Anaphylaxis due to liposomal amphotericin (AmBisome)

As patients with AIDS are living longer, increasing numbers are developing systemic infections with Cryptococcus neoformans necessitating intravenous amphotericin therapy.

Liposomal amphotericin B (AmBisome) is a recently introduced preparation and is claimed to be less commonly associated with adverse effects than conventional amphotericin B. It is therefore a reasonable alternative to use in patients with systemic fungal infection where conventional amphotericin B has been previously associated with renal toxicity.

Two cases of anaphylaxis due to liposomal amphotericin in patients who were not allergic to amphotericin B have recently been described. We report a further case of anaphylaxis occurring in a patient being given his first injection of AmBisome for treatment of cryptococcal menigitis.

A 28 year old male patient who had been diagnosed HIV positive 9 years previously was admitted with a week's history of headache, photophobia and vomiting. Cryptococcal menigitis had been successfully treated 9 months previously with conventional intravenous amphotericin B. Subsequently, the patient was maintained on fluconazole but relapsed six months later. Initially, this was treated with intravenous amphotericin B. However, signs of renal toxicity, as shown by rising creatinine and urea, developed after two days and fluconazole was substituted. The patient recovered and again was maintained on fluconazole. After a further month this was changed to itraconazole because of nausea due to fluconazole.

On admission, medication included dapsone 50mg daily, pyrimethamine 50mg weekly, and itraconazole 400mg daily. CT of the brain was normal and examination of CSF showed 22 white blood cells/mm³ (the majority were lymphocytes) and two yeast cells. Both CSF and serum were positive for cryptococcal antigen. Relapse of cryptococcal menigitis was diagnosed and intravenous liposomal amphotericin B (AmBisome) at a dose of 1mg/kg was commenced. Within seconds of starting the infusion the patient vomited and complained of epigastric pain and abdominal tightness. Bronchospasm, facial flushing and sweating were noted. The infusion was immediately discontinued and symptoms settled within 4 hours. Subsequent treatment comprised of fluconazole and itraconazole and the patient made an uneventful recovery.

It is well recognised that HIV positive patients have a higher incidence of adverse drug reactions compared with the general population and these cases further highlight the need for care to be taken when medicating this group of patients.