Treatment of Candidemia

MOST COMMON MICROORGANISMS

- *Candida albicans*
- *C. glabrata*
- *C. parapsilosis*
- *C. tropicalis*
- *C. krusei*

CURRENT RESISTANCE PATTERNS

- *C. glabrata* is usually considered resistant to fluconazole and should be treated with an echinocandin
- *C. krusei* is resistant to fluconazole and should be treated with an echinocandin

DIAGNOSTIC CONSIDERATIONS

- If yeast suspected, draw a set of blood cultures from two different sites
- *Candida* in blood should generally NOT be considered a contaminant

MANAGEMENT CONSIDERATIONS

- Infectious Diseases (ID) consultation is recommended; particularly if an endovascular or device-related infection suspected
- Replace all central lines as soon as possible
- Ophthalmology assessment is recommended to rule out ophthalmic disease within 1 week of therapy (or after neutrophil count recovery in neutropenic patient)
- Collect 2 aerobic blood culture bottles every 48 hours until negative to demonstrate sterilization

EMPIRIC TREATMENT OF SUSPECTED OR CONFIRMED CANDIDEMIA

- Fluconazole if patient is NOT critically ill (i.e., is hemodynamically stable) and unlikely to have a fluconazole-resistant *Candida* (no azole exposure within 3 months):
  - Fluconazole 800 mg IV/PO x 1, then 400 mg IV/PO once daily (adjust for renal function)
- An echinocandin:
  - Caspofungin 70mg IV x initial dose on Day 1; subsequent dosing 50 mg IV daily
- Amphotericin B
  - Amphotericin B liposomal (AmBisome) 5 mg/kg IV daily
DURATION

- Minimum 2 weeks after first negative blood culture in absence of metastatic complications

SPECIAL CONSIDERATIONS

- Febrile patients with hematologic malignancy recovering from neutropenia are at risk of chronic disseminated (hepatosplenic) candidiasis
- Echinocandins do not achieve high urinary concentrations
- *Candida* in respiratory secretions and catheter urine in asymptomatic patients is usually colonization and rarely requires therapy
- Consider endocarditis if blood cultures persistently positive, persistent fever despite therapy, new heart murmur or embolic phenomena
- Microbiology report S-DD (susceptible-dose dependent): Susceptibility depends on maximum blood levels. This requires a higher fluconazole dose than the standard dosing in adults with normal renal function. ID should be consulted if fluconazole is used in this situation.

REFERENCES

2. Local Antibiotics [http://www.cdha.nshealth.ca/antimicrobial-stewardship](http://www.cdha.nshealth.ca/antimicrobial-stewardship)
3. CLSI M60-ED1:2017 Performance Standards for Antifungal Susceptibility Testing of Yeasts