

4th International Conference on

HEPATOLOGY

April 27-28, 2017 Dubai, UAE

Effect of aqueous extract of plantago ovata fork (psyllium) fruit on improvent of non alcoholic fatty liver**Hossein Kargar Jahromi, Faezeh Sadeghian and Sara Rahmanian**

Jahrom University of Medical Sciences, Iran

Statement of the Problem: Nonalcoholic Fatty Liver Disease (NAFLD) was detected by Ludwig et al. in the people with no history of alcohol consumption for the first time in 1980. Nowadays, NAFLD is hepatic manifestation of metabolic syndrome. Clinical manifestations of metabolic syndrome include type 2 diabetes, obesity, dyslipidemia and hypertension. Given the prevalence of risk factors for metabolic syndrome, nonalcoholic fatty liver disease is the most common cause of liver disease in society. Epidemiological studies reported prevalence of NAFLD as 2.8% in Iranian population. According to increased prevalence of NAFLD and the positive impact of some herbal remedies (antioxidants) in this disease's prevention and treatment, the aim of this project is to investigate the effect of psyllium extract on NAFLD.

Methodology & Theoretical Orientation: In this experimental study 56 adult male Wister rats were divided into 7 groups of 8 animals, include control, sham 1 and 2 (induced fatty liver). experimental group 1 received psyllium extract with a concentration of 400 mg/kg and experimental groups 2, 3 and 4 received psyllium extract with a concentration of 100 mg/kg, 200 mg/kg and 400 mg/kg respectively after the induction of fatty liver over 28 consecutive days. Blood samples were taken from the animal's heart a day after the last injection and ALT, AST, ALP liver enzymes concentration as well as LDL, HDL, TC were measured. The results were analysed with ANOVA and Duncan's test in significant level ($p > 0.05$).

Findings: In the sham group 1 and 2 compared with the control group the mean serum ALT, AST, ALP, LDL were significantly increased and TG, HDL and TC were significantly reduced. In this experimental group 1, compared with the control group, the mean serum ALT, ALP, TC and TG were significantly reduced. In this experimental group 3 and 4, compared with sham group 1 and 2, the mean serum ALT, AST, ALP were significantly reduced but in this experimental group 2, compared with the control group 1 and 2 the mean serum ALP and ALT were significantly reduced and there was no change in AST mean serum. In this experimental group 3 and 4, compared with sham group 1 and 2 and control TC and TG mean serum were reduced significantly but in experimental group 3 and 4, compared with sham group 1 and 2 TG mean serum was reduced significantly and there was no change in TC mean serum. In this experimental group 4 compared with sham group 2 HDL mean serum was increased significantly and in experimental group 2, 3 and 4 compared with control group LDL mean serum was significantly reduced. But there was no change compared with control group.

Conclusion & Significance: The result showed that psyllium extract can cause hepatoprotective effect and can treat liver enzymes disorder and lipid profile in non-alcoholic fatty liver patients.

Biography

Hossein Kargar Jahromi has a PhD in Comparative Histology. He is a member of Research Center for Noncommunicable Diseases, Jahrom University of Medical Sciences, Jahrom, Iran and Zoonoses Research Center, Jahrom University of Medical Sciences, Jahrom, Iran.

hossein.kargarjahromy@yahoo.com

Notes: