Candidemia Management

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women. Local microbiology and susceptibility/resistance patterns should be taken into consideration when selecting antibiotics.

INITIAL EVALUATION AND MANAGEMENT

Blood culture positive for Candida species

Obtain Infectious Diseases consult regardless of colony count or presumed source to evaluate and provide recommendations on the following:
- Optimal treatment
- Potential removal of all indwelling central lines
- Potential Ophthalmology consult to perform a dilated funduscopic exam (evaluating for Candida endophthalmitis)
- Daily follow-up blood culture until two negative blood cultures have been documented

No

Suspected echinocandin resistance?

Yes

First line: Liposomal amphotericin (AmBisome®) 3-5 mg/kg IV daily

De-escalate therapy by changing to:
- Fluconazole susceptible:
  - Fluconazole 6 mg/kg IV or PO daily or
  - Voriconazole 3-4 mg/kg IV or PO twice a day
- Fluconazole susceptible, dose-dependent:
  - Fluconazole 12 mg/kg IV or PO daily or
  - Voriconazole 3-4 mg/kg IV or PO twice a day

Yes

Is the patient clinically stable?

Susceptible to fluconazole?

Yes

2 negative blood cultures?

No

Re-evaluate current therapy and optimize on case-by-case basis

First line: Caspofungin 70 mg IV once, then 50 mg IV daily

Second line: Liposomal amphotericin (AmBisome®) 3-5 mg/kg IV daily

Third line: Fluconazole 12 mg/kg IV or PO once, then 6 mg/kg IV or PO daily

Note: Fluconazole should not be used empirically in patients with prior azole use, in patients with prolonged neutropenia, or in patients who are critically ill.

Yes

Notes:
- Doses indicated are for patients with normal renal/hepatic function. If organ dysfunction is present, dose adjustments may be necessary.
- Therapy duration may need to be extended in the setting of prolonged neutropenia, persistence of symptoms, or endophthalmitis

Yeast/fungus in blood does not imply Candida, particularly in patients with hematologic malignancy. Carefully consider the possibility of non-Candida yeast (e.g., Trichosporon, Cryptococcus) or mold based on clinical scenario and consultation with the microbiology lab. Infectious Diseases consultation is strongly encouraged for any patient with yeast or fungus in the blood.

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2 Repeat blood cultures are negative for 2 separate days

3 Echinocandin resistance should be suspected in patients with a history of prolonged recent echinocandin exposure

4 If patient’s weight is ≥ 80 kg, the caspofungin dose should be adjusted to 150 mg IV once followed by 70 mg IV daily; further weight-based adjustments for morbid obesity should be considered on a case-by-case basis

5 Weight-based dosing of fluconazole (based on total body weight) should always be used in candidemia

6 Adjusted body weight should be used to dose voriconazole in patients who exceed 20% of ideal body weight

Department of Clinical Effectiveness V3
Approved by Executive Committee of the Medical Staff 01/18/2022
SUGGESTED READINGS


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This practice consensus statement is based on majority opinion of the Candidemia Management experts at the University of Texas MD Anderson Cancer Center for the patient population. Theses experts included:

- Antimicrobial Stewardship Team
  - Wendy Garcia, BS
  - Thoa Kazantsev, MSN, RN, OCN
  - Dimitrios P. Kontoyiannis, MD (Infectious Diseases)

³ Core Development Team
⁴ Clinical Effectiveness Development Team

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