Assessment of NAFLD cases and its correlation to BMI and Metabolic syndrome in Healthy Blood Donors in Kerman

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Hepatitis is a common cause of the morbidity and mortality in Iran and world(1, 2). Alanine aminotransferase (ALT) is a sensitive indicator of liver-cell injury and are helpful in recognizing hepatitis(3). The etiology of an elevated ALT level varies in different population. The aim of study was determination of prevalence of asymptomatic elevated ALT and its etiology in Kerman, Iran. A total of 2002 apparently healthy blood donors invited to participate in this study. The place of enrollment was the Blood Donation Center of Kerman, Iran. Information regarding demographic characteristics, drug history, and alcohol consumption was obtained. An alcohol drinker was defined as subjects with an intake of more than 20 g alcohol per day . A venous blood sample was obtained from each donor and tested for antibody to hepatitis C, hepatitis B surface antigen (HBsAg) and human immunodeficiency virus antibody. ALT levels

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> 41 U/L were considered elevated. Nine and 14 donors had HBsAg and Anti-HCV positive respectively and 95 were alcohol drinker and 50 blood donor refused to assess their ALT levels, so we assessed a total of 1839 for serum ALT levels . A total of 378 had elevated ALT(20.5%). In comparison with Tehran study [1959 blood donors were enrolled , 5.1% had elevated ALT levels(> 40 U/L) and Non-alcoholic steatohepatitis was the most common cause of persistently elevated serum ALT 1(4), in Kerman, 4 times more had have elevated ALT which needs further evaluation to determine its causes and the reasons for difference in comparison with blood donors in Teh-

REFERENCES:

- Hoyert DL, Arias E, Smith BL, Murphy SL, Kochanek KD. Death and death rate in the United States. Natl Vital Stat Rep 2001;49:1-113.
- Naghavi M. Etiology of death in 18 provinces of Iran in year 2001. In: Ministry of Health and Medical Education IR Iran. 2003.
- Pratt DS, Kaplan MM. Laboratory tests. In: SchieffER, SorrellMF, MaddreyWC, eds. Schiff's Disease of the Liver, Vol. 1, 8th ed. Philadelphia: Lippincott-Raven, 1999; 205-
- Pourshams A, Malekzadeh R, Monavvari A, Akbari MR, Mohamadkhani A, Yarahmadi S, et al. Prevalence and etiology of persistently elevated alanine aminotransferase levels in healthy Iranian blood donors. J Gastroenterol Hepatol 2005;20:229-33.

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