MYCOLOGY QUESTIONS

Q1: Is the (spore types) slide in lecture 1 required for the exam? The doctor didn't go over it in the lecture

A: Yes, they are required.

Q2: Are echinocandins and Allylamines fungicidal or fungistatic ? I searched about them but different resources say different things!
Generally saying Echinocandins are fungicidal while allylamines are fungistatic. what you might refer to in the trusted sources are species dependent. However, the above saying is valid for the commonest use for them which is against Candidal spp.

Q3:

دكتور لو سمحت هسا بالنسبة لل Opportunistic fungal mycoses هل هي نوع خاص من ال؟ Systemic ones

طيب إذا نعم يا دكتور كيف بتعمل مثلًا؟superficial disease

مش الsystemic

يصيب ال؟ internal organs

Opportunistic mycotic infections primarily affect individuals with weakened immune systems ; weakened immune system can be Localized or systemic and the fungi causing this type of mycoses are considered of Low inherent virulence, while endemic mycotic infections are caused by fungi that can infect even healthy people and are confined to specific geographic regions and are cosidered moderate to high inherent virulence fungi and might cause Systemic mycoses.

. Endemic fungi are considered "true pathogens" because they can cause disease in both immunocompetent and immunocompromised hosts, although the disease may be more severe in the latter.

Q4: For some diseases, you mentioned multiple names for them in the lecture. Should we know all the names or is it enough to know the names in the slides.

Yes , you should be familiar with those names.

Q5:

كيف ندرس الماده خصوصا في كثير معلومات انذكرت بالمحاضرة

I would recommend the Slides followed by what have been said in the lecture and then those topics from the reference books.

Q6: In diagnosis of cryptococcus neoformans, we can do an antigen based analysis to know if we have cryptococcus?

Common laboratory methods for the detection of cryptococcal antigen include latex agglutination (LA) test and enzyme immunoassay (EIA), both of which are available in commercial, FDA-approved formats that have demonstrated comparable performance in identifying fungal antigens in samples like blood, cerebrospinal fluid (CSF), or urine.

Q7: Regarding tinea versicolor caused by Malassezia, is it fine to go without treatment?

I know treatment is for cosmetic reasons but other than that is it required to prevent for example more severe infection

The prognosis is still benign — the condition is not dangerous and does not cause scarring or permanent damage. However, it tends to persist for months to years and may recur frequently, especially in humid or hot environments.

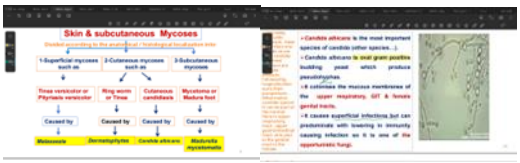
Q8: Is it right to say that pseudo diaper rash involves the gluteal skin folds, while the napkin dermatitis (diaper rash) does not involve the skin folds because it only results from contacting the diaper unlike the pseudo which doesn't exactly require contacting?

Yes , it is.

Q9: Are Echinocandins and allylamines considered fungicidal or fungistatic ?

Generally saying Echinocandins are fungicidal while allylamines are fungistatic. what you might refer to in the trusted sources are species dependent. However, the above saying is valid for the commonest use for them which is against Candidal spp.

Q10: In the flowchart, Candida albicans is classified as a cutaneous infection, but in another slide it's written as a superficial infection.



I researched and found that it can infect any layer of the skin and even internal organs, but for exam purposes, which classification is correct?

As you could read, it was mentioned in the lecture that the clinical spectrum of candidal infections in humans is very wide and ranges from superficial & cutenous infections to systemic candida

Q11:**When using tissue biopsy for fungal infection diagnosis , do we need to use KOH ?**
Another question , in Tinea capitis , the black dots occur in the Tinea capitis or the more severe form Tinea favosa ?

Another question. Spores are always formed right? Even in yeast by budding, it's just that they're daughter cells called blastospores right? And spores are always formed in reproduction in both hyphae and yeast? Asis and Candidemia.

1- yes, but also depends on the specimen type and the suspected diagnosis.
2-Black dots are a sign of tinea capitis, a non-inflammatory type caused by an endothrix infection where the hair shaft breaks off at the scalp. Tinea favosa is a severe, distinct form of tinea capitis, which can be chronic, and is characterized by thick, yellow, honeycomb-like crusts called scutula, not black dots.
3-Not all fungi form spores at all times, and spore formation is not required for every type of fungal reproduction.

Yeasts, for example, usually reproduce asexually by budding, producing blastoconidia (blastospores) — not true spores in the sense of reproductive survival structures like conidia or sporangiospores.

Some yeasts can form spores, but only under certain conditions (often nutrient limitation or sexual reproduction).

-You mentioned that ergotsim and amantia are caused by mushroom , but I wasn't able to find the name of the mushroom that causes them.

https://www.acslab.com/mushrooms/amanita-muscaria-vs-psychedelic-mushrooms

in pseudo diaper rash , the picture where there are fungal lesions around the baby's mouth , you said that the mother could've used the same infected napkin over the baby's mouth , but candida is part of normal flora , how could it be transmissible?

Another question , endothrix and ectothrix occur only in Tinea capitis and not favosa right ?

Transmisstion most frequently occures by the Hands of the mother (bad hygiene) 2 - yes in favosa there is hair loss , and hair folicIles are filled with crusts (scutula) which forms around and within the hair shaft, but no true endo- or ectothrix pattern

Q12: What is the hyper and the hypo pigmentation in pityriasis versicolor disease? If the pigmentation is darker than the skin color, it is hyperpigmentation and vice versa?

depending on the skin type and sun exposure. Hypopigmentation (lighter patches)

Occurs most commonly in tanned or darker skin types. while Hyperpigmentation (darker patches)

Occurs more often in lighter skin types. there is also Mixed

Both processes can coexist

Common

“Variegated” or mottled patches. That’s why the disease is named versicolor — meaning “of various colors.”

'- [ ] Can the cutaneous mycoses be transported from plants ? What is called then?

'No, dermatophyte infections are not transmitted from plants.

Q13 : How should we classify pseudo hyphae-forming fungi — are they considered yeasts or filamentous fungi? Are they yeast originally but there polymorphic appearance differ ?

Pseudo hyphae-forming fungi are yeasts that undergo a polymorphic change to an elongated, filament-like growth form, but are not classified as true filamentous fungi (molds).

Q14: I’m a bit confused about Zygomycetes — since they are filamentous fungi that reproduce sexually by forming zygospores, doesn’t that contradict the rule that filamentous fungi produce asexual spores (sporangiospores) at the tip or side of the hyphae inside a sporangium?”

Zygomycetes have two distinct reproductive cycles :Asexual reproduction-produce asexual sporangiospores inside of a sporangium. Sexual reproduction --involves the fusion of hyphae from two compatible mating types . The resulting fusion forms a thick-walled zygosporangium, which contains a single zygospore. If interested , here is additional sources :https://www.sciencedirect.com/science/article/abs/pii/B9780128186190000344

Q15: يعطيك العافية دكتور, دكتور في كثير اضافات على السلايدات و اكثله كثيرة ممكن بس تحددلنا شو المهم او على اشي نركز لو سمحت

I would recommend the Slides followed by what have been said in the lecture and then those tyopics from the reference books.

Q16: Black skin people experience hypopigmentation in tinea versi color right?

Yes , the lesions are of hypopigmentation for the dark skinned people in tinea versicolor.