Trichophyton rubrum infections in animals are apparently rare. Chaerabarty et al. (1954) isolated T. rubrum from skin lesions in one dog and two cows. Moss and Dyson (1955) described two cases of T. rubrum infections in dogs. In Egypt, T. rubrum is rarely met with in man of animals. Repai (1967) isolated it only 4 times from patients suffering from tinea cruris. The present report describes tinea circinata in a family, caused by T. rubrum and the role of cats in transmitting the infection.

Case history

On July 15, 1967, a 15-day old cat from the street was presented to a family. In August, the small cat started to loose its hairs in the tip of the left ear, trunk and tail. The cat was treated with Bioterin for about 3 weeks but without success. In September, the owner noticed the appearance of 3 red circinate patches in his leg and another one on his face (Photo 1). Five days later, lesions started to appear in the wife at her neck.
(Photo 2) and other parts of the body. After the appearance of infection in the wife, other 3 cats already found in the house showed loss of hairs at different parts of their bodies.

Photo 3: Trichophyton rubrum, 14 days old, culture on Sabouraud glucose agar

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Trichophyton rubrum infection in a family transmitted from a cat

Mycological examinations

Hairs and skin scrapings were taken from both patients and the 4 cats. In 15% KOH solution the scales present hyphae and arthrospores. The samples were cultivated on Sabouraud dextrose agar and incubated at room temperature. After about 10 days, white, cottony, dome-shaped colonies appeared on the surface of the medium.

Microscopical examination of the colonies revealed the presence of piniform microconidia arranged singly along the hyphae. Accordingly, the fungus was identified as Trichophyton rubrum (Photo 3). This was verified by cultivating the isolated strains on glucose and peptone solutions (Photo 4 and 5). They showed the characteristic growth features of T. rubrum described by Repai and Rieth (1964).
Discussion

Although _T. rubrum_ is generally considered to be an anthropophilic dermatophyte, it is apparent that lower animal infections with this fungi can occur.

This is the first time to isolate _T. rubrum_ from small animals in Egypt. The source of infection in case of the small cat is not known. It appears that the small cat contracted the disease from outside the house and transmitted it to the owner. However, it is not clear, whether the wife contracted the infection from the small cat or from her husband. The small cat stayed always away from the other 3 old cats and therefore it was difficult to decide, whether the 3 old cats contracted the infection from the small cat or from the wife. She amused her self always with her cats on the contrary of her husband who dislikes the cats at all. Moreover, transmission of infection from man to animals is possible. Kaplan and Gump (1958) described a case of _T. rubrum_ infection in a dog whose owner has a persistent tinea pedis due to _T. rubrum_. Finally it seems possible that the small cat has transmitted the infection to all other members of the house either directly or indirectly through the scattered infective hairs fallen from it any where in the house.

Summary

Trichophyton rubrum was isolated from 2 patients and 4 cats. The infection is transmitted from a cat found in the street. This is the first time to isolate _T. rubrum_ from animals in Egypt.

Zusammenfassung


Resumen

Se aisló Trichophyton rubrum de 2 pacientes y de 4 gatos. La infección fue transmitida por un gato enfermo, que fué hallado en la calle. El gato mostraba caída de pelos en la oreja izquierda, tronco y cola. El nuevo dueño enfermó 6 semanas después de haber recogido el animal, con lesiones de contornos pronunciados en la pierna y cara. Su esposa se enfermó 5 días después con lesiones en la nuca y otras partes del cuerpo. Se halló luego en la misma casa 3 gatos enfermos más. Es la primera vez que en Egipto se aisló Trichophyton rubrum de animales.

References


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