

**INCIDENCE AND PREDICTORS OF TOXICITY AMONG AIDS  
PATIENTS TREATED WITH NEVIRAPINE BASED REGIMEN  
AT BAMRASNARADURA INSTITUTE, NONTHABURI,  
THAILAND**

**SAW EINDANI AUNG**

**A THEMATIC PAPER SUBMITTED IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF CLINICAL TROPICAL MEDICINE  
FACULTY OF GRADUATE STUDIES  
MAHIDOL UNIVERSITY**

**2006**

**COPYRIGHT OF MAHIDOL UNIVERSITY**

**INCIDENCE AND PREDICTORS OF TOXICITY AMONG AIDS PATIENTS TREATED WITH NEVIRAPINE-BASED REGIMEN AT THE BAMRASNARADURA INSTITUTE, NONTHABURI, THAILAND****SAW EINDANI AUNG 4838794 TMCT/M****M.C.T.M.****THEMATIC PAPER ADVISORS: WIRACH MAEK-A-NANTAWAT, DIP.THAI BOARD IN ALLERGY AND IMMUNOLOGY, SOMSIT THANSUPHASAWADIKUL, DIP. THAI BOARD OF INTERNAL MEDICINE, BENJALUCK PHONRAT, M.Sc.(TROP.MED.), JARANIT KAEWKUNGWAL, PH.D.(APPLIED STATISTIC EVALUATION PROGRAM)****ABSTRACT**

Nevirapine-based regimens are commonly and widely used for treating HIV/AIDS-infected patients in resource-limited countries due to their affordability. Toxicity monitoring becomes more important as more people have access to it. Previous studies indicated that gender, CD4 count, ART status, BMI, concurrent medications, etc. were predictive of nevirapine toxicity. The purpose of this study was to determine the incidence of toxicity among Thai HIV/AIDS patients treated with nevirapine-based regimen and its predictors.

A total of 206 adult HIV/AIDS patients, of whom 105 (51%) were male and 101(49%), female; with a median age (IQR) at the start of the nevirapine-based regimen of 33 years (range 29-38 years), treated with the regimen during the period January 2004 to December 2005, were included in the study. It was found that, incidence of toxicity from nevirapine-based regimen at Bamrasnaradura Institute was 1.09/100 person-months. The median time to onset of toxicity was 4 weeks-- 2.57 weeks for skin toxicity and 12.43 weeks for hepatic toxicity.

There were statistically significant associations between history of drug allergy and development of toxicity (24.1 % vs 6.2%, p-value=0.006) and hepatic toxicity (37.5% vs 6.2%, p-value=0.016). Similarly, a statistically significant association was found between, sulfa drug allergy and development of toxicity from treatment with a nevirapine-based regimen (17.2% vs 4.0%, p-value=0.015). Concerning use of concurrent medication, a statistically significant association was found between concurrent treatment with anti-TB medication and development of hepatic toxicity (85.7% vs 22.0%, p-value=0.001).

It is important to closely monitor liver function tests for HIV/AIDS patients concurrently treated with anti-TB medication and those with a history of drug allergy especially to sulfa drugs, to provide prompt treatment in case of the development of toxicity from a nevirapine based regimen.

**KEY WORDS: INCIDENCE/PREDICTORS/NEVIRAPINE/TOXICITY/ALLERGY**