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Primary cutaneous cryptococcosis in a liver transplant recipient

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DESCRIPTION

A 31-year-old Caucasian office worker who had received a liver transplanted 1 year earlier consulted for a painful ulcer located on the medial face of the right elbow (figure 1). Four months before, he fell while skiing (without direct cutaneous exposure) and developed a haematoma on the right elbow that never healed but fistulised and ulcerated. The lesion was solitary and there were no clinical signs of dissemination. White blood cell count and C reactive protein were within normal levels. Cryptococcal capsular antigen (CCA) was undetectable in serum. Microscopic examination of a skin biopsy specimen showed numerous encapsulated yeast forms amidst a dense dermal inflammatory infiltrate (figure 1). Cultures yielded *C. neoformans* var. *neoformans* (serotype D, identified using a monoclonal antibody specific for capsular polysaccharide).

The patient was given fluconazole (6 mg/kg/d following a single loading dose of 12 mg/kg) and surgical debridement was performed. Tacrolimus dose was reduced by 50% because of drug interactions. The QTc-interval remained <420 ms and no hepatotoxicity occurred during treatment. Complete healing of the lesion was achieved within four months of treatment.

Primary cutaneous cryptococcosis (PCC) in transplant recipients is usually a localised disease, without evidence for dissemination based on undetectable CCA in serum and negative blood, urine and CSF cultures. PCC is characterised by a solitary lesion, predominantly developing on the upper limbs following a pre-existing skin traumatism due to outdoor hobbies/activities. Unlike disseminated cryptococcosis, most PCC cases are due to *Cryptococcus neoformans* var. *neoformans*. Treatment consists of systemic antifungal therapy with fluconazole, with or without surgical resection. Interactions with immunosuppressive drugs (mainly tacrolimus and ciclosporin) need to be considered. This treatment is usually effective, provided it is administered for 4 weeks to 4 months.

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Competing interests None.

Patient consent Obtained.



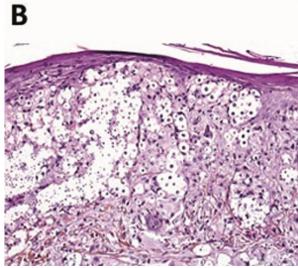


Figure 1 (A) 3.5×2.6 cm umbilicated, ulcerated lesion is seen on the right medial face of the elbow. (B) Microscopic examination shows multiple cryptococcal organisms within the dermis (haematoxylin-eosin-saffron staining, original magnification, $\times 400$).

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