TINEA (FUNGAL SKIN INFECTIONS)

WHAT IS TINEA?
Tinea refers to a group of fungal infections that can affect your skin, hair, or nails. Humans and fungi usually co-exist in harmony. Only a few fungi, known as dermatophytes, cause skin problems. These fungi live on the outer layers of the skin and thrive in warm, moist environments. Common tinea infections include:
- Tinea corporis (of the body)
- Tinea capitis (of the scalp)
- Tinea barbae (of the beard)
- Tinea cruris (of the groin)
- Tinea pedis (of the foot)
- Onychomycosis (of the nail)

HOW IS IT TRANSMITTED?
Tinea is transmitted by direct contact with an infected person, animal, or object (vector).
- For example, tinea corporis can be transmitted by an infected pet; if you have a cat or dog, look for a rash or bald patches in the fur. Cattle, goats, pigs, and horses can also be sources.
- Tinea can also be spread from one body part (eg. infected feet) to another (eg. groin area).
- Vectors for tinea capitis include hats, combs, brushes, etc.
- Vectors for tinea pedis include damp surfaces found in public showers, swimming pool facilities, and locker rooms.

HOW IS IT DIAGNOSED?
Tinea is often diagnosed simply by its appearance. If the diagnosis is unclear, your medical provider may take a superficial skin scraping to examine under the microscope. On rare occasions, a skin, hair, or nail sample will be sent to the lab to see if fungi will grow in a special medium. Because fungi grow slowly, it takes several days for this test to come back.

HOW IS IT TREATED?
Antifungal medications, both over-the-counter and by prescription, are available for treatment.
- **Topical antifungal medications** (creams/lotions/gels/powders) are effective against most forms of tinea. They are typically used once or twice daily for 1 to 4 weeks, depending on the type of infection. It is important to continue treatment for 7-10 days after symptoms resolve to ensure a complete cure.
- **Antifungal medications taken by mouth** may be recommended in select cases:
  - Tinea infections of the scalp, beard, or nail require oral medications because topical treatments do not penetrate hair or nails well.
  - Oral medications may be used for other forms of tinea if the infection is extensive or not responding to topical treatments.

Self Care Tips:
- Bathe or shower daily, taking care to thoroughly dry your skin.
- Dry the infected area last. Do not reuse the towel until it has been laundered.
- Change clothing and underwear daily. Avoid tight clothing.
- Wash infected clothing, towels, etc. in hot water.
- Disinfect or discard affected combs, brushes, hats, etc.
- Over-the-counter anti-itch lotions (like Sarna or Prax) can be used if needed. These products will not cure an infection and should not be used on open skin or sores.

Return to your healthcare provider if:
- You are not experiencing gradual improvement while using your medication.
- You develop signs or symptoms of a bacterial infection, such as swelling, increased redness, pain, fever, and/or drainage.

HOW DO I PREVENT TINEA?
- Do not share clothing, towels, or sports equipment.
- Wear slippers or sandals at the gym, public showers, local pools, etc.
- Wash well with soap and shampoo after any sport with skin-to-skin contact.
- Change your socks and underwear at least once a day (more often if you sweat a lot).
- Wash workout clothes after each use.
- Avoid tight clothing.
❖ **Tinea Capitis** is a fungal infection of the scalp, typically seen in children.
   **Symptoms:** Usually begins as a red scaly patch that grows slowly; often remains unnoticed until a bald patch appears.
   **Treatment:** Antifungal medications taken by mouth for 2 to 12 weeks, depending on the medication and response to treatment. Antifungal creams/lotions are not effective for scalp infections.

❖ **Tinea Pedis (Athlete's Foot)** is a fungal infection of the feet. It often follows activities that cause feet to sweat. The moist skin between the toes is a perfect place for fungi to grow.
   **Symptoms:** Most commonly presents as itchy, red skin between the toes; skin may turn white from excessive moisture. Another form of athlete's foot involves thickening or scaling of the skin on the heels and soles of the feet. A third type of athlete's foot presents as itchy, painful blisters, often on the side of the foot.
   **Treatment:** Usually responds to topical antifungal treatments (creams/lotions/gels/powders), many of which are over-the-counter. Treatment duration is usually 4 weeks. Infections between the toes may only require 1 week of treatment if Lamisil 1% cream is used. Severe cases may require a prescription medication taken by mouth.
   **Self Care:** It is very important to keep your feet dry! Please read “Self Care Tips” on the previous page.
   - Wash your feet at least once a day with soap and warm water. After a bath or shower, dry all other body parts first before drying your feet. Do not reuse the towel until it has been laundered.
   - Dry your feet thoroughly, including the skin between your toes. You may want to insert cotton balls between the ends of your toes (not the web spaces), to allow moisture to evaporate.
   - If areas of macerated skin (eg. between your toes) are present, Burrow's soaks applied for 20 minutes 2-3 times/day can help dry out lesions and relieve itching. Burrow's (or Domeboro) powder is available over-the-counter or by prescription.
   - Wear socks that absorb moisture (such as cotton and wool), and change them at least daily. Put on your socks prior to putting on your underwear.
   - Sprinkle your feet and shoes with antifungal powder.
   - Wash your shoes if they are washable. If they can't be washed, allow them to dry completely between use (use a hair dryer to dry the insides if needed).
   - Alternate shoes on a daily basis to prevent moisture build-up and growth of fungi. Throw away worn-out exercise shoes.
   - Wear shoes that allow air to circulate (such as open-toed shoes, sandals, and flip-flops).
   - Have shoes and socks off as much as possible, but do not walk barefoot to avoid spreading the infection to others. Remember to wear sandals, flip-flops, or clogs in the shower.

❖ **Tinea Cruris (Jock Itch)** is a fungal infection of the groin. It is more common in men and during hot weather. It tends to occur in athletes and overweight individuals because of increased sweating and moisture in the groin area.
   **Symptoms:** Itching and redness of the groin area, which may extend down to the thighs and toward the buttocks or anus. In males, the scrotum is usually spared.
   **Treatment:** Usually responds to topical antifungal medications (creams/lotions/gels/powders), many of which are over-the-counter. Treatment should last 3 to 4 weeks. The most common source of infection is the patient’s own athlete’s foot, so treating both areas at the same time is important.
   **Self Care:** Please also read “Self Care Tips” on the previous page.
   - After a shower or bath, dry the groin area last. If needed, use a hair dryer on a low setting to thoroughly dry the area. Do not reuse the towel until it has been laundered.
   - Wear cotton underwear (boxers are preferable in men), and avoid tight clothing.
   - Use a drying powder in the groin area to prevent excess moisture.
   - Wear a clean athletic supporter if you use one.
   - Avoid hot baths.

❖ **Tinea Corporis (Ringworm)** refers to fungal infections that appear on parts of the body other than those listed above. It often develops when a tinea infection is transferred from one part of the body to another.
   **Symptoms:** Often presents as an itchy red ring; typically develops a raised scaly border with normal-looking skin in the middle, resembling a worm under the skin.
   **Treatment:** Usually responds to antifungal creams/lotions/gels, over-the-counter or prescription. Treatment is for 1 to 3 weeks, depending on the response to treatment.
   **Self Care:** Please read “Self Care Tips” on the previous page.

**Recommended Websites:** [www.aad.org](http://www.aad.org), [www.familydoctor.org](http://www.familydoctor.org), [www.mayoclinic.org](http://www.mayoclinic.org)