Disseminated Trichosporon infection in a cardiac and renal transplant recipient - presenting as skin lesions mimicking calciphylaxis

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Here we present the unusual case of a 53 year old female with a previous cardiac transplant (for dilated cardiomyopathy) and recent renal transplant (for polycystic kidney disease), complicated by delayed graft function, for which she was still receiving intermittent haemodialysis.

She was re-admitted to hospital soon after her initial post-operative discharge with cellulitis of her right thigh, which rapidly progressed to involve both lower limbs. The lesions were excruciatingly painful and developed focal areas of necrosis and skin breakdown, mimicking calciphylaxis (figure 1). A decision was made to biopsy the lesions and this revealed a surprising diagnosis of disseminated "Trichosporon inkin" infection.

Further imaging revealed a large mycotic aortic aneurysm, at the anastomotic junction of her cardiac transplant and localised leptomeningeal disease in the right frontal lobe of the brain. The patient also developed acute loss of vision in one eye due to fungal endophthalmitis and subsequent rhegmatogenous retinal detachment.

We managed this lady with minimisation of immunosuppression (low dose tacrolimus and steroids only) and 3 months treatment with combination anti-fungal agents (Ambisome, voriconazole and flucytosine). She required surgical excision and repair of her aortic aneurysm and a vitrectomy for her retinal detachment.

Surprisingly, given the extent of systemic involvement, we were able to successfully treat the disseminated Trichosporon infection. The patient is now independent of dialysis and has no signs of cardiac transplant rejection. She continues on lifelong oral voriconazole to prevent a recurrence of her infection and is monitored regularly through serum fungal markers.

There are only 3 previously reported cases in recipients of solid organ transplants (1 in a kidney transplant recipient). The prognosis is usually extremely poor with high mortality.

This case illustrates the important role of skin biopsy for patients with suspected calciphylaxis as the differential diagnosis is broad and includes potentially treatable infections.