

Scedosporium apiospermum Skin Infection in a Patient with Nephrotic Syndrome

Sir,

With the advance in the treatment of malignancies and the widespread use of corticosteroids, there has been a prominent increase in the occurrence of opportunistic pathogens. Recently, *Scedosporium apiospermum* infection of various sites has been reported (1). The organism has low inherent virulence but is a fungal opportunist able to elicit infections. Apart from mycetoma, cutaneous and subcutaneous infection with *Scedosporium apiospermum* is rarely encountered in clinical practice. We here describe a case of *Scedosporium apiospermum* skin infection in a patient with nephrotic syndrome.

CASE REPORT

The patient was a 59-year-old male retired office worker, with a history of nephrotic syndrome diagnosed 9 years previously. He had received 10–30 mg/day of oral prednisolone for treatment. In 1990, he developed chronic renal failure, which deteriorated in 1995, and he was referred to the Division of Dermatology for multiple painful abscesses of his left forearm (Fig. 1). When the nodules were punctured, a yellowish white sticky exudate was discharged. No grains were visible in the discharge. Intravenous administration of penicillin was not effective. Routine bacteriological culture of swabs taken from the skin lesions was unhelpful. Direct microscopical examination of scrapings and pus from the area showed no hyphae. A biopsy specimen was taken from the nodule. A haematoxylin and eosin-stained section showed a granulomatous infiltrate containing histiocytes, neutrophils and multinucleate giant cells within the deep dermis to the subcutaneous tissue. The biopsy specimen stained by periodic acid-Schiff revealed fungal elements within the subcutaneous tissue. Culture of the specimen was performed on Sabouraud dextrose agar at 32°C. It revealed woolly colonies, at first white, then becoming dark brown 4 weeks later. Microscopically, the hyphae were hyaline and septate. Ovoid to round-shaped, smooth conidia were borne singly or in small groups on short simple conidiophores (Fig. 2). Cleistothecia were not



Fig. 1. Multiple cutaneous to subcutaneous nodules, 0.5–1.5 cm in diameter, are seen on the left forearm. (The linear scar of the lesion is due to injury suffered 5 years earlier.)

observed. The fungus was finally identified as *Scedosporium apiospermum*. The patient was commenced on itraconazole 50 mg once daily for a week. Due to lack of effect, the dose of itraconazole was increased to 100 mg/day (1.8 mg/kg). Two weeks later, most abscesses disappeared. However, the patient refused further intake of the drug. The fungal disease relapsed, and the patient died of deteriorated nephrotic syndrome and disseminated intravascular coagulation. An autopsy could not be performed, thus the fungal involvement of the internal organs could not be investigated.

DISCUSSION

Scedosporium apiospermum, an anamorph of *Pseudallescheria boydii*, appears to have a worldwide distribution and is a soil- and water-inhabiting fungus. The organism has low inherent virulence. But in the past few years an increasing number of cases of the fatal disseminated disease have been encountered in severely compromised hosts (1). The fungus grows rapidly on most laboratory media.

The clinical manifestations of infection by *Scedosporium apiospermum* are quite varied. The most frequent form is mycetomas, a localized type of infection occurring in a normal immune status host following trauma (1, 2). The present case was not a mycetoma, as the infection was multifocal; there was no drain sinus and grains were not seen. Apart from mycetomas, reports of cutaneous and subcutaneous infection with this fungus are still rare. Additionally, there are a few cases of a lymphocutaneous infection in a sporotrichoid fashion (1, 3).

In our present case, oral treatment with itraconazole was effective. Itraconazole seems to be one of the most useful drugs in the treatment of *Scedosporium apiospermum* infection (3, 4).

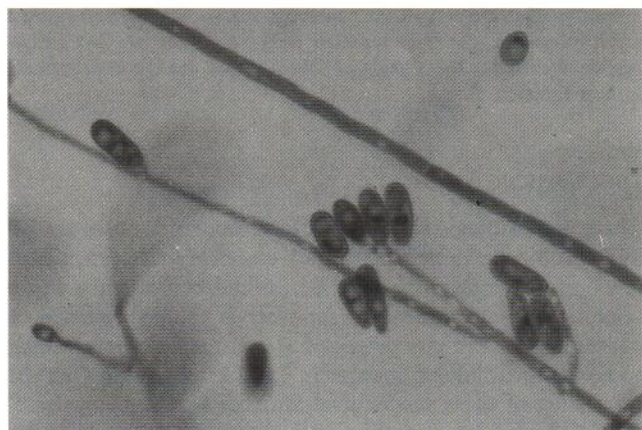


Fig. 2. Slide culture method stained with lactophenol cotton blue demonstrated the presence of *Scedosporium apiospermum*.

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