CONDITION

Yeast infections

Yeast infections occur when Candida yeast overgrows on body surfaces or, rarely, enters the bloodstream.

WHAT IT IS
Overgrowth or invasion by Candida yeast

BODY SYSTEM
Skin, mouth, genitals, and bloodstream

MAIN SYMPTOMS
Itching, soreness, rash, white patches or discharge

WHAT CAUSES IT
Candida overgrowth, sometimes invasive infection

HOW IT IS DIAGNOSED
Examination plus microscopy or culture of samples

MAIN TREATMENT
Antifungal medicines and management of underlying triggers

CAN IT BE CURED?
Usually - local infections respond to antifungal treatment

IS IT AN EMERGENCY?
Sometimes - bloodstream infection can become life-threatening

LONG-TERM OUTLOOK
Most local infections clear, but recurrence is possible

Overview

Yeast infections are caused by fungi, most often species of Candida . Small amounts of Candida normally live on the skin and in the mouth, intestines and vagina without causing problems. An infection can develop when the yeast grows more than usual or gets into a part of the body where it does not belong.

Common forms include vaginal yeast infection, oral thrush and Candida rashes in warm skin folds. The penis can also become inflamed. These infections are usually limited to the body surface and are treatable.

Invasive candidiasis is different. It happens when Candida enters the bloodstream or internal organs. It mainly affects people who are already seriously ill, such as those in hospital with a central intravenous line, major surgery or a severely weakened immune system. It needs

urgent hospital treatment.

Symptoms associated with yeast can also be caused by bacterial infections, skin conditions or sexually transmitted infections. This is especially important when symptoms are new, keep returning or do not improve with treatment.

Symptoms

Symptoms depend on the affected area.

A vaginal yeast infection, also called vulvovaginal candidiasis, may cause:

Not everyone has the typical thick discharge. A strong or unpleasant smell is less typical of yeast and may suggest another cause.

Oral thrush can cause creamy white patches on the tongue, inner cheeks, gums or roof of the mouth. The tissue underneath may be red and may bleed slightly if a patch is wiped away. Other symptoms include soreness, altered taste and cracks at the corners of the mouth.

Candida affecting skin folds may cause a bright red, sore or itchy rash. Smaller spots can appear around the main rash. Common locations include the groin, under the breasts, between the buttocks and beneath an abdominal skin fold.

Yeast inflammation of the head of the penis may cause redness, itching, soreness, swelling or a white discharge under the foreskin.

Candida in the oesophagus, the tube between the mouth and stomach, can make swallowing painful or difficult. This is more likely in someone with a weakened immune system.

Invasive candidiasis often causes fever and chills that do not improve with antibacterial treatment. Because affected people are usually already unwell, symptoms can be difficult to separate from those of other serious infections.

- Intense itching or burning around the vagina and vulva
- Redness, swelling or small cracks in the skin
- Pain during sex or when passing urine
- Thick, usually white discharge that often has little or no smell

Causes and risk factors

Candida usually causes a local infection when the normal balance of microbes, moisture or skin protection changes. This is not a sign of poor hygiene.

Factors that can make some yeast infections more likely include:

Vaginal yeast infection is not usually classified as a sexually transmitted infection. Sexual activity can sometimes trigger symptoms through friction or changes in the local environment, but Candida can overgrow without sexual contact. Partners generally do not need treatment unless they have symptoms.

Risk factors for invasive candidiasis are different. They include intensive care treatment, a central intravenous line, major abdominal surgery, prolonged courses of broad-spectrum antibiotics, injected drug use and severe immune suppression.

Some people develop recurring vaginal infections without an obvious cause. A less common Candida species or reduced sensitivity to standard antifungal medicines may sometimes be involved.

- Recent antibiotics like amoxicillin or doxycycline , which can reduce bacteria that normally limit yeast growth
- Pregnancy or other changes in hormone levels
- Diabetes, particularly when blood sugar is often high
- A weakened immune system due to illness or treatment
- Steroid medicines, including inhaled steroids like budesonide or fluticasone left in the mouth
- Dentures, especially if worn overnight or not cleaned regularly
- Heat, moisture and friction in skin folds
- Tight or non-breathable clothing around a damp area

Diagnosis

A clinician may diagnose a surface yeast infection by asking about symptoms and examining the affected area. Because several conditions look similar, examination can be especially useful for a first episode or symptoms that have changed.

For vaginal symptoms, a sample of discharge may be examined under a microscope. A laboratory culture or another test can identify Candida and sometimes the particular species. Testing is more likely when symptoms are severe, keep returning or have not responded to treatment.

Oral and skin infections are often diagnosed by appearance. A scraping or swab may be tested if the diagnosis is unclear or treatment has not worked.

Blood cultures help diagnose invasive candidiasis. Additional blood tests, scans or samples from an affected organ may be needed. These investigations are carried out in hospital.

Repeated self-treatment without confirmation can delay the diagnosis of another condition, such as bacterial vaginosis, eczema or a sexually transmitted infection.

Treatment and management

Antifungal medicines treat Candida. The medicine and length of treatment depend on the infection site, symptom severity, Candida species, pregnancy status and whether infections keep returning.

Vaginal infections are commonly treated with antifungal like fluconazole or terbinafine creams, vaginal tablets or, in some circumstances, medicine taken by mouth. Products sold without a prescription may be reasonable for someone who has previously had a confirmed yeast infection and has the same typical symptoms. New, unusual or persistent symptoms should be assessed rather than repeatedly self-treated.

During pregnancy, treatment choices are more limited. Vaginal antifungal treatment is generally used, while oral fluconazole is usually avoided. If you are pregnant or could be pregnant, check with a clinician or pharmacist before starting treatment.

Oral thrush may be treated with an antifungal liquid, gel, lozenge or tablet. Dentures need regular cleaning and should usually be removed at night. If you use a steroid inhaler, rinsing your mouth and spitting out the water after each dose can reduce medicine left in the mouth. A spacer device may also help when it is suitable for your inhaler.

Skin infections are treated by keeping the area dry and using an appropriate antifungal medicine. Addressing friction, trapped moisture or poorly controlled blood sugar may reduce further episodes.

A partner with redness, itching or soreness may need assessment and treatment. Treating a partner who has no symptoms does not usually prevent vaginal yeast infections from returning.

Recurring infections may need laboratory confirmation and a longer treatment plan supervised by a clinician. Boric acid is sometimes considered for selected vaginal infections, but it is toxic if swallowed and is not appropriate during pregnancy. It should only be used with professional guidance and stored safely away from children and pets.

Invasive candidiasis requires antifungal treatment in hospital. A central line may need to be removed or replaced. Treatment is guided by the infection site, laboratory findings and the person's overall health.

Complications

Most surface yeast infections do not cause lasting harm. However, severe inflammation can lead to painful cracks, bleeding or difficulty eating, urinating or having sex.

Repeated vaginal symptoms can affect sleep, comfort, relationships and emotional well-being. Persistent symptoms may also mean that the original cause was not yeast.

Oral thrush can spread to the oesophagus, mainly in people with significant immune suppression. Invasive candidiasis can affect organs such as the eyes, heart, brain, bones or kidneys. This is a serious hospital-managed infection, not the usual progression of vaginal, oral or skin thrush.

Prevention

Not every yeast infection can be prevented. Candida normally lives on the body, and some people have repeated infections despite sensible precautions.

Measures that may lower risk in certain situations include:

There is not enough reliable evidence to say that probiotics or special "anti-Candida" diets prevent or cure yeast infections. Restrictive diets may make it harder to get balanced nutrition.

In hospitals, hand hygiene, careful central-line care and appropriate antimicrobial use help reduce invasive Candida infections.

- Keep skin folds clean and dry, and change out of damp clothing
- Avoid unnecessary antibiotic use
- Clean dentures daily and remove them overnight
- Rinse and spit after using a steroid inhaler
- Manage diabetes with support from your healthcare team
- Avoid scented washes, vaginal douching and other products that cause irritation

Living with it and what to expect

A straightforward skin, mouth or vaginal infection often begins improving after treatment starts, although soreness and irritation may take longer to settle. Completing treatment as directed helps give it time to work.

If symptoms remain after treatment, return quickly or occur several times over a year, further

testing may be useful. Longer-term management can include confirming that Candida is truly the cause, identifying the species and checking for contributing factors such as diabetes or immune suppression.

Recurring yeast infections do not usually mean that Candida is spreading through the body. Many people have long symptom-free periods between episodes. Others need a clinician-supervised maintenance plan over several months, and symptoms can return after that plan ends.

Recovery from invasive candidiasis is less predictable. It depends on the organs involved, how quickly treatment begins and the underlying illness. Follow-up may continue after discharge from hospital.

When to get medical help

Arrange routine medical advice if:

Seek urgent medical care for difficulty or significant pain when swallowing, dehydration, rapidly spreading redness, severe swelling or worsening illness in someone with a weakened immune system.

Fever, chills, confusion, faintness or trouble breathing can indicate a serious infection, particularly after major surgery or during hospital care, or if you have a central intravenous line. Seek emergency assessment rather than assuming these symptoms are caused by ordinary thrush.

- This is your first suspected yeast infection
- Symptoms are different from previous confirmed infections
- Treatment has not helped or symptoms soon return
- Infections occur repeatedly
- You have diabetes or a weakened immune system
- You are pregnant or breastfeeding
- There is a strong-smelling, green, yellow or bloody discharge
- You have sores, blisters, pelvic pain or concern about a sexually transmitted infection
- Oral thrush makes eating uncomfortable or keeps returning

Common questions

Is a vaginal yeast infection an STI?

Usually not. Candida can overgrow without sexual contact, and routine treatment of a symptom-free partner is not generally needed. However, other infections can cause similar symptoms, so testing may be appropriate after a new sexual exposure or when symptoms are unusual.

Can a yeast infection go away without treatment?

Mild symptoms sometimes settle, but there is no reliable way to predict this. Treatment can shorten discomfort. If you are not sure yeast is the cause, getting assessed is safer than repeatedly using antifungal products.

Why do I keep getting yeast infections?

Possible reasons include antibiotics, pregnancy, diabetes, immune suppression, ongoing moisture or irritation, and a Candida species that responds differently to common treatments. Sometimes no clear trigger is found. Laboratory testing can help confirm whether repeated symptoms are actually caused by yeast.

Can men get yeast infections?

Yes. Candida can cause redness, itching and soreness on the head of the penis or under the foreskin. Similar symptoms can also come from irritation, skin conditions or sexually transmitted infections, so persistent symptoms need assessment.

How long does a yeast infection last?

Many local infections start to improve within several days of suitable treatment, but full recovery can take longer. The timing depends on the affected area and severity. Symptoms that persist after the expected treatment period should be reviewed.

Can I have sex while I have a vaginal yeast infection?

Sex may worsen pain and irritation, so waiting until symptoms settle may be more comfortable. Some vaginal creams and suppositories can weaken latex condoms and diaphragms during treatment and for a period afterward; check the product information.

Sources

- Centers for Disease Control and Prevention. "Vulvovaginal Candidiasis." Sexually Transmitted Infections Treatment Guidelines, 2021 . MMWR Recommendations and Reports . 2021;70(4)

- Centers for Disease Control and Prevention. "Clinical Overview of Candidiasis." Candida infections
- Pappas PG, Kauffman CA, Andes DR, et al. "Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America." Clinical Infectious Diseases . 2016;62(4):e1-e50
- National Institute for Health and Care Excellence. Clinical Knowledge Summary: Candida - female genital
- National Health Service. "Oral thrush in adults"
- National Health Service. "Thrush in men and women"