



## Case illustrated

## A malar rash from inner Rio de Janeiro State, Brazil

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## ABSTRACT

A 49-year-old previously healthy woman from Rio de Janeiro State, Brazil, presented with a right malar rash that started as a tiny pustule and progressed to an ulcerated papulonodular lesion within ten weeks. A presumptive diagnosis of zoonotic sporotrichosis was made based on excellent response to treatment and epidemiological linkage with a diseased cat.

## Case study

## A tiny malar pustule

A 49-year-old previously healthy Brazilian woman from north-western Rio de Janeiro state, Brazil, presented with an enlarging ulcerated lesion over the right malar region (Fig. 1C). She first noted the lesion ten weeks earlier, as a tiny pustule surrounded by a rim of erythema (Fig. 1A). Makeup was applied to conceal the lesion. Two weeks after the start of illness there was a nodule, a rostral satellite papule, and the disease had spread caudally to involve an infra-auricular lymph node (Fig. 1B). Antimicrobial agents directed against common causes of pyoderma were prescribed, with no benefit.

When she came to our attention, there was a large, painless, ulcerated papulonodular lesion, with raised, scaling borders, and a depressed violaceous center (Fig. 1C). She complained of headache and diffuse arthralgia. She informed that her cat had an ulcerated lesion over the right pinna (Fig. 1F). Itraconazole had been empirically started

four days previously. She did not recall having had any trauma, scratch or bite at the site of the lesion, despite close contact with the cat. Since the lesion partially improved after 4 days of itraconazole, she declined any diagnostic procedure. Itraconazole was maintained at a dose of 200 mg/d during five months. Fig. 1D/E show the complete resolution of the lesion while on treatment. Serologic tests for *Bartonella henselae* were negative for both IgM and IgG. The cat disappeared.

Sporotrichosis is the most likely diagnosis in the present case. It is an implantation mycosis of humans and animals caused by species of the *Sporothrix schenckii* complex [1]. It needs to be differentiated from many other conditions, including cat-scratch disease, leishmaniasis, mycobacterioses, and paracoccidioidomycosis. Culture is the gold standard in diagnosis [1]. The presumptive diagnosis in the present case was based on response to treatment and epidemiological linkage with a diseased cat. Cat-associated sporotrichosis is hyperendemic in Rio de Janeiro [2]. Diseased animals should not be abandoned. Appropriate disposal of carcasses of dead animals is needed. Veterinary care is essential to interrupt enzootic and zoonotic transmission [3].

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**Fig. 1.** Clinical images of the patient. A) When the illness was first noted, there was a tiny pustule surrounded by a rim of erythema. The lesion was taken as acne. B) Two weeks later there was a 2 cm nodule, a small satellite papule rostrally, and an enlarged infra-auricular lymph node. C) Ten weeks after the illness was first noted, there was a large, painless, ulcerated and crusted papulonodule, with raised, scaling borders, and a depressed violaceous center. She was then under considerable emotional distress and itraconazole had been empirically initiated four days previously. D) Fourteen weeks after the illness was first noted (four weeks after treatment initiation) the ulcer had closed and there was a violaceous macule with a scaling center. The rostral satellite papule was then a faint macule. The draining cervical lymph node had significantly shrunk. E) Nineteen weeks after the illness was first noted (nine weeks after treatment initiation) only a faint erythematous macule with hypochromic center could be seen. F) An ulcerated lesion over the lateral caudal border of the right pinna of the patient's cat.

#### Conflict of interest

The authors declare that there is no conflict of interest.

#### Informed consent

Informed consent of the patient was obtained for publication of the case.

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