Case Report/Relato de Caso

Recurrent Acremonium infection in a kidney transplant patient treated with voriconazole: a case report

Infecção recidivante por Acremonium em paciente transplantado renal tratado com voriconazol: relato de caso

Felipe Francisco Tuon¹, Carolina Pozzi², Sergio Ricardo Penteado-Filho¹, Ricardo Benvenutti² and Fabiana Loss de Carvalho Contieri²

ABSTRACT

Acremonium infection is rare and associated with immunosuppression. A case of recurrent cutaneous Acremonium infection after short term voriconazole use is described. Surgical resection was the definitive therapy. Oral voriconazole was used in the treatment of Acremonium infection, but recurrence was associated with short therapy. Prolonged antifungal therapy and surgical resection are discussed for the treatment of localized lesions. Key-words: Voriconazole. Acremonium. Fungal infection.

RESUMO


INTRODUCTION

Acremonium is a ubiquitously fungus present in the soil and human infection is extremely uncommon¹,². Dermatophytoses, keratitis and mycetomas are the most common clinical presentation. Immunosuppressed patients show a large clinical spectrum, including pneumonia, arthritis, osteomyelitis, endocarditis, peritonitis, meningitis and sepsis³,⁴. Immunosuppressed patients can also present localized cutaneous lesions⁵. A case of cutaneous lesion caused by Acremonium sp with recurrence after a short course of voriconazole is described.

CASE REPORT

A 47 year-old male farmer, living in Mabore (a southern city in Brazil) was admitted to hospital due to skin lesion in the thigh on March 22, 2009. The patient has been a kidney transplant patient since November 7, 2007, using mycophenolate mofetil, tacrolimus and prednisone. The lesion, measuring 1.5cm in diameter, appeared two months before admission and presented purulent discharge (Figure 1). There was no history of trauma, the rest of the physical examination was normal and laboratorial tests were irrelevant. A skin biopsy showed a granulomatous reaction with giant cells, while Grocott stain showed phialide and phialoconidium (Figure 2). The culture was positive for Acremonium sp, though species identification was not performed.

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Immunosuppressive therapy was suspended and voriconazole 200mg b.i.d. was used for 14 days. The lesion improved and drainage was suspended; however, after one month, the lesion returned and a new culture showed Acremonium sp with histological analysis showing the same aspect of the first biopsy. Surgical resection of the lesion was performed and immunosuppressive therapy was reintroduced. The lesion cured without recurrence after six months.

1. Division of Infectious and Parasitic Diseases, Hospital Universitário Evangélico de Curitiba, Curitiba, PR.
2. Division of Renal Transplant, Hospital Universitário Evangélico de Curitiba, Curitiba, PR.

Address to: Dr. Felipe Francisco Tuon. Infectious and Parasitic Diseases Clinic, Hospital Universitário Evangélico de Curitiba. Alameda Augusto Stellfeld 1908/3º andar, SCIH - Bigorrilho, 80730-150 Curitiba, PR, Brazil.
Phone: 55 41 3240-5055; Fax: 55 41 3240-5274
e-mail: flptuon@gmail.com
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DISCUSSION

This case suggested that short therapy with voriconazole is inadequate for the treatment of cutaneous lesions caused by certain yeasts occurring on transplant patients. We believe that prolonged therapy should be used for transplant patients. The improvement of the lesion after two weeks of therapy demonstrated the efficacy of voriconazole against Acremonium, although no sensitivity test was performed. Nevertheless, short therapy (two weeks) was insufficient for fungus eradication from the skin. The fact that the cutaneous lesion was localized permitted a surgical resection approach.

A previous review summarized clinical experience with infections caused by species of Acremonium. Two cases of cutaneous lesions have been published involving transplant patients. The first was described by Strabelli et al in a heart transplant patient. This patient presented a lesion on the knee that was treated with surgery and local therapy. In another case, a subcutaneous infection in a kidney transplant patient was cured with surgical resection of the abscesses and ketoconazole. In some instances, the particular species of Acremonium cannot be determined by morphology, as described in several reports and in this case.

The drug of choice for treatment of Acremonium infections is amphotericin; however, the species presents low susceptibility to most antifungals, including imidazoles, fluorocytosine and amphotericin B. In vitro studies have shown that Acremonium can be susceptible to voriconazole, but resistant to other imidazoles. Voriconazole has been used in some cases of Acremonium infections with success. This patient received voriconazole due to renal graft and risk of renal failure.

In summary, Acremonium sp can cause skin lesions in kidney transplant patients. Voriconazole improved the lesion but recurrence occurred with short therapy. Considering the cost of new antifungal drugs, surgical resection is an adequate approach in these cases.

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REFERENCES