Itraconazole vs. Fluconazole as Primary Prophylaxis for Fungal Infections in HIV-Infected Patients in Thailand

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Background: Disseminated fungal infections are common presenting opportunistic infections among AIDS patients in developing countries. Primary prophylaxis with itraconazole has been shown to be effective in northern Thailand. This study aimed to compare the efficacy of fluconazole vs. itraconazole as primary prophylaxis for fungal infections in HIV-infected patients.

Methods: A retrospective cohort study was conducted among HIV-infected patients who received primary prophylaxis with fluconazole 400 mg once weekly or itraconazole 200 mg once daily at Chiang Mai University Hospital. We compared the incidence of systemic fungal infections and the probability of disease-free survival between groups.

Results: From January 2000 to August 2009, 308 HIV-infected patients who received primary fungal prophylaxis were enrolled; 160 were male. Two hundred and seventy-six patients received fluconazole and 32 received itraconazole. Baseline CD4+ cell count was 35 (IQR 15, 70) and 50.5 (IQR 21, 75) cells/μL in fluconazole and itraconazole groups, respectively (p=0.159). The median follow-up time was 12 months (IQR 7, 19) in fluconazole group and 15.5 months (IQR 9, 21.5) in itraconazole group. Seven patients (2.5%) who received fluconazole and 2 patients (6.3%) who received itraconazole developed systemic fungal infections, giving the incidence of 17.0 and 34.8/10,000 person-months, respectively (p=0.261). The probability of developing any systemic fungal infections or death did not differ between groups.

Conclusions: Although fluconazole has a reduced susceptibility against *P. marneffei* in vitro, our study has demonstrated that once-weekly fluconazole is at least as effective as once-daily itraconazole as primary prophylaxis for systemic fungal infections in AIDS patients in northern Thailand.