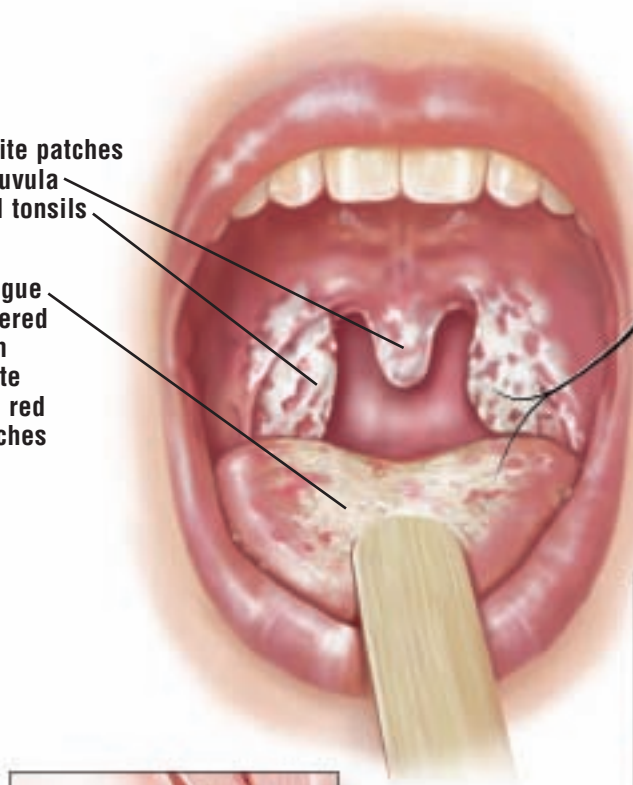
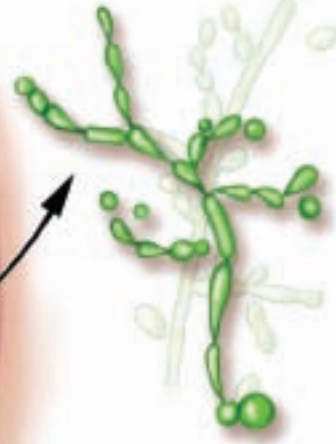


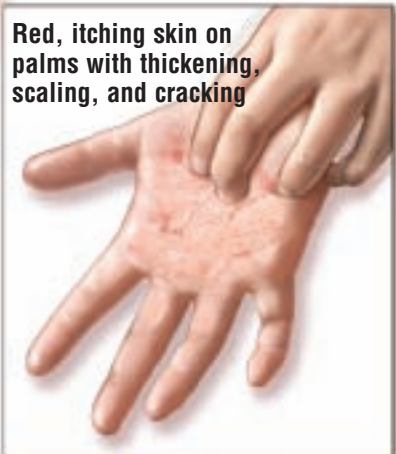
Thrush

White patches on uvula and tonsils

Tongue covered with white and red patches

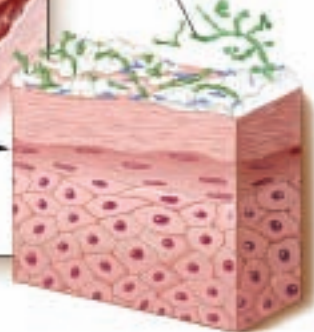
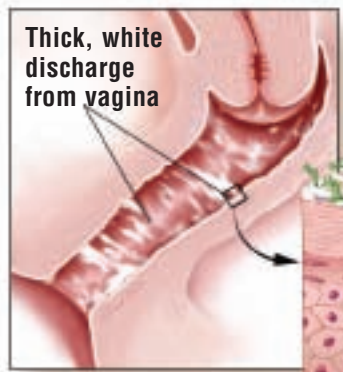


Red, itching skin on palms with thickening, scaling, and cracking



Thick, white discharge from vagina

Candidiasis



Fungal Overgrowth

Candida albicans is a fungus normally found in the mouth, gastrointestinal tract, and vagina and on the skin of healthy people. Usually, *Candida* does not cause infection, because its growth is held in check by normal bacteria and the body's immune system. When medication, stress, hormonal changes, or a weakened immune system causes an upset in this balance, *C. albicans* can grow freely, leading to a condition known as thrush.

Most commonly, the fungal overgrowth occurs in the mouth and is known as oral thrush. Oral thrush causes patches of white or red painful tissue located on the tongue, inside the cheeks, on the gums, or on the roof of the mouth. It has a classic appearance, which usually makes it easy to diagnose without any special testing. Treatment of oral thrush includes antifungal medications that are available in a variety of dosage forms. In some cases, adding yogurt with active cultures or acidophilus supplements to the diet can help control *Candida* overgrowth and prevent future infections.

TEAR ALONG PERFORATION

MEDICAL ILLUSTRATION: ©LYDIA V. KIBUIJK 2006



Oral thrush appears as sores or white or red areas in the mouth that can be painful and bleed slightly when rubbed or scraped. Often, the condition is not serious and is easy to treat once diagnosed.

Imbalance of Microorganisms

Since *Candida albicans* is found in healthy people in the mouth and vagina and on the skin, overgrowth of this fungus can cause oral thrush, vaginal yeast infections, and diaper rash. In most people, none of these conditions are serious, and they are easily treated when properly diagnosed. In patients with suppressed immune systems due to cancer or HIV/AIDS, oral thrush can spread into the esophagus and cause painful swallowing.

Those at Risk

People at highest risk for developing oral thrush are the very young, the very old, pregnant women, and those with suppressed immune systems. Thrush can also develop after the use of certain medications, such as antibiotics, birth control pills, and oral or inhaled steroids. Uncontrolled diabetes, cancer, and HIV/AIDS also increase the risk for thrush.

Diagnosis

Symptoms of oral thrush include a dry mouth with painful sores or red or white patches on the tongue, inside the cheeks, or on the throat, tonsils, and gums. The diagnosis of thrush is usually made after examining the affected areas, but a scraping of the sores can be examined under a microscope for a definitive diagnosis. If oral thrush develops in a person who has no risk factors, the doctor can suggest further testing to determine the underlying cause.

Treatment Options

In most cases, treatment of oral thrush is focused on reestablishing the normal balance between bacteria and fungus in the body. This can sometimes be accomplished by adding yogurt with active cultures to the diet or taking acidophilus supplements to restore this balance. In cases that persist, or in patients with weakened immune systems, an antifungal medication is effective in controlling fungal overgrowth. There are several forms of antifungal medicines, including lozenges that are dissolved on the tongue, tablets, and a liquid that is swished in the mouth, then swallowed.

Prevention

Taking steps to prevent oral thrush infections is important for people with recurring *Candida* overgrowth or those with a high risk of developing oral thrush. In infants, oral thrush often disappears on its own. If thrush develops in an infant and does not clear after seven to 10 days, a doctor should be consulted. Breast-fed infants with oral thrush can be protected from reinfection by using an antifungal medication on the mother's nipples. Bottle-fed babies should have bottle nipples replaced as the infection clears to avoid reinfection.

If you have questions about treatment for thrush, be sure to ask your pharmacist.