**INTRODUCTION**

Cryptococcosis is a fungal infection caused by two varieties of Cryptococcus neoformans, with 5 (five) serotypes, that is, *C. neoformans var. neoformans* (serotypes A, D and AD) and *C. neoformans var. gatti* (serotypes B and C). Cryptococcosis has been found mainly in patients with immunodeficiency, generally carriers of the Acquired Immunodeficiency Syndrome (AIDS), and is rarely observed in immunocompetent patients. *C. neoformans var. neoformans* frequently occurs in immunodepressed patients and the *C. neoformans var. gatti* is more common in the immunocompetent. The most utilized treatment for cryptococcosis is fluconazole, with a 600 mg daily dose and average duration of 40 to 60 days; all of the cases reported in the literature have had successful outcomes.

**CASE REPORT**

A 67-year-old male patient residing in Blumenau-SC, a poultry farmer, reports that 60 days ago, while he was cleaning a chicken coop he was scratched by a hen on the right arm. Erythematous spots appeared around the lesions, with “small blisters” and intense itching that spread onto the forearm with the onset of open wounds.

The dermatological examination showed the presence of nodular lesions, with high borders and ulcerated, depressed center surrounded by multiple excoriations and lesions, ulcerated in the anterior surface of the right forearm region, with exudation and suppuration (Figures 1 and 2).

General Examination: The patient was white, lucid, hypertensive, his pulse was regular and the lungs were clear to auscultation.

Laboratory tests - Glucose 89.0/ml; total cholesterol 232; hemogram with hemoglobin 15.5, eosin-
Primary cutaneous cryptococcosis in an immunocompetent patient

hils 2.0; normal platelets; sodium, 143 and potassium 5.5 mmol/l. Immunoglobulins were within normal levels: IgG (1027.0mg/dL), IgM (79.0mg/dL) and IgA (207.0mg/dL).

**HIV1 and HIV2 Test - Method:** Chemiluminescence - CMIA (Architect i2000SR)

**RESULT:** Sample non-reactive to HIV - S/CO 0.10 (Normal = < 1.0)

Lung X-ray without alterations.

A direct mycological examination with India ink made encapsulated and gemmulated forms typical of Cryptococcus sp. visible and culture showed growth of milky colonies typical of *Cryptococcus neoformans* (Figures 3 and 4). In view of the direct mycological and culture results, the biopsy and anatomopathological examination were not carried out.

The definitive diagnosis was primary cutaneous cryptococcosis in immunocompetent patient.

The treatment prescribed was Fluconazol at the dose of 450 mg per day (3 capsules/day) during 40 days, which achieved complete healing, with total regression and healing of lesions (Figure 5). At the follow-up appointment after 60 days the patient was healthy, with only residual scars.

**DISCUSSION**

Cutaneous cryptococcosis is more frequent in patients with the Acquired Immunodeficiency Syndrome (AIDS), who present multiple and varied lesions simulating molluscum contagiosum, acneliform, nodular, herpetiform lesions, cellulitis or even simulating keloids.8-10
In the case reported, the lesions are nodular, erythematous, with small centered ulcers with exudation. This immunocompetent patient had a full therapeutic response to fluconazole.

The culture showed growth of *Cryptococcus neoformans* colonies, that may be of the neoformans and/or gatti variety, which we were unable to determine; however, the literature reports that in immunocompetent patients like this the most common incidence is of *Cryptococcus neoformans var. gatti*.1-5,11

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REFERENCES


The patient is a farmer who has a small poultry farm with 12 chickens and he was cleaning the coop where they are kept as he usually does every week when he was scratched by one of them.

There is the possibility that the patient was contaminated by chicken manure on the scratched location.

He did not mention the presence of pigeons, that are the main carriers of cryptococcus, which were found in their stools.12

Werchniak presented a case of an immunocompetent farmer who developed cutaneous cryptococcosis after injuring his upper limb while he was cleaning his barn.13

Micalizzi C, Persi A, Parodi A., report the case of a pigeon keeper who developed primary cutaneous cryptococcosis after the birds hurt his finger, without any other pathology.14

There is no record in the literature of primary cutaneous cryptococcosis in the State of Santa Catarina, probably due to the rarity of the case and in Rio Grande do Sul one case was reported of primary cutaneous cryptococcosis in immunocompetent caused by *Criptococcus neoformans var. gatti*.11

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