

Short Article

# An Overview to Candidiasis - A Candida Infection

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## I N F O

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## A B S T R A C T

Microbes are basically very small living things that human eye is not capable to see but are only visible under a microscope. Candida is a fungal contamination in body as it is a type of yeast. Candidiasis is entitled as the yeast contagion, due to the infecting agent a yeast, Candida. Candida albicans are the pathogens that are of much significance which are present everywhere and mostly reside along side plentiful bacteria near mouth, gastrointestinal tract and vagina. Wilkinson was the first person to describe candidiasis in 1849. Candidiasis of the mouth is termed as Thrush. Those areas of the skin where there is very less ventilation and are uncommonly wet develop infection of the skin called Cutaneous candidiasis. When Fungi invades inside the body, enters the blood stream and spreads everywhere inside it is called deep Candidiasis. Treatment methodology are different for each case. Natural prevention is mandatory to safe yourself from being a victim to disease.

**Keywords:** Candidiasis, Candida, Treatment, Classification

## Introduction

Microbes are basically very small living things that human eye is not capable to see but are only visible under a microscope. Thus, they are also termed as Microscopic organisms. They are present everywhere in the planet including water, rocks, soil, plants, animal and human bodies. From ice cold places to very warm ones, these organisms can survive anywhere. These microbes are of two types. Those that are beneficial ones having a significant role in our lives and the ones that are harmful which are termed as disease causing microbes or pathogens. They are best at settling in the new environment thus making it difficult to clear them out. They tend to enter human body and cause infections and other chronic conditions. Our concerning microbial interaction of a yeast. Our body is habitat for diverse fungi. Candida is a fungal contamination in body as it is a type of yeast. Candidiasis is entitled as the yeast contagion, due to the infecting agent a yeast, Candida.<sup>1-3</sup>

## Candidiasis

Candida fungi causes candidiasis. Almost 200 various species are included in the genus Candida but only minute quantity of them are harmful and can lead to infections which can either be external or internal (if it invades inside the

body) which are more severe. Candida albicans are the pathogens that are of much significance which are present everywhere and mostly reside along side plentiful bacteria near mouth, gastrointestinal tract and vagina. The body's immune system and the present bacteria regularly monitors the candida and any impairment in the immune system or change in bacteria can result in candida causing an infection. Generally, these infections are mostly restricted to mouth, genital area and skin but a person with any other serious condition like cancer or HIV whose internal defence system is already much weakened can develop much severe one.<sup>4-6</sup>

## History

Wilkinson was the first person to describe candidiasis in 1849. Afterwards, in 1875 Haussmann showed that the it is basically the same organism that is responsible for causing vaginal and oral candidiasis. Candidiasis gradually increased with the evolvement of antibiotics. Christine Marie Burkhouit was the one to explain the Albicans species in 1923 during her thesis in University of Utrecht. With the passage of time, the genus candida started classifying as many other species were discovered. Presently there are over 200 species and Albicans are the most important ones that cause infections in humans. Tropicalis, Glabrata,

Krusei, Parapsilosis, Dubliniensis, and Lusitaniae are some of the other species that are of pathogenic nature. The word Albican is derived from Latin word Albicare which means 'to whiten' and Candida is derived from Latin word 'Toga'.<sup>7-9</sup>

## Types of Candidiasis

Candidiasis is mostly of following different types.<sup>10-15</sup>

### Thrush

Candidiasis of the mouth is termed as Thrush in which white patches are formed on the inner side of the mouth, on top of the tongue and surrounding the lips. Below the white patch, surface is generally red and inflamed. The edge of the lips might be ruptured and seen a red moist area which could cause slight pain.

### Cutaneous Candidiasis

Those areas of the skin where there is very less ventilation and are uncommonly wet develop infection of the skin called Cutaneous candidiasis. Most commonly it includes the area of wearing diaper, hands on which rubber gloves are regularly being worn, base skin of finger nail, area surrounding groin and cleavage of huge breasts. Moist Red patches are formed on the skin.

### Vaginal Candidiasis

This infection is basically not a sexually transmitted one. Women have a very high chance of developing vaginal candidiasis and probably have at least one during their lifetime. Having a pregnancy or diabetes makes them more vulnerable to this Vaginal infection. It can cause itching and pain on the vagina, a thick discharge of cheese like appearance, scorching sensation surrounding the vagina and irritation while having intercourse.

### Deep Candidiasis

When Fungi invades inside the body, enters the blood stream and spreads everywhere inside it is called deep Candidiasis. It leads to very serious infections and normally happens to those with critically impaired immune system like the cancer or HIV patients. Symptoms can be from severe fever to failure of any organ.

### Symptoms of Infection

The symptoms of candidiasis vary differently according to area of infection as oral thrush, exhaustion due to magnesium loss, urinary tract infections, digestive system consequences like cramps, constipation, gas etc. Skin and nail infections.<sup>16</sup>

### Treatment

For Thrush, anti-fungal medicines are usually prescribed like nystatin and clotrimazole. If the infection is not severe then fluid form of nystatin or clotrimazole lozenge can be orally swallowed. In case of severe infections, Fluconazole is prescribed to take one tablet in a day. For the treatment of Cutaneous Candidiasis, blend of lotions, creams and

ointments are prescribed, and the patient is directed to keep the affected area dry and clean. For Vaginal candidiasis, creams and ointments for direct applying or oral medicines like prescribed butoconazole, clotrimazole, nystatin, tioconazol or fluconazole can be prescribed. Deep Candidiasis required intravenous antifungal dosage for treatment. It can be series of antifungal doses until fully treated.<sup>17-20</sup>

### Conclusion

In outline, the expansion in intrusive candidiasis in more established grown-ups has turned into a significant clinical issue. Risk variables for contagious contaminations in the older.

- Multifocal (counting oropharyngeal) colonization.
- Presence of intravascular catheters (biofilm arrangement).
- Residence in social insurance offices .
- Admission and delayed emergency unit.
- Renal disappointment .
- Systemic organization of expansive range anti-infection agents.
- Parenteral nourishment.
- Recent stomach medical procedure.
- Neutropenia .
- Use of corticosteroids or immunosuppressant drugs. Natural prevention is mandatory to safe yourself from being a victim to disease.

**Conflict of Interest:** None

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