

1. Candidiasis Mucocutaneous infection results in oropharyngeal (thrush) or vaginal or cervical candidiasis; intertriginous lesions of the gluteal folds, buttocks, neck, groin, and axilla; paronychia; and onychia. Dysfunction of T lymphocytes, other immunologic disorders, and endocrinologic diseases are associated with chronic mucocutaneous candidiasis. Chronic or recurrent oral candidiasis can be the presenting sign of HIV infection or primary immunodeficiency. Esophageal and laryngeal candidiasis can occur in patients who are immunocompromised. Disseminated or invasive candidiasis occurs in very low birth weight neonates and, in immunocompromised or debilitated hosts, can involve virtually any organ or anatomic site and be rapidly fatal. Candidemia can occur with or without systemic disease in patients with indwelling central vascular catheters, especially patients receiving prolonged intravenous infusions with parenteral alimentation or lipids. Peritonitis can occur in patients undergoing peritoneal dialysis, especially in patients receiving prolonged broad-spectrum antimicrobial therapy. Candiduria can occur in patients with indwelling urinary catheters, focal renal infection, or disseminated disease. Like other *Candida* species, *C albicans* present on skin and in the mouth, intestinal tract, and vagina of immunocompetent people. Vulvovaginal candidiasis is associated with pregnancy, and newborns can acquire the organism in utero, during passage through the vagina, or postnatally. Mild mucocutaneous infection is common in healthy neonates. Person-to-person transmission occurs rarely. Invasive disease typically occurs in people with impaired immunity, with infection usually arising endogenously from colonized sites. Factors such as extreme prematurity, neutropenia, or treatment with corticosteroids or cytotoxic chemotherapy increase the risk of invasive infection. People with diabetes mellitus generally have localized mucocutaneous lesions. In clinical studies, 5% to 20% of newborns weighing less than 1,000 g at birth develop invasive candidiasis. Patients with neutrophil defects, such as chronic granulomatous disease or myeloperoxidase deficiency, are also at increased risk. Patients undergoing intravenous alimentation or receiving broad-spectrum antimicrobial agents, especially extended-spectrum cephalosporins, carbapenems, and vancomycin, or requiring long-term indwelling central venous or peritoneal dialysis catheters have increased susceptibility to infection. Postsurgical patients can be at risk, particularly after cardiothoracic or abdominal procedures. The presumptive diagnosis of mucocutaneous candidiasis or thrush can usually be made clinically, but other organisms or trauma can also cause clinically similar lesions. Yeast cells and pseudohyphae can be found in *C albicans*-infected tissue and are identifiable by microscopic examination of scrapings prepared with Gram, calcofluor white, or fluorescent antibody stains or in a 10% to 20% potassium hydroxide suspension. Endoscopy is useful for diagnosis of esophagitis. A definitive diagnosis of invasive candidiasis requires isolation of the organism from a normally sterile body site (eg, blood, cerebrospinal fluid, bone marrow) or demonstration of organisms in a tissue biopsy specimen.

2. Candidiasis affects only mucous membranes of the body.

- a. False
- b. True
- c. Not given

3. Candidiasis can indicate a problem with the immune system

- a. False
- b. True
- c. Not given

4. Choose the correct statement.

- a. Candidiasis – is always the symptom of more serious illness
- b. Candidiasis itself is not dangerous
- c. Candidiasis occurs only in neonates
- d. In some cases, candidiasis can lead to death

5. How can a definitive diagnosis of invasive candidiasis be made?

- a. Microscopically
- b. Clinically
- c. By finding *Candida* in the tissue that is normally sterile
- d. By performing endoscopy

6. Oral candidiasis is always a symptom of HIV infection.

a. False

b. True

c. Not given

7. The patients in the ICU have a high possibility of developing candidiasis.

a. Not given

b. False

c. True

8. What factors increase the risk of getting candidiasis?

a. Prematurity, neutropenia, or treatment with corticosteroids

b. Allergy and neutropenia

c. Cytotoxic chemotherapy and asthma

d. Treatment with corticosteroids and NSAIDs

9. What patients have a higher risk of getting infected with candidiasis?

a. Patients who are taking any drugs

b. Patients who underwent surgery

c. Patients who had contact with the infected person

d. Patients who stay in the hospital