

DYSLIPIDEMIA AMONG THAI HIV-INFECTED ADULTS RECEIVING ANTIRETROVIRAL THERAPY: A HOSPITAL-BASED REPORT

Apichot So-Ngern¹, Buddharat Khan-asa², Preecha Montakantikul³
and Weerawat Manosuthi⁴

¹Faculty of Pharmacy, Siam University, Bangkok; ²Siriraj Hospital, Faculty of Medicine Siriraj Hospital, Mahidol University; ³Faculty of Pharmacy, Mahidol University, Bangkok; ⁴Bamrasnaradura Infectious Diseases Institute, Ministry of Public Health, Nonthaburi, Thailand

Abstract. The objective of this study was to determine the prevalence of dyslipidemia, pattern of lipid profiles, and risk factors for dyslipidemia. This study was a retrospective cross sectional study of the outpatient Thai HIV-infected patients receiving antiretroviral therapy (ART). Of 175 patients, 43% were male and median (IQR) age was 44 (40-51) years. Median (IQR) duration of HIV infection was 15 (13-16) years and median (IQR) duration of receiving ART was 11 (9-14) years. The prevalence of dyslipidemia was 51%. Dyslipidemia were associated with 76%, 55%, and 37% of patients receiving lopinavir/ritonavir-, efavirenz-, and nevirapine-based regimen, respectively. Medians serum low-density lipoprotein cholesterol (LDL-c) level for the corresponding regimens were 112, 136, and 107 mg/dl, respectively. The medians of serum triglycerides (TG) for the corresponding regimens were 162, 138, and 100 mg/dl, respectively. By multivariate analysis, risk factors associated with dyslipidemia included fasting blood glucose >110 mg/dl (OR=9.48), lopinavir/ritonavir-based regimen (OR=4.26), duration of receiving ART \geq 12 years (OR= 2.69), and male (OR=2.29). Dyslipidemia associated ART was a common metabolic complication among even Thai HIV-infected patients, receiving ART in the outpatient clinic, especially patients received lopinavir/ritonavir-based regimen. Thus, clinicians should monitor these metabolic complications to improve quality of care.

Keywords: antiretroviral, dyslipidemia, Thailand

INTRODUCTION

Antiretroviral therapy (ART) is recommended for all HIV-infected patients to reduce the risk of disease progression

Correspondence: Dr Weerawat Manosuthi, Department of Medicine, Bamrasnaradura Infectious Diseases Institute, Tiwanon Road, Nonthaburi, 11000, Thailand.

Tel: +66 (0) 2590 3408; Fax: +66 (0) 2590 3411

E-mail: drweerawat@hotmail.com

and burden of opportunistic infections (Sungkanuparph *et al*, 2010; Panel on Antiretroviral Guidelines for Adults and Adolescents, 2012; WHO, 2013). However, antiretroviral drugs have a various adverse drug reactions (Tymchuk and Currier, 2008). One of those reactions is metabolic complication. The previous studies reported various metabolic complications, including hyperglycemia, dyslipidemia, and lipodystrophy (Friis-