

Identify patient at risk for Candida infection

Major risk factors include

- Previous bacterial infection and therapy with multiple antibiotics
- Isolation of Candida from > 2 sites
- Immunosuppression
- Hemodialysis
- Previous surgical procedures (eg, deep abdominal or cardiac)
- Extensive burns or severe trauma

Other risk factors include

- Tunneled venous catheters
- Urinary catheters
- Diarrhea
- Parenteral nutrition
- Mechanical ventilation
- Prolonged ICU stay
- Malignancies

Initiate studies to diagnose candidiasis

- Obtain cultures from oropharynx, sputum, stool, urine, drain sites, and blood
- Obtain two sets of blood cultures for 2 days (or longer if the patient remains febrile)
- Consider serologic tests and histologic analyses

Look for findings that may signal hematogenous candidiasis

- Endophthalmitis
- Suppurative thrombophlebitis
- High-grade candiduria without instrumentation of the bladder or the renal pelvis
- Colonization with Candida at ≥ 2 sites (≥ 1 site for *C tropicalis*)

Exclude other possible causes of persistent fever

Blood culture positive

Blood cultures are positive for Candida, or clinical or laboratory signal of potential hematogenous candidiasis is present

See next page

Blood culture negative-Candida isolated ≥ 2 sites

Blood cultures are negative for Candida, and no clinical or laboratory signal of potential hematogenous candidiasis is present, but Candida is isolated from ≥ 2 remote sites (≥ 1 site for *C tropicalis*)

Give 400 mg. IV/day fluconazole until clinical evidence of response to treatment, then 400 mg/day po unless patient condition precludes reliable oral therapy. If patient is colonized by *C krusei*, *C glabrata*, or *C lusitanae*, give amphotericin B, 0.5 mg/kg/day. (Consider adding flucytosine, 25 mg/kg/day po in two divided doses, for *C glabrata* and *C lusitanae*.) Treat for 7 to 10 days (patient should be free of signs and symptoms of infection for 5 days before treatment is ended).

Blood culture negative-Candida isolated ≤ 1 site

Blood cultures are negative for Candida, no clinical or laboratory signal of potential hematogenous candidiasis is found, and Candida is isolated from ≤ 1 remote sites (0 sites for *C tropicalis*)

Continue surveillance cultures weekly.

Blood culture positive for fungal infection or deep organ infection
Organisms not identified
Initiate presumptive therapy

No previous or concurrent fluconazole therapy
Begin treatment with fluconazole

Previous or concurrent fluconazole therapy
Treat with amphotericin

Organism identification

Hemodynamically stable
Patient is hemodynamically stable, does not have high-grade candidemia, and does not appear to have organ infection.
Remove all venous catheters

Hemodynamically unstable
Patient is hemodynamically unstable, has high-grade candidemia, or shows evidence of organ infection
Remove all venous catheters
Treat any associated syndromes of hematogenous candidiasis (eg, endophthalmitis, pericarditis, suppurative thrombophlebitis, endocarditis).

Patient is infected or colonized by *C albicans*, *C tropicalis*, *C parapsilosis*
Give 400 mg IV/day fluconazole until clinical evidence of response to treatment, then 400 mg/day po unless patient condition precludes reliable oral therapy
Treat for 7 to 10 days (patient should be free of signs and symptoms of infection for 5 days before treatment is needed).

Patient is infected or colonized by *C krusei*, *C glabrata*, or *C lusitaniae*
Give amphotericin B, 0.5 to 0.7 mg/kg/day. (Consider adding flucytosine, 25 mg/kg/day po in two divided doses, for *C glabrata* and *C lusitaniae*.)
Treat for 7 to 10 days (patient should be free of signs and symptoms of infection for 5 days before treatment is ended).

Patient is infected or colonized by *C albicans*, *C tropicalis*, *C parapsilosis*, or other germ tube-positive candidal organism
Give combination therapy: fluconazole, 800 mg/day IV, plus flucytosine, 25 mg/kg/day po in two divided doses.
Treat for 10 to 14 days after disappearance of all signs and symptoms of infection.

Patient is infected or colonized by *C krusei*, *C glabrata*, or *C lusitaniae*
Give combination therapy: amphotericin B, 0.7 to 1.0 mg/kg/day IV, plus flucytosine, 25 mg/kg/day po in two divided doses.
Treat for 10 to 14 days after disappearance of all signs and symptoms of infection.