Candidiasis (Thrush)

What is candidiasis?
Candidiasis, or thrush, is an infection caused by a common type of fungus or yeast called *Candida albicans*. This fungus is normally found:

- in the mouth
- in the stomach and intestines
- on the skin
- in the vagina

Usually it is controlled in the body by the immune system and only becomes a problem when it overgrows. This can happen when:

- the immune system becomes weakened due to stress or illness, or
- people have taken antibiotics that kill off some other harmless bacteria in the body, giving the *Candida* more room to grow.

Thrush is one of the most common infections in people with HIV/AIDS (PHAs).

What are the symptoms of candidiasis?

- *Candida* infection in the mouth is also called thrush. It looks like white patches, similar to cottage cheese. Once the white patches are scraped away, the underlying tissue looks reddish and sore. Thrush can cause throat pain, pain when swallowing, change in taste, nausea and loss of appetite. It can spread further down the throat to the stomach.

- *Candida* infection in the vagina can cause itching, burning, redness and soreness in the genital area and a thick white discharge.

Can candidiasis be prevented?

Because the *Candida* fungus naturally lives in our bodies, it is impossible to avoid it. Taking anti-HIV medications that help to strengthen the immune system is considered to be the best way to prevent candidiasis from becoming a health problem.

Usually doctors do not recommend taking regular medications to prevent candidiasis unless it keeps coming back or if the *Candida* begins to infect the throat.

Common ways that people have tried to prevent candidiasis include:

- avoiding sugar and foods and drinks that are sweet or have added sugar. Examples of these include candy, many packaged cereals, foods made from white flour (bread, doughnuts, cookies, cakes), grapes and grape juice, and starchy foods.
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- Taking supplements of friendly bacteria, such as *Lactobacillus acidophilus*, which is available in capsules or powder form.
- Eating yogurt with live friendly bacteria.
- Gargling with tea-tree-oil mouthwash.

**How is candidiasis treated?**

Treatment for candidiasis can be divided into two groups:

- **Local or topical treatments** are applied to where the infection is found. They come in various forms, such as cream (clotrimazole), suppositories (miconazole), lozenges or liquids for gargling (nystatin).

- **Systemic therapies** are usually taken in pill form. The most commonly used anti-fungal medications include ketoconazole (Nizoral), itraconazole (Sporanox) and fluconazole (Diflucan). *Candida* can become resistant to these drugs, meaning that they will no longer work. If this happens, an intravenous anti-fungal, called Amphotericin B, may be used.

Topical or local treatments are usually cheaper and have fewer side effects, however, they may taste unpleasant and may take longer to work.

Systemic treatments are more expensive, have more side effects and interactions with other drugs, but they may work faster.

Common side effects of anti-fungal medications include nausea, vomiting and rash.

Itraconazole and ketoconazole interact with a number of other drugs commonly used by PHAs.

Amphotericin B can cause anemia and kidney problems.

Make sure you talk to your doctor and/or pharmacist about possible side effects and drug interactions. It is important to tell your doctor and pharmacist about all the prescription and non-prescription drugs (including vitamins and herbs) that you are taking.

**Other tips that may help to reduce pain and symptoms caused by candidiasis:**

- Reduce the amount of hot and spicy food in your diet.
- Reduce your intake of citrus fruits (oranges, lemons, grapefruits).
- Brush your teeth, gums and tongue with a soft toothbrush after each meal and at bed time.
- Eat soft food if you have trouble swallowing.
- Cut out alcohol and tobacco because they can irritate the inside of your mouth.
Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV-related illness and the treatments in question.

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Funding has been provided by the Public Health Agency of Canada.