

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

**TINEA VERSICOLOR****WHAT IS IT?**

Tinea versicolor is a common skin condition caused by the overgrowth of yeasts in the genus *Malassezia*. This type of fungus normally lives in small numbers in the pores of healthy skin. Its overgrowth leads to a characteristic discoloration of the skin. It is most commonly seen in teenagers and young adults.

**WHAT CAUSES IT?**

It is unclear why some people develop tinea versicolor and others don't. Factors that can trigger an overgrowth of yeast include:

- Hot humid weather
- Excessive sweating
- Oily skin
- A genetic predisposition
- Hormonal changes (eg. from birth control pills)
- Poor nutrition
- Weakened immune system

**IS IT CONTAGIOUS?**

No. Because the tinea versicolor fungus is part of normal adult skin, this condition is not considered contagious.

**WHAT ARE THE SYMPTOMS?**

- ❖ "Versicolor" refers to the various changes in skin pigmentation that result from the overgrowth and migration of *Malassezia* yeast under the skin. This condition leads to flat patches of skin that are lighter in color, darker, or a mix of both:
  - Hypopigmentation refers to a decrease in skin pigment. Acid produced by *Malassezia* decreases the amount of pigment produced by new skin cells, resulting in scattered areas of skin that are lighter than the underlying skin color. This discoloration is more noticeable in the summer because the affected skin does not tan.
  - Hyperpigmentation, an increase in skin pigment, may also occur, resulting in tan, brown, or gray-black patches of skin. These, hyperpigmented lesions, as well as areas of pink discoloration, may result from an inflammatory response to the yeast.
  - A fine scale is usually visible on the affected skin.
- ❖ Tinea versicolor is most commonly seen on the shoulders, chest, upper back, and upper arms. It may also occur on the face, neck, or in places where skin rubs together, such as the armpit.
- ❖ The rash may sometimes be itchy. It is otherwise harmless, although some patients may find its cosmetic appearance distressing.

**HOW IS IT DIAGNOSED?**

Tinea versicolor is usually diagnosed by its characteristic appearance. If the diagnosis is unclear:

- Scales may be gently scraped from the skin and examined under a microscope for the presence of yeast.
- A special ultraviolet black light called a Wood's lamp may also be used. In one-third of cases, the affected skin will appear yellowish-green under the lamp.

**HOW IS IT TREATED?**

Symptoms tend to persist without treatment. Medication is used to suppress the overgrowth of fungi. A variety of treatments are available, depending on the severity and location of the condition.

## **HOW IS IT TREATED? (continued)**

- ❖ **Antifungal creams** are a good choice if the rash is easy to reach and not very extensive.
  - Over-the-counter (OTC) creams like clotrimazole (Lotrimin) or miconazole (Monistat) are effective options. They are usually applied twice daily for 2 weeks.
  - Prescription-strength antifungal creams may be recommended if you do not notice an improvement after 4 weeks or if symptoms are more severe. A typical choice is ketoconazole (Nizoral) 2% cream applied once daily for 2 weeks.
- ❖ **Medicated shampoos** are recommended for more widespread rashes. Foams, gels, and lotions are also available.
  - OTC options include selenium sulfide 1% (Selsun Blue), ketoconazole 1% (Nizoral), and zinc pyrithione 1% (Head & Shoulders) shampoos.
  - Stronger forms of selenium sulfide (2.5%) and ketoconazole (2%) shampoos are available by prescription.
  - After applying the shampoo to the affected skin, add water, and lather with a rough washcloth or loofah. Leave the shampoo on for 5-10 minutes before washing it off. Repeat this process for the prescribed number of days:
    - OTC shampoos are typically used once daily for 1-2 weeks.
    - Prescription-strength selenium sulfide 2.5% shampoo is used once daily for 1 week. Selenium sulfide 2.25% foam is a newer product that is applied twice daily without rinsing.
    - Prescription-strength ketoconazole 2% shampoo appears to be effective with one application or when used daily for 3 days.
  - In resistant cases, lotions can be left on overnight and washed off in the morning.
- ❖ **Oral antifungal medications** are usually reserved for patients who are not responding to topical treatments or for patients with widespread disease. Preferred agents include fluconazole (Diflucan) and itraconazole (Sporanox).
  - Fluconazole (Diflucan) is typically taken as a 300mg dose once weekly for 2 weeks OR as a single 400mg dose.
  - Talk to your medical provider to see if these medications are right for you because they can interact with common medications (like cholesterol medicines) and can also affect liver function tests.

## **HOW LONG WILL IT TAKE TO RESPOND TO TREATMENT?**

- ❖ Even after successful treatment, it may take several weeks to months for your skin color to return to normal. Spots that are lighter than the surrounding skin may take longer to improve.
- ❖ Treatment failure is uncommon in patients who are otherwise healthy. A diagnosis of treatment failure is considered if persistent scale is noted on skin lesions AND yeast is identified under the microscope.

## **WHAT IF SYMPTOMS RETURN?**

- ❖ Recurrences are common, especially during warm weather. To prevent symptoms:
  - Avoid wearing tight or poorly ventilated clothing.
  - Avoid using oily products on your skin.
- ❖ If you are experiencing frequent recurrences, effective treatment options include:
  - Selenium sulfide 2.5% or ketoconazole 2% shampoo applied to the entire body for 10 minutes once a month.
  - Oral itraconazole (Sporanox) may be prescribed in some cases.

**RECOMMENDED WEBSITES:** [www.aad.org](http://www.aad.org), [www.mayoclinic.org](http://www.mayoclinic.org)