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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.[1 2] Unlike disseminated cryptococcosis, most PCC cases are due to *Cryptococcus neoformans* var. *neoformans*.[1] 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.[3] This treatment is usually effective, provided it is administered for 4 weeks to 4 months.[1 2]

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Competing interests None.

Patient consent Obtained.

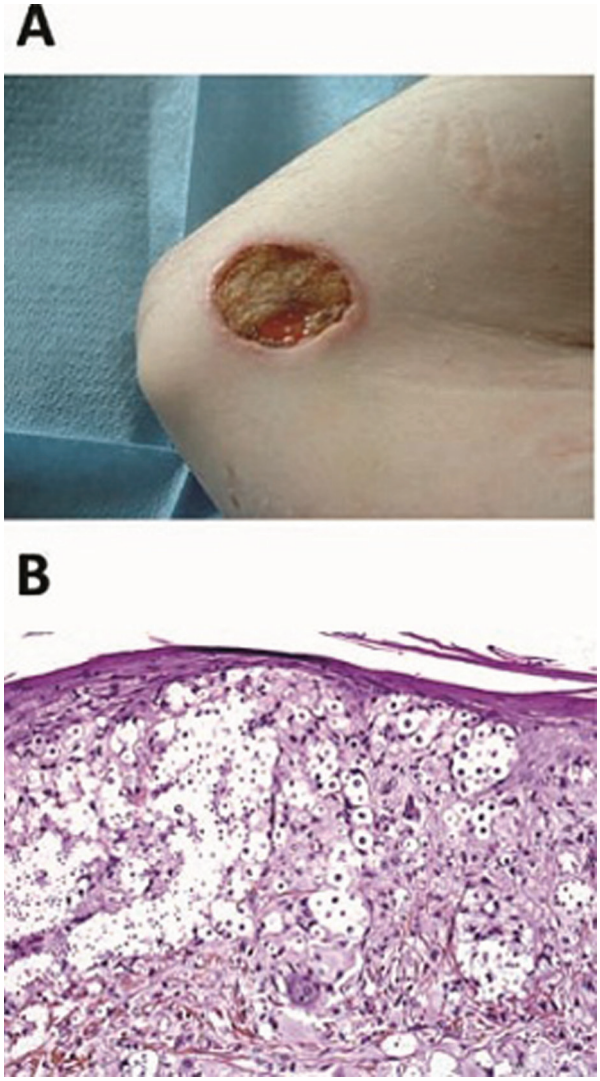

Figure 1 (A) 3.5×2.6 cm umbilicated, ulcerated lesion is seen on the right medial face of the elbow. (B) Microscopic examination shows multiple cryptococcal organisms within the dermis (haematoxylin-eosin-saffron staining, original magnification, ×400).

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