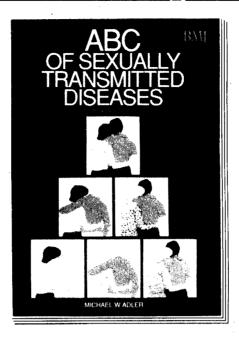
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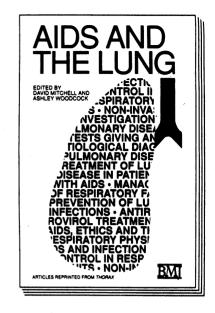
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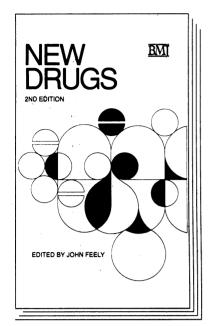
The number and range of sexually transmitted diseases have been increasing steadily in the past few years, and the second, revised edition of the ABC of Sexually Transmitted Diseases, includes the most up to date figures as well as new chapters on AIDS and psychosexual problems. Doctors need to be aware that common clinical conditions such as rashes, vaginal discharge, and pelvic pain may have a sexual origin and in the new edition of this invaluable handbook Professor Michael Adler gives expert guidance on the diagnosis and management of these conditions.

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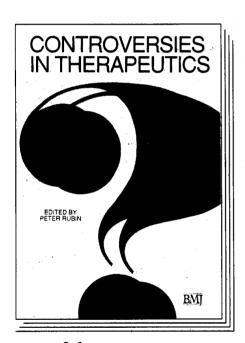
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