Cryptococcosis in an AIDS patient : itraconazole efficacy after other therapeutic failures

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Letters to the Editor

Cryptococcosis in an AIDS patient: Itraconazole efficacy after other therapeutic failures

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Sir,

Cryptococcus neoformans, an ubiquitous soil yeast, causes neurological and/or disseminated mycotic invasion and is the fourth most common infection in AIDS patients.[1] Conventional treatment of cryptococcosis [amphotericin B (AMB) with flucytosine] is not completely satisfactory in such patients because of persistent immune defects and frequent toxicity of these antifungal drugs. For these reasons fluconazole (FCZ) is often prescribed as initial therapy but it is effective in only about 40% cases.[2] Itraconazole (ITZ), a recently introduced triazole, has been successfully administered after failure of the other drugs.

We report the case of a 30-year-old HIV-positive man, who was hospitalised because of sudden coma and developed a left VI nerve paralysis a few days later. Cryptococcal meningitis was diagnosed when *C. neoformans* was isolated from the CSF and cryptococcal soluble antigen found in high titre in CSF and serum.

Oral FCZ (400 mg/day) was prescribed with transient improvement of consciousness and the left VI nerve paralysis. However he then relapsed and developed bradypsychia and obnubilation. At the same time two low density cerebral lesions appeared on CT scan. On day 38 of treatment IV AMB (1 mg/kg) was added and the FCZ raised to 800 mg/day. On day 55, neurological problems had increased and a further therapeutic change was implemented. Oral ITZ was prescribed in association with AMB for 7 days and then continued alone. In less than a week neurological improvement had started and the patient eventually achieved an approximately normal life style. After 9 months of ITZ administration, the patient was tolerating the drug satisfactorily apart from some disturbance of liver function tests (raised transaminase and alkaline phosphatase values) which required reduction of the dose to 200 mg/day.

The response of our patient to ITZ following the therapeutic failure of FCZ and AMB in high dosage for 55 days, confirms its efficacy. There are however very few publications concerning ITZ therapy in AIDS cryptococcosis.[2–5] Our case showed apparent clinical synergy between AMB and ITZ. In a previous study, ITZ alone had a 40% complete response rate which rose to 83% if up to 1 week of AMB was given before the ITZ.

From a mycological point of view, CSF cultures were negative after 50 days of treatment, but after 7 months, direct examination confirmed the presence of cryptococcus and soluble antigen in the CSF. These findings did not reflect the clinical situation and justified continued ITZ therapy.

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Clenched fist actinomycosis in a penicillin-allergic female

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Sir,

Clenched fist actinomycosis is rare compared with other clenched fist injuries, and has hitherto been reported exclusively in males.[1] This infection may result in osteomyelitis of the hand bones as reported by Blinkhorn *et al.*,[2] who reviewed eight other cases in the literature.

We now report the case of a 33-year-old female fish packer, who presented with pain and a 1 cm diameter fluctuant abscess on the dorsum of the second metacarpophalangeal joint of the index finger of the right hand. She had been involved in a fight a month earlier, during which she punched her opponent in the teeth. There was no lymphangitis or axillary lymphadenopathy, no signs or symptoms of systemic sepsis and she was able to extend the finger fully. She was allergic to penicillin and was prescribed oral erythromycin, 500 mg q.d.s. and asked to return that afternoon for incision and drainage. She did not attend until 4 days later, when the wound was incised and curetted under general anaesthetic. Gram-stains of pus from the wound showed numerous pus cells and Gram-positive branching bacilli. A presumptive diagnosis of *Actinomyces* spp. infection was made. The patient returned a month later because of increasing pain and swelling. The abscess was now 2 cm in diameter. X-ray and another incision and drainage showed no evidence of septic arthritis or osteomyelitis. Gram-stains of the pus showed Gram-positive branching bacilli and Gram-negative bacilli. Culture on blood agar and Colombia Blood Agar base with added antibiotics (Metronidazole 2·5 mg/l and Nalidixic acid 50 mg/l) yielded a moderate growth of *Actinomyces israelii* in both media. The Columbia Blood Agar also yielded a moderate growth of *Bacteroides ureolyticus* and *Haemophilus paraphrophilus*. All isolates were susceptible to penicillin G (1 IU), erythromycin (5 μg) and tetracycline (10 μg) on disc susceptibility testing by the Stokes method. The patient was given oral doxycycline 200 mg stat followed by 100 mg daily. Local pain and swelling improved and the patient was discharged after 3 days. Follow-up 4 and 12 days later showed progressive diminution in the size of the lesion and a full range of movements of the finger. The patient failed to attend subsequent follow-up appointments but was seen 11 weeks after initial presentation for an unrelated injury, when her lesion was noted to have healed completely.

This case underlines the value of microscopy of pus samples from cases of human bite injuries in the presumptive diagnosis of actinomycosis. Not infrequently, as in our case, other mouth 'commensals' are encountered in actinomycotic wounds, for example, *Haemophilus* spp., *Bacteroides* spp., *Actinomyces actinomycetocomitans*... etc.