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Zoonotic Sporotrichosis in Rio de Janeiro, Brazil: A Protracted Epidemic yet to Be Curbed

TO THE EDITOR—The zoonotic transmission of sporotrichosis seems to be rare worldwide. However, since 1998, an increasing number of cases have been reported in humans in Rio de Janeiro, Brazil, the vast majority of them associated with contact with cats affected by the same condition [1, 2]. From 1998 through 2004, there were 759 humans and 1503 cats diagnosed with this mycosis by *Sporothrix schenckii* isolation in biological specimens at the Evandro Chagas Clinical Research Institute, Oswaldo Cruz Foundation (IPEC/Fiocruz). This represents an enormous increment vis-à-vis previous findings, because during the previous 12 years, there were only 13 cases in the same reference center [2].

From 2005 through 2008, 804 human patients were diagnosed with sporotrichosis, corresponding to an annual increase of 85%. The most affected population remains unchanged, with a predominance of women aged 40–49 years who are engaged in domestic duties and are from deprived social strata. Close contact with cats, either with clinically evident disease or with no symptoms, was reported in 91% of the human cases. Bites and/or scratches were reported by 68% of these patients, suggesting such lesions as the putative mean of transmission of the fungus.

The clinical picture [3] comprised 66% of presentations belonging to the lymphocutaneous form, 25% of the fixed form, and 9% of patients with disseminated lesions (ie, disseminated cutaneous forms, with or without extracutaneous lesions).

Also worthy of notice is the apparent overlapping with other infectious conditions, such as human immunodeficiency virus infection (14 patients), tuberculosis (3), leprosy (2), and human T-lymphotropic virus infection (2). Among those patients infected by human immunodeficiency virus, 36% presented the disseminated severe form of the disease.

The drug of choice to treat these patients has been oral itraconazole ($n = 514$; 64% of patients), and terbinafine was used in 184 (23%) patients. Amphotericin B was very seldom used (6 patients). Almost 2% of clinically cured patients had clinical relapses (reemergence of their lesions), whereas 11% ($n = 90$) of the patients did not need to be treated, because of spontaneous cure. Patients were followed from 3–6 months after the end of therapy. Nine percent of the patients were lost to follow-up. Six patients were hospitalized, with 2 deaths. Irrespective of the drug regimens, 89% of the cases were cured.

It is still not certain how the infectious agent has been disseminated throughout the Rio de Janeiro municipality and its outskirts, but it is beyond reasonable doubt that the close interaction with cats represents a key form of transmission of the fungus. Felines have very close contact with contaminated soil and organic matter and constitute a reservoir of this agent [4, 5]. An improper destination given to ill or dead cats was mentioned by 71% of their current/former owners (most cats were just abandoned or died without receiving a proper burial or cremation). Such non-hygienic practices most likely foster the sustained dissemination of the mycosis, contributing to its current epidemic (en route to endemization?) status, which has yet to be curbed in Rio de Janeiro's metropolitan area.

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Genetic Determinants of Antibiotic Resistance in Diarrheagenic *Klebsiella pneumoniae* Subspecies *ozaenae*: An Emerging Enteropathogen in Senegal

TO THE EDITOR—Diarrheal diseases are common in developing countries. They are usually caused by bacteria like *Salmonella*, *Shigella*, *Escherichia coli*, *Campylobacter*, and *Vibrio cholerae*. Members of the genus *Klebsiella* are found as normal flora in the human intestinal tract; some strains are considered to be enteropathogenic and are able to cause diarrhea both in immunocompetent and immunocompromised individuals [1, 2]. Although this pathogen is responsible for diarrhea, the molecular mechanism of its pathogenesis remains unclear. Virulence factors includ-