

Prevalence and risk factors associated with antituberculosis drugs induced hepatitis in Malaysia

Amer Hayat Khan¹, Syed Azhar Sulaiman¹, Abdul Razzak Muttalif² and Mohamed Azmi Hassali¹

¹School of Pharmaceutical Sciences Universiti Sains Malaysia, Malaysia

²Penang General Hospital, Malaysia

Hepatotoxicity is one of the major adverse effects of Anti tuberculosis (Anti-TB) drugs. Retrospective cohort study was conducted to evaluate prevalence and risk factors associated Anti-TB drug induced hepatitis in four states of Malaysia from January 2006 to December 2007. TB patients with human immunodeficiency virus and incomplete medical record were excluded. A purpose developed valid data collection form was used for collecting demographic and clinical data. Data was analyzed by using SPSS 16[®].

Of 8277 patients, 322 (3.9%) patients of the studied population developed drug induced hepatitis. In Univariate analysis, gender ($p=0.021$), diabetes mellitus ($p<0.001$), alcohol consumption ($p<0.001$), intravenous drug users ($p<0.001$), patients of weight, 31-50 Kg ($p=0.038$), 51-70 Kg ($p=0.001$) and belonging to Pulau Pinang ($p<0.001$) and Sarawak ($p<0.001$) states had statistically significant association with drug induced hepatitis. In multivariate analysis diabetes mellitus (OR=0.516, $p<0.001$) and Sarawak state (OR=0.615, $p=0.005$) had significant negative association, while intravenous drug users (OR=4.126, $p\text{-value}<0.001$), patients belonging to weight group (51-70 Kg) (OR=1.875, $p=0.020$) and Pulau Pinang state (OR=1.806, $p<0.001$) had statistically positive association with drug induced hepatitis. This model fit was based on a non-significant Hosmer and Lemeshow test ($p=0.289$).

The prevalence of drug induced hepatitis was 3.9%. Intravenous drug users, patients belonging to Pulau Pinang state and falling in weight group of 51-70 Kg were the risk factors associated with drug induced hepatitis. Doctors caring for these high risk groups patients should be aware of the increased prevalence of drug induced hepatitis in their patients.

Biography

Amer Hayat Khan completed Ph.D. in Clinical Pharmacy from Universiti Sains Malaysia, in 2010. Currently he is working as Senior Lecturer in Discipline of Clinical Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia. Communicable diseases and surgical infections are the main focus of research of Dr. Amer, and currently supervising 2 Ph.D.'s and 6 Master research fellows. He has published more than 38 papers in reputable journals and serving as an editorial board member of Journal.

amerhayat@ymail.com