

CASE REPORT: SKIN *CRYPTOCOCCAL* INFECTION IN RENAL-TRANSPLANT RECIPIENT

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BACKGROUND: Cryptococcosis is the infection caused by the encapsulated yeast *Cryptococcus neoformans*, a dimorphic fungus. Although the primary site of infection is most often the lungs, the disease frequently manifests involving the skin in approximately 10-15% of cases. Dissemination occurs most often in the immunocompromised host, such as those with AIDS, lymphoreticular malignancy, those on long-term immunosuppression and others [1]. The prevalence in organ transplanted patients reportedly is 2.8%. The age of onset more common over the age of 40 years in male sex. Clinically, it may appear as painless papule, which then becomes nodule with surrounding erythema that may ulcerate and exude a liquid [2]. The distinct histopathologic patterns show - oval, thick-walled spherule surrounded by a polysaccharide capsule [3]. Special staining with methylene blue may be performed to demonstrate the capsule. We present a case of skin Cryptococcal infection in renal-transplant recipient.

CASE REPORT: A 69-year-old woman, cadaveric renal transplant recipient for 26 months presented with papular, nodular and ulcerative lesions on both hands and left cheek.

The patient had a significant past medical history of long standing renal failure and hemodialysis for 18 months. She received a related-donor kidney transplant when she was 67 years old. And therefore she had been treated with systemic tacrolimus, mycophenolatum mofetilum and methylprednisolone. Seven months later it had been noted a nodule on the right hand, which slowly enlarged and finally ruptured into a small ulcer. Histology showed epidermal and hair follicle epithelium proliferation and latent inflammatory infiltration with possible infection of *Cryptococcus*.

Initially treatment with fluconazole 200 mg PO a day resulted in only slight improvement and new lesions appeared.

Physical examination revealed a cyanotic nodule measuring 2 cm, surrounded by erythema with central ulceration and liquid exudation.

The second histological examination showed granulomatous inflammation, most possible infection - *Cryptococcus*.

Exudate from the lesion serology examination showed secondary infection of *Curvularia* sp., which did not require additional treatment.

The diagnosis of skin Cryptococcosis was made. Treatment with itraconazole 200 mg PO a day and topical therapy of Nizoral® washing liquid 2-3 times a week, Travocort® and clotrimazolum 2 times a day was started and after one month showed marked improvement.

CONCLUSION: *Cryptococcus* usually affect immunocompromised host. It is frequently localized in the lungs and rarely involves the skin. Cutaneous lesions often provide the opportunity for early diagnosis by lesional biopsy.

[1] Liapis K, Taussig D, Cotter FE, Gribben JG. Cutaneous cryptococcosis in Hodgkin lymphoma. *Br J Haematol*. 2014 Feb. 164(4):467.

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[3] Molina-Leyva A, Ruiz-Carrascosa JC, Leyva-Garcia A, Husein-Elahmed H. Cutaneous *Cryptococcus laurentii* infection in an immunocompetent child. *Int J Infect Dis*. 2013 Dec. 17(12):e1232-3. [Web]. [Read: 2018 04 30].