LEARNING OBJECTIVES

Upon completion of the chapter, the reader will be able to:

1. Describe the difference between yeasts and molds.
2. Define yeast, mould, hyphae, mycelium, septate, dimorphic fungi.
3. Describe the difference between primary (intrinsic) resistance and secondary (acquired) resistance.
4. List the antifungal agents for which clinical breakpoints (CBPs) for Candida species have been developed, and how they should be interpreted.
5. Compare the in vitro activity of fluconazole, voriconazole, posaconazole, amphotericin B, and echinocandins for Aspergillus spp.
7. List 5 risk factors for candidemia.
9. List 3 mechanisms of resistance to azole antifungals.
10. Describe the drugs, doses, and durations of therapy for induction, consolidation and suppressive (maintenance) therapy with itraconazole for the treatment of histoplasmosis in an HIV-infected patient.
11. Recommend appropriate patients who do not require antifungal therapy for blastomycosis.
12. List the 2 main species of Cryptococcus causing disease in humans.
13. Design an appropriate antifungal regimen for an HIV patient with CNS cryptococcosis.
15. Compare and contrast the dosages and common adverse effects of the 3 currently available echinocandins.
16. Compare and contrast the dosages and common adverse effects of the 3 currently available amphotericin B products.