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\(^1\)

- Obtain Infectious Diseases consult regardless of presumed source to evaluate and provide recommendations on the following:
  - Optimal treatment
  - Potential removal of all indwelling central lines
  - Potential Ophthalmology consult (for evaluation of *Candida* endophthalmitis)
  - Daily follow-up blood culture until two negative blood cultures have been documented\(^2\)

Suspected echinocandin resistance?

- Yes
- No

First line:
- Liposomal amphotericin (AmBisome\(^8\))\(^3\) 3-5 mg/kg IV daily
- Note: Do not use fluconazole empirically in patients with prior azole use, with prolonged neutropenia, or who are critically ill.

Is the patient clinically stable?

- Yes
- No

Susceptible to fluconazole?

- Yes
- No

2 negative blood cultures\(^2\)?

- Yes
- No

De-escalate therapy by changing to:
- Fluconazole susceptible:
  - Fluconazole\(^6\) 6 mg/kg IV or PO daily or
  - Voriconazole\(^7\) 3-4 mg/kg IV or PO twice a day
- Fluconazole susceptible, dose-dependent:
  - Fluconazole\(^6\) 12 mg/kg IV or PO daily or
  - Voriconazole\(^7\) 3-4 mg/kg IV or PO twice a day

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

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

\(^1\) Fungal elements in blood does not imply *Candida*, particularly in patients with hematologic malignancy. Consider non-*Candida* yeast (e.g., *Trichosporon, Cryptococcus*) or molds based on clinical scenario. Infectious Diseases consultation is strongly recommended for patients with any fungal elements in the blood.

\(^2\) Repeat blood cultures are negative for 2 separate days

\(^3\) Consider echinocandin resistance in patients with a history of prolonged recent exposure

\(^4\) Refer to the institutional ordering tools in OneConnect

\(^5\) If patient’s weight is \(\geq 80\) kg, adjust the dose 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

\(^6\) Weight-based dosing of fluconazole (based on total body weight) should always be used in candidemia

\(^7\) Adjusted body weight should be used to dose voriconazole in patients who exceed 20% of ideal body weight

Department of Clinical Effectiveness V4
Approved by Executive Committee of the Medical Staff 12/13/2023
SUGGESTED READINGS


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DEVELOPMENT CREDITS

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:

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