

## ABSTRACT

The advance of chemotherapy for tuberculosis (TB) in the past fifty years has given a chance to eliminate TB from public health problems. Unfortunately, an explosive epidemic of new emerging virus, Human Immunodeficiency Virus type 1 (HIV) has burned out all the chance to eliminate TB. Control of TB is further threatened by the emergence of drug resistant TB.

The aim of present retrospective study is to determine the predisposing factors of drug resistant TB, pattern of drug resistance and outcome of patients with acquired immunodeficiency syndrome (AIDS). This study was conducted at Bamrasnaradura Hospital, Nonthaburi, Thailand in 1998. The study had 2 parts. Part A is retrospective case control study in which all AIDS patients with TB infection, confirmed by culture and sensitivity test (C&S) within 1<sup>st</sup> January 1997 and 31<sup>st</sup> December 1997, who were of age 14 years or older registered as out patients or inpatients at Bamrasnaradura Hospital, were included if their hospital record were available and find out predisposing factors of drug resistant TB and resistant pattern. Part B is retrospective study in which all patients from part A were followed for 1 year to determine outcome.

All together 180 patients were included in this study. 158 (87.8 %) patients were male 22 (12.2%) were female, 21 to 30 year age group and 31 to 40 year age group were majority, 70 (38.9 %) and 72 (40 %) respectively. Most of them live in Bangkok central area 151 (83.9 %) patients, low socioeconomic group (according to their occupation, laborer) was majority 96 (53.3 %) patients.

There were 61 drug resistant cases and 119 controls. One drug resistant and two drugs resistant cases were 23 number (12.7 %) each, 9 cases (5.1 %) had three drugs resistance and 6 cases (3.33%) had four drugs resistant and above. Multi drug resistant tuberculosis (MDR-TB) were 32 cases (17.7%). Drug resistant TB cases were significantly associated with past history of TB ( $p = 0.0003$ ) and past treatment of TB ( $P = 0.00009$ ).

At one year follow up duration, 38 patients survive and not lost to follow up, 8 patients in case group and 30 patients in control group. 101 patients had lost of follow up as their outcome, 33 patients in case group and 68 patients in control group.

At one year from the time of diagnosis of TB, 29 (16.11 %) patients died. The tuberculosis disease was claimed as the cause of death in 17 patients (58.6 % of over all mortality) 11 in cases group and 6 in control group. But the cause of death were not confirmed by postmortem examinations. 19 patients (65.5% of mortality) died within 1 month duration from diagnosis of tuberculosis.

Adverse drug reactions were seen in 11(6.11 %) patients. The commonest adverse drug reaction is jaundice / hepatitis, others are nausea and vomiting, neurological side effects and drug eruption.

The results from these study will be used as baseline data for drug resistant surveillance program in this hospital and for the country and help in part in management of the AIDS patients with TB.