## **MUCORMYCOSIS IN PATIENTS WITH COMPLICATED CIRRHOSIS**

Dear Sir,

Abbas et al presented a case series of mucormycosis in patients with cirrhosis.<sup>(1)</sup> They correctly noted that amphotericin B is the cornerstone of antimicrobial therapy; however, its use is often limited by its serious adverse effects. Also, patients with mucormycosis often require weeks, if not months, of therapy: this is a disadvantage for a medication that is both expensive and available only intravenously. It is therefore surprising that the role of posaconazole in mucormycosis was not discussed.

Posaconazole is a new oral triazole with broad antifungal activity, including *Aspergillus* and *Candida* species, phaeohyphomycetes, non-*Aspergillus* hyalohyphomycetes and zygomycetes (the fungi that cause mucormycosis).<sup>(2)</sup> A recent study has examined the outcome of mucormycosis in patients who took posaconazole as salvage therapy,<sup>(3)</sup> in which 17 patients had microbiologically-proven mucormycosis; of these, 12 (71%) had clinical success with posaconazole.

Abbas et al presented patients with underlying cirrhosis.<sup>(1)</sup> Posaconazole is predominantly metabolised by the liver through glucoronidation. It also causes abnormal liver function tests in 1%-5% of patients.<sup>(2)</sup> The product information recommends that posaconazole be used with caution in the setting of hepatic impairment.<sup>(4)</sup> Such a vague recommendation probably reflects the paucity of clinical data on this issue; however, at this stage, it is not contraindicated in hepatic impairment, nor should the dose be altered.<sup>(4)</sup> In fact, a case report of posaconazole use for candidiasis in the setting of cirrhosis has been published; although the patient died, posaconazole was not the cause of death.<sup>(5)</sup>

In conclusion, posaconazole is an oral antifungal agent with some efficacy against mucormycosis. It probably should be reserved for patients who fail or cannot tolerate amphotericin B.<sup>(6)</sup> While it should be used cautiously in those with hepatic impairment, this is currently not a contraindication to its use.

Yours sincerely,

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## REFERENCES

- 1. Abbas Z, Jafri W, Rasool S, Abid S, Hameed I. Mucormycosis in patients with complicated cirrhosis. Singapore Med J 2007; 48:69-73.
- 2. Torres HA, Hachem RY, Chemaly RF, Kontoyiannis DP, Raad, II. Posaconazole: a broad-spectrum triazole antifungal. Lancet Infect Dis 2005; 5:775-85.
- 3. Greenberg RN, Mullane K, van Burik JA, et al. Posaconazole as salvage therapy for zygomycosis. Antimicrob Agents Chemother 2006; 50:126-33.
- 4. Schering Corporation. Product Information Noxafil. Available at: www.spfiles.com/pinoxafil.pdf. Accessed January 21, 2007.
- 5. Anstead GM, Martinez M, Graybill JR. Control of a Candida glabrata prosthetic endovascular infection with posaconazole. Med Mycol 2006; 44:273-7.
- Spanakis EK, Aperis G, Mylonakis E. New agents for the treatment of fungal infections: clinical efficacy and gaps in coverage. Clin Infect Dis 2006; 43:1060-8. Erratum in: Clin Infect Dis 2006; 43:1232.