

What is candidiasis?

Candidiasis is an infection caused by any of several types of yeast (fungus) called *Candida*. The most common is called *Candida albicans*. This yeast is normally present on the skin, in the intestines and in the vagina, but doesn't cause disease. However, sometimes it can develop into an infection—usually of the mouth, vagina or skin—that causes red or white patches, itching and irritation.

Candidiasis is not usually a dangerous infection, but in some people it can spread through the bloodstream to other parts of the body such as the heart valves, the spleen, the kidneys and the eyes. This “invasive candidiasis” is a much more serious condition and can be fatal.

How common is candidiasis?

Serious fungal infections have become more common in recent years, partly because increasing numbers of people are living with diseases or undergoing treatments that weaken their immune systems (such as HIV, chemotherapy or organ transplantation). It has been estimated that there are between 10,500 and 42,000 cases of invasive candidiasis in the United States every year.¹ Rates appear to be slightly lower in Canada,¹ suggesting that there are probably several hundred cases per year in Canada.

Who gets candidiasis?

“Local” infections of the skin, mouth or vagina can develop in anyone, but they are more common and/or more difficult to get rid of in people with diabetes, cancer or AIDS, people who are taking antibiotics, and pregnant women.

System-wide infections mainly affect people with a weakened immune system, such as transplant recipients and people with HIV. They can also occur in critically ill people in intensive care units (ICUs). Others who are at higher-than-average risk include infants, people over the age of 65, people who have had gastrointestinal surgery, people taking certain antibiotics and people with cancer, diabetes or kidney failure. Candidiasis is also more serious and more difficult to treat in people with certain conditions, such as diabetes.

How to prevent invasive candidiasis

In hospitals, strategies that can reduce the risk of invasive candidiasis include more attention to hand-washing and less use of antibiotics when they are not needed (since antibiotic use increases the risk of candidiasis).

It has been suggested that hospitalized people at particularly high risk of invasive candidiasis be treated with antifungal medications to prevent the disease, rather than waiting until they develop it. This has been found to reduce the number of cases, but there isn't an established rule at present for which patients should receive this treatment.

What are the symptoms of candidiasis?

Candidiasis of the mouth (also called “thrush”) causes white, painful patches inside the mouth, cracking at the corners of the mouth (“cheilitis”) and a red, painful, smooth tongue. If the throat is affected, it can cause pain while swallowing. Skin infections cause a burning rash.

If candidiasis spreads to other parts of the body, it can cause fever, a heart murmur, blindness, enlargement of the spleen, dangerously low blood pressure and/or decreased urine production. A severe infection may cause organs to stop functioning and may be fatal. Invasive candidiasis leads to death in 15 to 25% of affected adults and 10 to 15% of affected infants and children.²

How is candidiasis diagnosed?

Although many *Candida* infections are apparent from their symptoms alone, the fungi must be identified in a blood or tissue sample under a microscope to confirm the diagnosis.

How is candidiasis treated?

Candidiasis affecting only the skin or mouth or vagina can be treated with antifungal ointments that are applied directly to the affected area. Sometimes an oral antifungal drug may be prescribed.

Candidiasis that has spread throughout the body is usually treated with intravenous antifungal drugs.

References

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