ABSTRACT

Tuberculosis remains numerically the most significant single infectious cause of morbidity and mortality. It was estimated in 1998 that there would be 9 million new cases of tuberculosis and 3 million would die from it annually. Although the causes of the worldwide resurgence of tuberculosis are multifactorial, the HIV epidemic is believed to have a central role. Control is further threatened by the emergence of multidrug resistant tuberculosis which was evidenced by outbreaks of drug resistant strains in patients with HIV. As Thailand has one of the most explosive HIV/ AIDS epidemic in the world, these problem can not be neglected.

The objective of this study is to determine the predisposing factors or associated findings in drug resistant tuberculosis, profile of drug resistance and clinical outcomes in patients with AIDS.

The retrospective case control study was carried out in Bamrasnaradura Hospital from November 16, 1998 to January 8, 1999. Out of 330 files eligible for entry, only 61 files for case and 119 files for control could be retrieved. The clinical findings from available data were as follows.

Clinical presentation in drug resistant group were as non specific as those in drug sensitive group with HIV infection. Fever (>80%), cough (50%), neck mass (8-17%), weight loss (13-26%) were common chief complaints in both groups, similarly.

Extrapulmonary tuberculosis with or without pulmonary involvement were 56% in case and 67% in control group, making up the majority of patients, than pure pulmonary tuberculosis, 42% in case and 32% in control. Extent of tuberculosis (pure pulmonary, pure extrapulmonary, both pulmonary and extrapulmonary) was similarly distributed when compared between case and control group.

Among patients with extrapulmonary tuberculosis, tuberculous lymphadenitis and disseminated tuberculosis were the most common findings in both groups. Tuberculous lymphadenitis made up of 51% in case and 80% in control group. Disseminated tuberculosis involved in 23% of case and 11% of control group.

Patients with past history of diagnosis of tuberculosis had 4.8 times higher risk of having drug resistant strains than those without past history of tuberculosis. Also, patients with history of prior anti-TB therapy had 5.6 times higher risk of development of drug resistant tuberculosis than patients without such prior medication.

In chest X ray, hilar or mediastinal adenopathy were more common in case (30%) than control (13%) [p=0.04] whereas localized upper lobe involvement was found more common in drug sensitive group (15%) than drug resistant group (2.1%) (p=0.04).

Smear positiveness in case group was as common as drug sensitive group. Prevalence of drug resistant tuberculosis was rather high and alarming, mainly multidrug resistant tuberculosis (17.7%), resistance to rifampicin (24%), and to isoniazid (26%) .

Loss to follow up (>30 days with unknown reason) was >50% in both case and control group. Clinical resolution occured in the majority (76%) of drug sensitive tuberculosis group with HIV infection, and (50%) of drug resistant group, during 1 year period after commencement of anti-TB therapy.

Patients usually well tolerated to first line anti-tuberculosis treatment as problems of drug adverse reaction were low.

As a conclusion, these findings from the study are sincerely expected to be useful to health care personals as an aid in order to detect tuberculosis, especially, drug resistant tuberculosis in patients with HIV infection, and also to have awareness and high index of suspicion over rising trend of drug resistant tuberculosis in HIV infected patients and to improve the management for better positive clinical outcomes in these miserable patients with HIV infection.