

Tinea (Ringworm)

Description:

Tinea (also called ringworm) is a group of conditions caused by a fungal infection of the skin or hair follicles.

Symptoms:

Tinea infection causes skin lesions which look different depending on the area affected, eg. the scalp, body, feet, or groin area. Tinea fungi need warm, moist environments and infection usually occurs in the warmest, most sweat-prone areas of the body.

Lesions are reddish and may be dry and scaly, or moist and crusted. There may also be small areas of pus or blister-like lesions. The central area often clears as the ring gets bigger and the skin may look normal. There may be more than one ring-shaped lesion.

Tinea infection of the feet is sometimes called athlete's foot. Frequently it appears as moist and cracked skin between the toes that can be quite scaly and itchy. The infection can also involve the hair or nail beds. Secondary bacterial infection is common.

Some people develop deep infections with these types of fungi. Instead of affecting the skin, the fungi infect deep body tissues, including the liver or the brain. These deep fungal infections most commonly occur in people who have weakened immune systems and can be fatal.

Transmission:

Tinea-causing fungi can be found on humans, animals and in the soil. Spread is fostered by overcrowding, shared bathroom facilities, poor hygiene, humid conditions and malnutrition. Overheating and perspiration contribute to tinea infections.

Tinea is spread by direct and indirect contact with fungal cells, from skin and scalp lesions of people who have the infection, lesions of animals, contaminated floors, shower cubicles, benches, clothing and towels.

The time from contact with tinea-causing fungi to development of symptoms is about one to three weeks, depending on the type of fungus. Tinea can be transmitted for as long as lesions are present or there are fungi on contaminated objects.

Everyone is susceptible to developing tinea. People at increased risk include those who live in areas where high temperatures and high humidity occur, and people who handle animals who have the infection.

Treatment:

Tinea infections respond well to topical antifungal agents in the form of cream/lotion applied directly on the lesions. Infections that are difficult to treat might also require oral antifungal medication. Infected people should follow medical advice regarding treatment.

Without appropriate treatment, the course of the illness can be quite prolonged, and treatment may need to be continued for an extended period of time to ensure it does not return.

Prevention:

Children with fungal infections should be excluded from school until the day after appropriate treatment has commenced.

Children and adults with fungal infections of the foot (athlete's foot) should avoid walking barefoot in gyms, locker rooms, public showers, or on public pool decks. Wearing of appropriate footwear such as sandals or thongs at all times, and daily washing of feet with soap and water as well as careful drying of the feet will help prevent spread of the infection.

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Contacts of people with this type of infection should be inspected closely for any signs of tinea. Good personal hygiene, hand washing techniques and proper cleaning procedures of floors, showers and other surfaces will help prevent spread of the disease.

Parents and children should be educated about the danger of acquiring infection from infected individuals, as well as from dogs, cats and other animals. Pets should be washed in antifungal solutions to treat any lesions. A veterinarian can give advice regarding antifungal treatments for animals.

Maintaining good hygiene and washing contaminated towels and clothing in hot water and soap should destroy any fungus. Clothing, headwear and towels should not be shared with other people.

Footnotes

Heymann D (Ed) (2008). *Control of Communicable Diseases Manual*, 19th ed. American Public Health Association: Washington.

Queensland Health. Fungal Skin Infections. *Primary Clinical Care Manual 2007*, 5th ed. (pp214-215) <http://www.health.qld.gov.au/pccm/default.asp>