Oral Candidiasis

What is oral candidiasis?

Oral candidiasis is a common oral yeast infection that is often referred to as "thrush". Oral candidiasis is most commonly caused by a fungal organism called Candida albicans, which is a normal component of the "oral microflora" in up to 30% of healthy patients (referred to as "carriers"). When conditions in the mouth allow for overgrowth of candida, oral candidiasis may develop. Patients usually complain of a burning or sensitive feeling in their mouth and typically develop white-yellow curd-like patches and red, raw areas in the oral cavity. Oral candidiasis can also cause a sore throat. Patients who wear removable dentures are particularly susceptible to developing oral candidiasis, especially if the dentures are left in at night and not regularly disinfected. Angular cheilitis is a candidal infection of the corners of the mouth, with crusted red raw fissures that are sore and easily bleed when the mouth is opened wide.

What causes oral candidiasis?

Both local (in the mouth) and systemic (in the whole body) factors may increase the likelihood of developing oral candidiasis.

Local factors include:

1. Use of topical steroid medications such as inhalers for asthma, or gels and rinses for inflammatory oral disease.
2. Chronic dry mouth. Saliva has anti-fungal properties and patients who suffer from dry mouth are at a higher risk of developing oral candidiasis. Patients with severe dry mouth from radiation to the head and neck for cancer, Sjögren syndrome, or chronic graft-versus-host disease are particularly prone to developing candidiasis. Chronic dry mouth can also be caused by the use of medications.
3. Poor denture hygiene because yeast may live within the denture.

Systemic factors include the use of antibiotics, immunodeficiency (such as HIV/AIDS), immunosuppression (due to an underlying medical condition such as cancer or cancer treatment and/or use of immunosuppressive medications such as prednisone), and poorly controlled diabetes. Although this is an infection, it is not the sort that you can spread to family or friends from kissing or hugging.

How do we know it is oral candidiasis?

Most cases of oral candidiasis can be diagnosed by taking a good history and carefully examining the mouth. In some cases your doctor may want to perform an oral scraping or culture to confirm the diagnosis. A positive culture may indicate "carrier" status and may not mean that there is necessarily an active yeast infection. A lot depends on how your lesions look in the mouth.

How do we treat oral candidiasis?

Oral candidiasis can be very effectively treated with topical and systemic anti-fungal medications, and good denture care (for patients who wear dentures). The most commonly prescribed topical and systemic anti-fungal medications and their dosages are listed below.

Topical anti-fungal agents include:

1. Nystatin suspension (100,000 IU/ml). Rinse for 5 min with 1 teaspoon (5 mls) of this medication four times a day for two weeks or as long as directed. Your doctor may ask you to swallow this medication or simply to rinse and spit.
2. Clotrimazole troches (10 mg). Suck on one troche five times a day for two weeks or as long as directed.
3. Mycolog II™ (nystatin/triamcinolone), Lotrisone™ (clotrimazole/betamethasone dipropionate) and Vytone™ (iodoquinol/hydrocortisone) creams. Apply to the corners of your mouth two or three times a day or to the underside of your denture, as long as directed.

Systemic anti-fungal agent:

1. Fluconazole 100 mg tablets. Take one tablet once a day for as long as directed.

Please let your doctor know if you are taking medications which may interact with fluconazole such as benzodiazepines (such as triazolam, alprazolam, clonazepam), anti-epileptics (such as carbamazepine, phenytoin), anti-coagulants (such as warfarin), statins (such as simvastatin), systemic corticosteroids (methylprednisolone) or anti-hypertensives (digoxin, hydrochlorothiazide, felodipine).

What to expect?

With adequate treatment and elimination of local factors, the treatment response is typically excellent, with resolution of all signs and symptoms within one week. If you tend to have recurrent bouts of candidiasis or if you are on long-term intraoral topical steroid treatment, your doctor may decide to prescribe fluconazole once or twice weekly for prevention, or some other anti-fungal medication.

In a very small number of patients, very long-term use of fluconazole may lead to candidiasis that no longer responds to fluconazole (fluconazole-resistant candidiasis). In such cases, your doctor will speak with you regarding alternative medications such as voriconazole, itraconazole and others.