

## Brief Description of Common Yeasts

Please Note: This description is only for reference only, not for diagnostics or therapy purposes.



### ***Blastoschizomyces capitatis* (Synonym: *Trichosporon capitatis*)**

*Blastoschizomyces capitatis* is a common environmental fungus and transient component of the normal skin flora, it is frequently isolated from sputum. Disseminated infections involving the spleen, liver, kidney, lung and brain have been reported in neutropenic patients with leukemia or from those undergoing bone marrow transplantation. Blood cultures are often positive and skin lesions similar to disseminated candidiasis may also be present.

### ***Candida***

*Candida* spp. are the most common yeasts encountered in both environmental and clinical. *C. albicans* is the most common species isolated and most wide distributed species. It accounts for up to 70% of *Candida* species isolated from sites of infection and has been reported as a causative agent of all types of candidiasis.

*C. albicans* occurs naturally as a commensal of mucous membranes and in the digestive tract of humans and animals. Environmental isolations are usually from sources contaminated by human or animal excreta, such as polluted water, soil, air and plants.

#### **Other most common *Candida* species:**

- [\*Candida glabrata\*](#)
- [\*Candida krusei\*](#)
- [\*Candida parapsilosis\*](#)
- [\*Candida tropicalis\*](#)

### ***Cryptococcus***

- *Cryptococcus* species are common yeasts encountered in the environmental and clinical. Among the species, *C. neoformans* is considered as the most important species in association with human and animal infections. In humans, *C. neoformans* affects immunocompromised hosts predominantly and is the commonest cause of fungal meningitis; worldwide, 7-10% of patients with AIDS are affected. Secondary cutaneous infections occur in up to 15% of patients with disseminated cryptococcosis and often indicate a poor prognosis. This species is found in nature in avian excreta, especially weathered pigeon droppings, which are believed to be the source of infection.
- *Cryptococcus laurentii* has been reported as a rare cause of pulmonary and cutaneous infection associated peritonitis in humans. It may also be occasionally recovered as a saprophyte from skin.

## ***Geotrichum***

*Geotrichum* is a yeast found worldwide in soil, water, air, and sewage, as well as in plants, cereals, and dairy products. It is also found in normal human flora and is isolated from sputum and feces. The most common one is *Geotrichum candidum*. *Geotrichum clavatum* and *Geotrichum fici* are among other *Geotrichum* species.

As well as being a colonizer of the intestinal tract, *Geotrichum* spp. may cause opportunistic infections in immunocompromised host and these infections are referred to as geotrichosis. The infections are usually acquired via ingestion or inhalation. Bronchial and pulmonary as well as disseminated infections and fungemia due to *Geotrichum* have been reported. It has also been isolated from infections resulting from trauma.

## ***Rhodotorula***

*Rhodotorula* is a yeast found in air, soil, lakes, ocean water, and dairy products. It may colonize plants, humans, and other mammals. While being considered as a common contaminant, *Rhodotorula* may infect individuals with predisposing risk factors.

The genus *Rhodotorula* includes three active species; *Rhodotorula glutinis*, *R. minuta*, and *R. mucilaginosa*. *Rhodotorula* spp. are rarely isolated as causative agents of opportunistic mycoses in vulnerable hosts, such as patients with AIDS or acute leukemia. Cases of meningitis, endocarditis, ventriculitis, peritonitis, endophthalmitis, central venous catheter-infections, fungemia, and sepsis have been reported.

## ***Trichosporon***

*Trichosporon* is a yeast isolated from soil, water samples, vegetables, mammals, and birds. As well as being a member of the normal flora of mouth, skin and nails, it is the causative agent of superficial and deep infections in humans. *Trichosporon* species are opportunistic pathogens, associated with a high mortality rate in immunocompromised patients.

*T. beigeli* is a minor component of normal skin flora, and is widely distributed in nature, and is regularly associated with the soft nodules of white piedra, and has been involved in a variety of opportunistic infections in the immunosuppressed patient. Disseminated infections are most frequently associated with leukemia, organ transplantation, multiple myeloma, aplastic anemia, lymphoma, solid tumors and AIDS. Disseminated infections are often fulminate and widespread, with lesions occurring in the liver, spleen, lungs and gastrointestinal tract. Infections in non-immunosuppressed patients include endophthalmitis after surgical extraction of cataracts, endocarditis usually following insertion of prosthetic cardiac valves, peritonitis and intravenous drug abuse.