

ANTIMICROBIALS

ANTIFUNGALS

Ringworm:

Microsporum spp,

Trichophyton spp

Candidia

Systemic fungal infections:

Aspergillus spp



ANTIMICROBIALS

ANTIFUNGALS

Griseofulvin

GRISEOFULVIN

(*Penicillium griseofulvum*)

Microtubular toxin - active uptake by fungi

- inhibits fungi (slow acting fungistatic)
- keratin precursor/stratum corneum



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GRISEOFULVIN (microsize, ultramicrosize)

Absorption: improved with fatty foods

Distribution: keratinised tissues, fat, liver, skeletal muscle

Liver metabolism: inactivated

induces hepatic mixed function oxidase

Excretion: urine



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ANTIFUNGALS

GRISEOFULVIN

Contraindications:

- liver disease
- hypersensitivity
- pregnancy
- cats with FIV



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GRISEOFULVIN

Adverse Effects:

- teratogenic
- diarrhoea, depression, anorexia, fever
- anaemia, leukopaenia, neutropenia
- hepatotoxicity (uncommon)
- neurological effects in kittens - ataxia



ANTIMICROBIALS

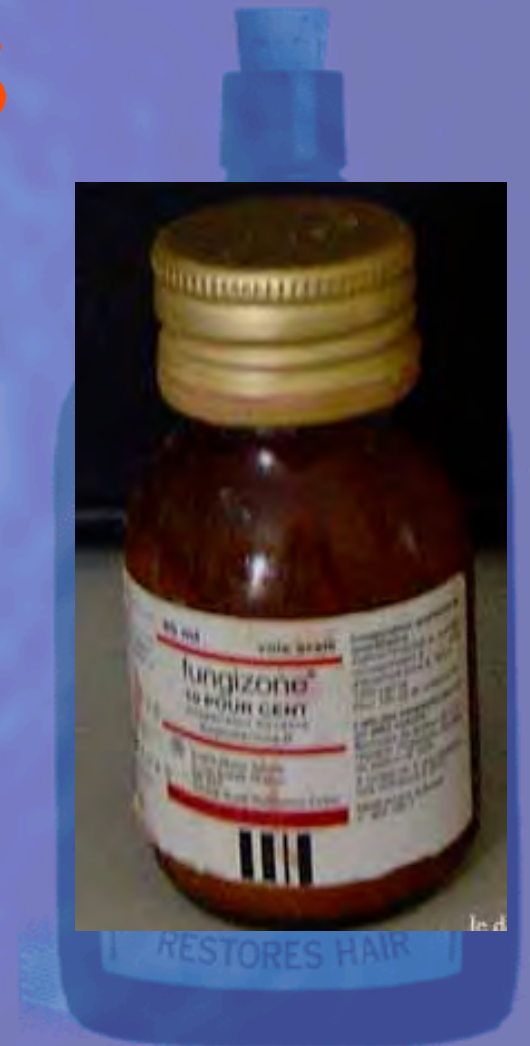
ANTIFUNGALS

AMPHOTERICIN B

- Polyene antibiotic

Binds to ergosterol

- fungal cell membrane



ANTIMICROBIALS

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AMPHOTERICIN B - USES:

- Systemic infections
 - Aspergillosis, etc
- Yeast infections
 - candidia



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AMPHOTERICIN B

- Not absorbed orally
- IV in 5% dextrose
- Poor distribution to CNS, eye, muscle or bone
- Elimination - slow binds to lipids



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AMPHOTERICIN B - Adverse Effects

- Renal toxicity

Monitor renal function

Note: Newer formulations with liposomes or lipid complexes reduce nephrotoxicity



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AMPHOTERICIN B - Side Effects

- Fever
- Anorexia
- Nausea



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AZOLES

- MICONAZOLE
- KETOCONAZOLE
- CLOTRIMAZOLE
- ITRACONAZOLE
- FLUCONAZOLE
- ENILCONAZOLE



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AZOLES

- Inhibit ergosterol synthesis
- Broad spectrum
- Dose dependent - static or cidal



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AZOLES - USES

- systemic fungal infections
 - nasal aspergillosis
- yeast infections
- hyperadrenalcorticism

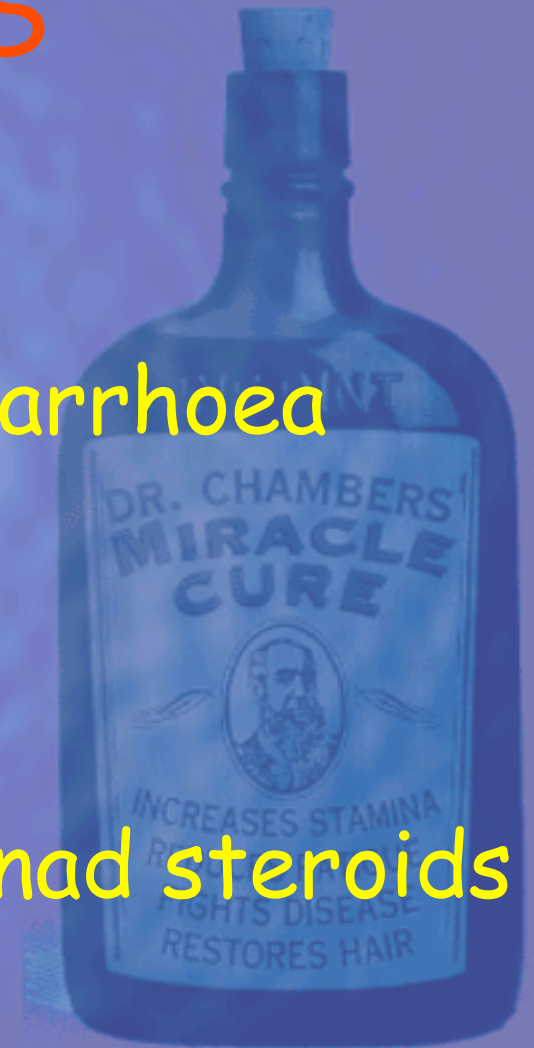


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AZOLES - SIDE EFFECTS

- anorexia, vomiting and/or diarrhoea
- depression
- hepatotoxicity
- suppression of adrenal & gonad steroids



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SUMMARY

Griseofulvin

Fungistatic, ringworm, slow action,
keratin deposition, teratogenic, fatty
meals ↑ absorption

Polyenes (amphotericin B) - nephrotoxic

Azoles (ketoconazole) - systemic mycoses

