



“Make it go away!”

Jerzy Pawlak, MD, MSc, PhD

Ryan, 10, presents with a rash on his chin that began two weeks prior. The rash has gradually extended, is asymptomatic and is scaling with sharply marginated plaques that have peripheral enlargement and central clearing (Figure 1).

What's your diagnosis?

- a) Annular lesions of psoriasis
- b) Seborrheic dermatitis
- c) Contact eczema
- d) Pityriasis
- e) Tinea corporis
- f) Rosea and/or erythema multiforme



Figure 1. Patient with rash on chin.

Answer:
Tinea corporis

Ryan's examination

- Ryan is otherwise healthy
- He received a cat from a friend a month before the rash developed
- Direct examination or culture will exclude the incorrect disease possibilities listed above

About tinea corporis

Tinea of the face (excluding the beard area in men), trunk and limbs is called *tinea corporis*, or ringworm. These fungal infections involve the glabrous skin and produce lesions that range from vesicles through scaling, eczematous lesions to deep granulomata, which may be mistaken for skin cancer.

The disease is seen in all ages and is more common in people from warmer climates. Classic ringworm begins with lesions that are flat and scaly, which develop a raised border that extends at variable rates. The advancing border may have red, raised papules or vesicles; the central area will become brown or

Lesions may spread to cover large areas of the body surface.

hypopigmented and less scaly as the active order progresses outward. It is not uncommon to see several red papules or vesicles in the central area.

There may be only one ring that grows to a few centimetres in diameter and then resolves, or several annular lesions that spread to cover

Infection is acquired from an active lesion of an animal by direct human contact.

large areas of the body surface. Larger lesions tend to be mildly itchy or symptomatic, which may reach a certain size and remain for years with no tendency to resolve. Clear central areas of the larger lesions are yellow-brown and usually contain several red papules with borders that are serpiginous or annular and irregular.

Infection is acquired from an active lesion of an animal by direct human contact

The lesion can be single or multiple, discrete or confluent, and it may cover an area of 10 cm.

(trichophyton rubrum) or from soil. Zoophilic fungi, such as trichophyton verrucosum from cattle, may produce a highly inflammatory skin infection. The round, intensely inflamed lesion has a uniformly elevated, red, boggy, postular surface. The postules are follicular and represent deep penetration of the fungus into the hair follicle.

Dr. Pawlak is a General Practitioner, Winnipeg, Manitoba.

Share your cases with us!

Our mailing address: 955 boul. St-Jean, Suite 306, Pointe-Claire, Quebec H9R 5K3
Our fax number: (888) 695-8554
Our e-mail address: diagnosis@sta.ca

Secondary bacterial infections can also occur. The process ends with brown hyperpigmentation and scarring. A fungal culture will help identify the source animal of the infection.

A distinctive form of inflammatory *tinea*, majocchi's granuloma (caused by trichophyton rubrum), is found on the lower legs of women who shave and at the shaving sites of men. The primary lesion is a follicular papulopustule or an inflammatory nodule. The lesion can be single or multiple, discrete or confluent and may cover an area of 10 cm. It may be red and scaly, but is not as intensely inflamed as ringworm. Also, the border may not be well-defined. A skin biopsy, with special stains for fungi, is required for diagnosis if hyphae cannot be demonstrated in scale or hair.

What's the treatment?

The superficial lesions of *tinea corporis* respond to antifungal creams, such as miconazole, ketoconazole, clotrimazole and cicloproxolamine. Lesions usually respond after two weeks of twice-daily application, but treatment should be continued for at least one week after resolution of the infection. Resistant and widespread infections require one to three (and sometimes more) months of oral therapy. 