In conclusion, we found the API 20 NE system unfit for use and often directly misleading when applied to organisms of the family Pasteurellaceae. This makes the validity of the *P. haemolytica* diagnosis in the endocarditis case report highly questionable because other bacteriological characteristics that might have led to an unequivocal identification were not described. When reporting unusual pathogens in unusual circumstances, we believe it is important to provide sufficient bacteriological details to make an evaluation of the diagnosis possible and/or to submit the organism to a reference laboratory.

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References


Acute pyogenic *Pseudallescheria boydii* foot infection sequentially treated with miconazole and itraconazole

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Sir,

On 2 December 1987 a 51-year-old healthy male farmer stepped on to the prongs of a dung fork hidden in a pile of cow dung. The fork penetrated his Wellington boot and his foot. He was given tetanus toxoid and co-amoxiclav tablets in casualty. Two weeks later the foot was swollen and painful and two pieces of boot were removed from beneath the scab of the entry wounds. No fractures were seen on X-ray and a swab of the pus did not grow any bacterial pathogens. The foot remained swollen and the patient was unable to walk and on 22 January a few small pieces of foreign material were discovered just under the skin. After their removal a below knee plaster was applied and the patient sent home. X-ray of the foot before discharge revealed an area of rarefaction in the cuneiform bones and bases of the 2nd, 3rd and 4th metatarsal bones. By the 12 February his foot was extremely painful and an X-ray showed marked osteoporosis. He was treated with flucloxacillin. The foot was explored again on the 23 February when there was oedema of all soft tissues and a large quantity of yellowish fluid was seen. All the involved bones were soft and there was a small abscess cavity at the base of the 2nd metatarsal and cuneiform bones. Fungal elements resembling hyphae were seen and culture of the pus revealed woolly colonies, at first white, but becoming grey with a dark underside. Microscopically elliptical, sperm-shaped, single-celled conidia, borne singly from the tips of conidiophores, were seen.
The fungus was identified as *Pseudallescheria boydii* by the Mycological Reference Laboratory, Colindale. A weak antibody (titre 2) to this organism was demonstrable on the serum taken on the 24 March.

The patient was started on iv amphotericin B on 24 February, but this had to be discontinued on 2 March because of intense nausea and failing renal function. Intravenous miconazole\(^1,2\) 600 mg three times a day was started on 3 March. The patient felt quite unwell even after a central line was established. He did not seem to improve and treatment was changed on the 17 March to oral itraconazole 200 mg once daily. On 21 March he was discharged home on this treatment which was discontinued on 13 May. X-ray of the foot in August still showed some generalised osteoporosis and a clear cavity in the base of the 2nd metatarsal bone but there was no evidence of active infection. The foot was still stiff but had adequate function.

The natural habitat for *P. boydii* is the soil and the organism has a world-wide distribution.\(^3,4\) It is the most frequent cause of fungal mycetoma in temperate regions. Man contracts the deep mycetomatous form of infection when traumatic wounds of the skin become contaminated with soil containing infective spores. Before the advent of the new antifungal agents, deep-seated eumycotic fungal infections involving bone would have been treated by surgical débridement or amputation.\(^5\) We record the successful treatment of a foot that was rapidly becoming a liquid culture of *P. boydii* by oral itraconazole after failure with amphotericin B and partial success with intravenous miconazole.

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