SIGNIFICANT LIVER FIBROSIS IN HIV-INFECTED PATIENTS WITHOUT VIRAL HEPATITIS CO-INFECTION IN THAILAND

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Abstract. Liver diseases have become one of the principal causes of death among human immunodeficiency virus (HIV) mono-infected patients in the era of combined antiretroviral therapy (cART). Prevalence and factors associated with significant liver fibrosis using liver stiffness measurement (LSM) were determined in Thai HIV-infected patients employing a prospective cross-sectional study of 57 HIV mono-infected patients who received cART at Songklanagarind Hospital, Prince of Songkla University, Thailand from September 2015 to February 2016. Nine percent of the patients had LSM values >7.0 kPa by transient elastography, defined as significant liver fibrosis. Using univariate analysis, factors significantly different between patients with and without significant liver fibrosis were underlying diabetes mellitus (40% vs 1.9%, p = 0.018), dyslipidemia (80% vs 23.1%, p =0.019), duration of HIV diagnosis (145 vs 84 months, p < 0.001), total duration of cART (121 vs 69 months, p = 0.005), serum fasting blood sugar (113 vs 95 mg%, p =0.02), and serum alkaline phosphatase (ALP) activity (126 vs 94 IU / ml, p = 0.031); while multivariate logistic regression analysis showed independent predictors associated with significant liver fibrosis were duration of HIV diagnosis [adjusted odds ratio (aOR) = 1.08; 95% confidence interval (CI): 1.01-1.16, *p* < 0.001] and serum ALP (aOR = 1.07; 95% CI: 1.00-1.15; *p* = 0.021). The findings should help increase awareness of health providers to focus on investigating actual etiology of liver fibrosis and on the special needs of this risk population.

Keywords: HIV, liver fibrosis, risk factor, transient elastography Thailand

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