

Yeast infections

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Intertrigo

Intertrigo occurs where two tissue surfaces are in direct contact producing a moist warm environment ideal for yeasts such as *Candida albicans*. Such an infection will produce a surface erythema with wet scaling at the periphery, and in more severe cases satellite lesions develop beyond the main border. These changes are most common under the breasts and in the axillae and groin. However, they can also occur in other areas such as between the fingers or, as in this case, in an abdominal fold at the site of previous surgery. Good hygiene is essential. Intertrigo can be treated with topical preparations such as clotrimazole.



Pityriasis versicolor

This condition used to be called Tinea versicolor as it was thought to be caused by dermatophyte fungi. In fact it is an overgrowth of the commensal yeasts of the *Malassezia* family. These yeasts release carboxylic acids which inhibit melanocytes leading to areas of relative depigmentation. In light-skinned individuals the rash may not be apparent until the skin is exposed to UV light and tanning occurs, producing the typical pale areas on a tanned background. On untanned skin the affected areas may appear slightly darker with a collarette of fine scale. The condition is best managed by applying an antifungal shampoo such as ketoconazole directly to the skin. It is important to explain to patients that the loss of scale is an indication of successful eradication of the yeast and that repigmentation may take many months. In resistant cases an oral antifungal medication can be used.



Candida nail infection

Onychomycosis is frequently caused by infection with fungi such as *Trichophyton rubrum*. However, in some cases, as illustrated here, yeasts such as *Candida* may be the cause. It is a good idea to test nail clippings and subungual debris to determine the causative organism before starting treatment, as other conditions such as onycholysis or psoriasis may mimic the appearance of onychomycosis.



Axillary rash

The abundance of sweat glands in the axillae produces a moist warm environment which is ideal for fungi and yeasts. The use of deodorants and soap can also increase irritation producing erythema and maceration as seen in this case. Fungi are the most common cause of such rashes but in this case a swab revealed *Candida*. The satellite lesions, shown here, beyond the border of the main rash are typical of *Candida* infection.



Candida balanitis

Genital candida infections are more common in women than men. However, the infection can be transferred during sexual activity increasing the risk to men. Other conditions such as poorly controlled diabetes and immunodeficiency can also predispose people to infection. In this case the patient had undiagnosed diabetes. Symptoms of candida balanitis include redness, pain and swelling of the foreskin which may prevent retraction causing a temporary phimosis. The condition can be treated with topical antifungals such as clotrimazole.



Leukoplakia

When the diagnosis appears to be oral candidiasis, it is important to ensure that the patient is not suffering from the potentially more serious condition leukoplakia, shown here, which may be premalignant. Leukoplakia appears as a localised flat, white area on the tongue or buccal mucosa that cannot be scraped off. In contrast, the plaques of thrush are raised and more easily removed. Leukoplakia is more common in smokers and does not respond to topical treatment. If in doubt, the patient should be referred for biopsy.

