Ringworm & Other Human Fungal Infections

McKenzie Pediatrics

Ringworm, medically known as Tinea Corporis, is a common skin infection of childhood, and is not caused by a worm at all, but rather by a fungus. It is usually easily treated, and should not be seen as a source of social stigma. It is just one of many types of Tinea infections that affect humans.

Tinea is a widespread group of fungal infections caused by dermatophytes. It is second to acne as the most frequently reported skin disease in the United States. Infection may occur through contact with infected humans (by way of shared combs, brushes, hats, pillows, clothing, or bedding) and animals (especially dogs and cats), soil, or inanimate objects. Tinea should be suspected in any red, scaly, itchy, and enlarging rash.

Tinea is a superficial infection of the skin (Tinea Corporis), scalp (Tinea Capitis), nails (Tinea Unguium), groin (Tinea Cruris), hands (Tinea Manuum) or feet (Tinea Pedis). There are three types and 27 varieties of dermatophytes that cause human Tinea: Trichophyton, Epidermophyton, and Microsporum.

Tinea Corporis (Ringworm) causes smooth and bare skin, typically surrounded by a raised, red, scaly "ring". Lesions are often solitary, though may be multiple, and even overlapping. It is not nearly as common as what it is most often mistaken for: nummular eczema, a variety of eczema that causes round or oval scaly patches but without a clear area in the center. Nummular eczema tends to be more numerous, and is often less itchy than Ringworm.

Topical treatments that are available over-the-counter usually work quite well for Tinea Corporis. Most any inexpensive, generic anti-fungal cream will work, if used <u>twice-daily</u>, used covering an area <u>extending one inch beyond the rash</u>, and used for <u>10 days longer than it takes to clear the infection</u>. Examples include: Clotrimazole, Miconazole, and Ketoconazole. If the rash fails to resolve after 3 weeks of topical treatment, please contact our office.

Tinea Capitis, or fungal infection of the scalp, is usually caused by Trichophyton tonsurans. It causes itchy scaling skin, patchy hair loss (alopecia), pustules, inflammation and swelling, and sometimes swollen lymph nodes in back of the head. It is most common in children before puberty, and can be difficult to treat. An office visit is needed to discuss the complex and lengthy treatment of Tinea Capitis.

Tinea Cruris, otherwise known as "jock itch", causes an intense itchy rash in the groin area of boys and girls, usually adolescents. It tends not to involve the penis, scrotum, vulva or anal area. It does tend to spread down the inner thigh. Like Tinea Corporis, it usually responds to treatment with over-the-counter and inexpensive anti-fungal creams or powders.

Tinea Pedis, otherwise known as "athlete's foot", causes a red, scaly, smelly and sometimes itchy rash between the toes (sometimes with breakdown of the skin, and secondary painful bacterial infections), or, less commonly, across the entire bottom and up the sides of the foot ("moccasin" appearance). Tinea Manuum is similar, but affecting the hands, and often occurs at the same time as Tinea Pedis. Both types of Tinea usually respond to treatment with over-the-counter antifungal treatments, but contact our office to discuss the full care of these types of Tinea.

Other fungal infections not caused by dermatophytes include: Candida, the most common type of fungal rash in the diaper region of infants and young children, and Tinea Versicolor, which is

not Tinea at all, but rather Pityrosporum versicolor, a chronic superficial fungal infection that causes fine and colored scales more noticeable when the infected areas fail to tan when exposed to sun. Both Candida and Pityrosporum Versicolor can be itchy, the latter when sweating or during warm weather.