

Patient Information for Tinea pedis in Child/Adult

Overview

Athlete's foot (tinea pedis), also known as ringworm of the foot, is a surface (superficial) fungal infection of the skin of the foot. The most common fungal disease in humans, athlete's foot, may be passed to humans by direct contact with infected people, infected animals, contaminated objects (such as towels or locker room floors), or the soil.

Who's At Risk

Athlete's foot may occur in people of all ages, of all races, and of both sexes. However, athlete's foot is more common in males than in females. Children rarely develop athlete's foot.

Some conditions make athlete's foot more likely to occur:

- Living in warm, humid climates
- Using public or community pools or showers
- Wearing tight, non-ventilated footwear
- Sweating profusely
- Having diabetes or a weak immune system

Signs & Symptoms

The most common locations for athlete's foot include:

- Spaces (webs) between the toes, especially between the 4th and 5th toes and between the 3rd and 4th toes
- Soles of the feet
- Tops of the feet

Athlete's foot may affect one or both feet. It can look different depending on which part of the foot (or feet) is involved and which fungus (ie, dermatophyte) has caused the infection:

- On the top of the foot, athlete's foot appears as a red scaly patch or patches, ranging in size from 1 to 5 cm. The border of the affected skin may be raised, with bumps, blisters, or scabs. Often, the center of the lesion has normal-appearing skin with a ring-shaped

edge, leading to the descriptive but inaccurate name ringworm. (It is inaccurate because there is no worm involved.)

- Between the toes (the interdigital spaces), athlete's foot may appear as inflamed, scaly, and soggy tissue. Splitting of the skin (fissures) may be present between or under the toes. This form of athlete's foot tends to be quite itchy.
- On the sole of the foot (the plantar surface), athlete's foot may appear as pink-to-red skin with scales ranging from mild to widespread (diffuse).
- Another type of tinea pedis infection, called bullous tinea pedis, has painful and itchy blisters on the arch (instep) and/or the ball of the foot.
- The most severe form of tinea pedis infection, called ulcerative tinea pedis, appears as painful blisters, pus-filled bumps (pustules), and shallow open sores (ulcers). These lesions are especially common between the toes but may involve the entire sole. Because of the numerous breaks in the skin, lesions commonly become infected with bacteria. Ulcerative tinea pedis occurs most frequently in people with diabetes and others with weak immune systems.

Self-Care Guidelines

If you suspect that you have athlete's foot, you might try one of the following over-the-counter antifungal creams or lotions:

- Terbinafine
- Clotrimazole
- Miconazole

Apply the antifungal cream between the toes and to the soles of both feet for at least 2 weeks after the areas are completely clear of lesions.

In addition, try to keep your feet dry, creating a condition where the fungus cannot live and grow:

- Wash your feet daily and dry them carefully, even using a hair dryer (on low setting) if possible.
- Use a separate towel for your feet, and do not share this towel with anyone else.
- Wear socks made of cotton or wool, and change them once or twice a day, or even more often if they become damp.
- Avoid shoes made of synthetic materials such as rubber or vinyl.

- Wear sandals as often as possible.
- Apply antifungal powder to your feet and inside your shoes every day.
- Wear protective footwear in locker rooms and public or community pools and showers.

When to Seek Medical Care

If the lesions do not improve after 2 weeks of applying over-the-counter antifungal creams or if they are exceptionally itchy or painful, see your doctor for an evaluation. If you have blisters, pustules, and/or ulcers on your feet, see a doctor as soon as possible.

Treatments Your Physician May Prescribe

To confirm the diagnosis of athlete's foot, your physician might scrape some surface skin material (scales) onto a glass slide and examine them under a microscope. This procedure, called a KOH (potassium hydroxide) preparation, allows the doctor to look for tell-tale signs of fungal infection.

Once the diagnosis of athlete's foot has been confirmed, your physician will probably start treatment with an antifungal medication. Most infections can be treated with topical creams and lotions, including:

- Over-the-counter preparations such as terbinafine, clotrimazole, or miconazole
- Prescription-strength creams such as econazole, oxiconazole, ciclopirox, ketoconazole, sulconazole, luliconazole, naftifine, or butenafine

Other topical medications your physician may consider:

- Compounds containing urea, lactic acid, or salicylic acid to help dissolve the scale and allow the antifungal cream to penetrate better into the skin
- Solutions containing aluminum chloride, which reduces sweating of the foot
- Antibiotic creams to prevent or treat bacterial infections, if present

Rarely, more extensive infections or those not improving with topical antifungal medications may require 3-4 weeks of treatment with oral antifungal pills, including:

- Terbinafine
- Itraconazole
- Griseofulvin

- Fluconazole

The infection should go away within 4-6 weeks after using effective treatment.