

# Anti-fungal 8-

## D cell-membran

fungocidal

### polyenes

### Terbinafin

uses:

Orally, topically → for dermatophytes

Side effect: GIT + taste disturbances

Adverse effect

→ sequential epoxidase enz → not present in human

→ No inhibition CYP450

(more selective toxicity)

### Amphotericin B

### Nystatin

\* the most important anti-fungal in deep fungal infection

too toxic for systemic use

Severe life threatening infection (I.V) not absorbed orally → given orally → Oropharyngeal and GIT

Meningitis [intrathecal] dose not reach CSF after injection → topically → cutaneous candidiasis

Side effect:

① infusion related [fever, rigors, hypotension, shock]

can be avoided by:

1) Slow infusion rate 2) pretreatment with antihistamin

② Dose-related [nephrotoxicity]

① ↓ Dose ②

③ Convulsion (with intrathecal injection)

inhibiting to CYP450

### AZoles

أزول

### Ketoconazol

used for

Deep fungal infection

Candida infection

Dermatophytes resistant → griseofulvin → terbinafin

avoid combination with:

Anti acids or H2 blockers → ↓ gastric acidity → ↓ absorption

Amphotericin B

Adverse effects:

Nausea, vomiting, rash

hepatotoxic

↓ steroid synthesis → ↓ Corticosteroids

→ ↓ Testosterone

→ ↓ female sex hormones

inhibition of metabolism of drug interaction

① antihistamin

② Warfarin, antiepileptics

they more specific to fungal than human CYP450

- less hepatotoxic
- less drug interaction
- more effective

### itraconazole, Fluconazol

Fluconazole → Drug of choice in

1) esophageal 2) oropharyngeal

3) cryptococcal meningitis

Equivalent to → amphotericin B

### posaconazole

brodest-spectrum azole

the only azole with activity

against mucormycosis

prophylaxis

during cancer chemotherapy

⊖ CYP450 → ↑ the levels

of cyclosporine and tacrolimus

↓ CYP450

↓ metabolism