Cutaneous coccidioidomycosis: a great mimicker

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DESCRIPTION

An 18-year-old immunocompetent woman with a history of coccidioidal meningitis (positive cerebrospinal fluid complement fixation test, titre 1:128) who was treated 2 years earlier with placement of a ventriculoperitoneal valve because of hydrocephaly along with fluconazole (300 mg two times per day) for 5 months, was referred to dermatology because of a 3-year history of a dermatosis. Physical examination revealed two erythematous plaques with central atrophy and telangiectasias on the right cheek and dorsal aspect of the nose (figure 1). Skin biopsy demonstrated endospore-containing spherules inside a giant cell surrounded by a granulomatous reaction (figure 2). *Coccidioides* spp was isolated in the skin culture.

Coccidioidomycosis is a systemic fungal infection caused by two species: *Coccidioides immitis* and *C. posadassi*.[1 2] The condition is endemic in the southwest USA, northern Mexico and parts of Central and South America.[3]

Cutaneous coccidioidomycosis most frequently results from dissemination of a primary pulmonary infection, usually asymptomatic and self-limited, mainly in endemic areas, as in this patient.[1] Skin lesions vary widely and display diverse clinical and histological morphology.[3] Isolation of the fungus or histological identification is considered the gold standard to confirm the diagnosis of coccidioidomycosis. Serological tests identifying anticoccidioidal humoral antibodies, and nucleic acid amplification, are also used for diagnosis and prognosis.[2]

In this case, the facial plaques of the patient could easily be misdiagnosed as discoid lupus, atopic dermatitis, psoriasis, sarcoidosis, lupus miliaris disseminatus faciei, granuloma faciale or tinea faciei. Coccidioidomycosis should always be considered as a differential diagnosis in endemic regions.

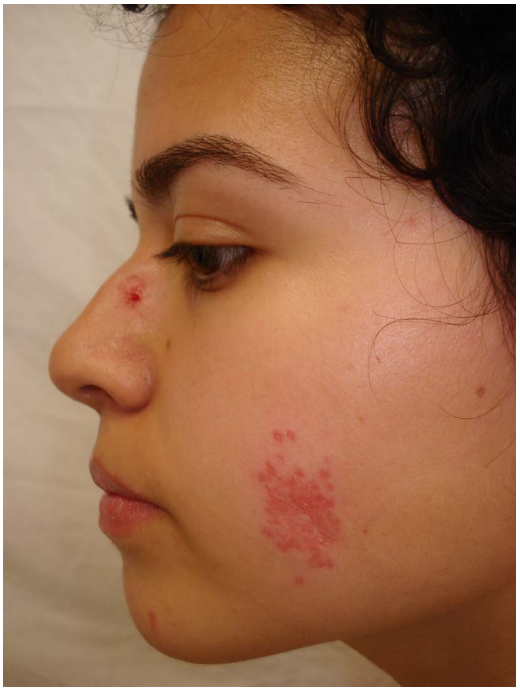

Figure 1 Physical examination revealed two erythematous plaques with central atrophy and telangiectasias located on the right cheek and dorsal aspect of the nose.

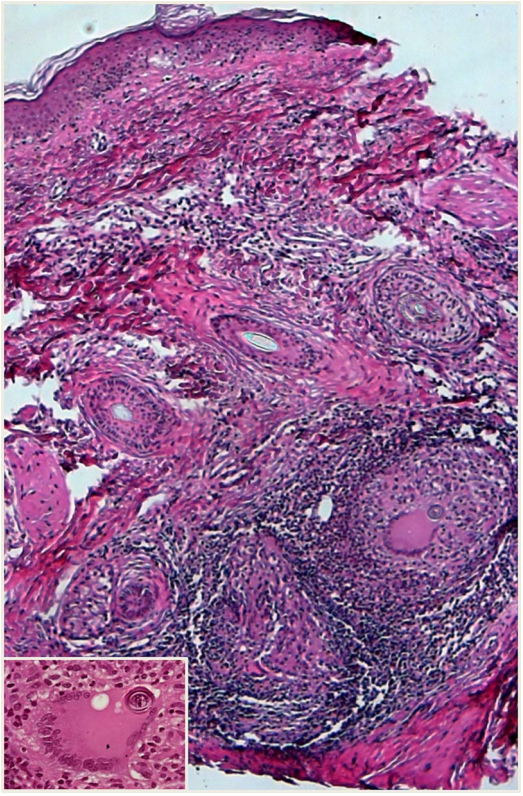

Figure 2 Endospore-containing spherules inside a giant cell surrounded by a granulomatous reaction with lymphocytes and histiocytes.

Learning points

- Coccidioidomycosis is endemic to the southwest USA, northern Mexico and parts of Central and South America.
- Skin lesions vary widely and display diverse clinical and histological morphology.
- Coccidioidomycosis should always be considered as a differential diagnosis in patients with papules, nodules, macules, plaques, abscesses, pustules and/or scars, especially in endemic regions.

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