

## Abstract

### **Treatment of invasive fungal sinusitis with liposomal amphotericin B: a report of four cases.**

Sungkanuparph S, Sathapatayavongs B, Kunachak S, Luxameechanporn T, Cheewaruangroj W. *Treatment of invasive fungal sinusitis with liposomal amphotericin B: a report of four cases.* J Med Assoc Thai. 2001 Apr;84(4):593-601. Department of Medicine, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

Invasive fungal sinusitis increasingly causes significant morbidity and mortality in immunocompromised patients. It is difficult to treat. Despite standard treatment by surgical debridement and intravenous amphotericin B, morbidity and mortality remain high. Conventional amphotericin B is the standard drug but its use is limited by dose-related nephrotoxicity and infusion-related acute toxicity. Liposomal amphotericin B has proven to be as effective as conventional amphotericin B with less nephrotoxicity and infusion reaction. We report four cases of invasive fungal sinusitis who were treated with liposomal amphotericin B after having severe side effects from conventional amphotericin B. There were two cases of mucormycosis and two cases of aspergillosis. All patients had diabetes mellitus. One patient had systemic lupus erythematosus and another was receiving immunosuppressive drugs after kidney transplantation. All cases needed multiple operations for sinus surgery. Two cases had acute reaction to amphotericin B infusion, one had active lupus nephritis with renal insufficiency, and one was considered treatment failure from amphotericin B. The patients received liposomal amphotericin B at the total doses of 4.55-8.85 g. Two cases of mucormycosis were considered to be successfully treated. In cases of aspergillosis, one was considered improved and another one with immunocompromised status died with active disease. From our experience, surgery is the main treatment for patients with invasive fungal sinusitis and liposomal amphotericin B is an effective alternative drug for adjuvant medical treatment. However, the degree of immunosuppression of the patients, the extension of fungal sinusitis and perhaps the species of fungus are important factors determining the clinical response.