Sir,
Organ transplant recipients under immunosuppressive therapy have a highly increased risk of acquiring unusual opportunistic fungal infections. Therefore, diagnostics for uncharacteristic inflammatory skin lesions in transplant recipients must include an appropriate search for fungi. We recently diagnosed a renal transplant recipient with a cutaneous phaeohyphomycosis due to *Alternaria infectoria*, and a literature search revealed 3 similar previous reports in dermatological journals (1–3). This low number of observations is probably due to 2 factors: *A. infectoria* may be disregarded as a supposed contaminant by dermatologists; and strains may be identified with difficulty using conventional methods alone. Appropriate awareness and routinely applied genetic diagnostics may therefore lead to an increase in detection of *A. infectoria* infections.

**CASE REPORT**
A 68-year-old renal transplant recipient was referred to our hospital with an unspecific painless and erythematous nodule on the lateral distal dorsal side of his right foot, which had developed within the last 2–3 months and had reached a diameter of approximately 3 cm (Fig. 1). The patient did not recall any preceding injury or trauma at this site. His general health had remained unchanged within the last months. He was under continuous immunosuppressive therapy with tacrolimus (4 mg daily), mycophenolate mofetil (1000 mg daily) and prednisone (5 mg daily). In addition, he was under therapy for hypertension, cardiac insufficiency, hyperlipidaemia and osteoporosis. He used insulin for his diabetes and took phenprocoumon.

A skin biopsy was taken from the nodule on his foot because some kind of granulomatous reaction was clinically suspected. In this biopsy, multiple thick periodic acid-Schiff-positive unpigmented short hyphal and large thick-walled spherical fungal elements were detected in the dermis within a granulomatous infiltrate of histiocytes, macrophages, giant cells and other inflammatory cells (Fig. 2). Some fungal cells were surrounded by clear spaces. As a consequence of this finding, a chest X-ray and abdominal sonography were performed, but revealed no abnormalities. Furthermore, a second deep skin biopsy was taken from the lesion after meticulous skin surface disinfection for mycological cultures. Immediately after this second biopsy, an oral antifungal treatment was initiated in consultation with the transplantation centre, starting with 400 mgitraconazole per day. Upon regression of the lesion this was tapered off to 200 mg/day after one week and to 100 mg/day after another 3 weeks in order to reduce interference with the immunosuppressive therapy. Additionally, topical application of ciclopiroxolamine was prescribed. After 2 months of therapy the lesion had healed.

**Mycology**
Dermal tissue obtained from the second biopsy was inoculated on agars free of cycloheximide that were incubated at 26°C and 37°C. Fungal growth was observed at 26°C only. The thalli showed a rapid radial spreading with, initially, some scarce aerial mycelia, but after 14 days the colony surfaces had become glabrous. Dark pigmentation was missing and only very sporadic and rudimentary conidia were obtained. Subsequent DNA analysis at the Centraalbureau voor Schimmelcultures (CBS), The Netherlands, revealed *A. infectoria* E.G.Simmons. The strain is now deposited in the public CBS collection (CBS no. 120931).

**DISCUSSION**
Of the saprobic *Alternaria* species that are potentially able to cause opportunistic cutaneous infections in immunosuppressed organ transplant recipients, *A. alternata* is seen most commonly (4, 5). However, we found 10 case reports of proven *A. infectoria* infec-

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Fig. 1. Erythematous nodule on the right foot caused by cutaneous *Alternaria infectoria* infection. The blue thread marks the site of the biopsy.

Fig. 2. Dermal skin biopsy taken from the lesion shown in Fig. 1. In the centre there are conspicuous large and thick-walled spherical periodic acid-Schiff-positive fungal elements. Some are surrounded by clear spaces (centre, left side).
A. infectoria infections are thought to be acquired via direct traumatic inoculation of fungal propagules into the skin (7). A. infectoria is ubiquitous on decaying organic material, particularly on hard and dry substrates such as wheat straw and kernels, and is thus easily introduced into human skin. In our case, A. infectoria elements in contaminated soil or organic material may have been rubbed into the skin under a tightly fitting shoe.

REFERENCES