the levels of AST, ALT and increased the levels of total protein, it has a protective effect on the liver.

PC082

Investigation of Possible Protective Effect of Propolis Extract against Bile Acid Induced Hepatotoxicity

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AIM: We investigated possible protective effect of propolis-extracts against bile-acid induced hepatotoxicity on viability of hepatocyte.
METHODS: We used C3A-human hepatoma cell line. Cells were seeded at concentration of 3x104 cell/100µl into 96-well-plate. We allowed cells to attach to plate during 24h. GCDCA (concentration of 0.5, 0.75, 1, 1.5, 2mM) was added in medium (n=3). After 24h bile-acid application, we determined toxic dose of GCDCA as 1mM by MTT assay. Propolis- extracts (concentration of 50, 10, 5, 1µg/ml) were administered before and after 3h treatment of determined effective dose of bile-acid. Possible protective effects of propolis were measured using MTT assay 24h later. Cells morphology was evaluated by acridine-orange staining under fluorescent-microscope.
RESULTS: Comparing alone with treatment group of propolis extracts with control group didn't show significant effects ($p>0.05$). It was shown that all dose of propolis aqueous extract treatment before toxicity induced by 1mM-GCDCA and 10 to 50µg/ml propolis aqueous extract after toxicity induced by 1mM-GCDCA significantly increased cell viability ($p<0.05$). Before toxicity induced by 1.5mM-GCDCA, 10 to 50µg/ml propolis aqueous extract showed positive effect ($p<0.05$). Before and after toxicity induced by 1mM-GCDCA, 1µg/ml propolis ethanol extract showed positive effect ($p<0.05$). Before and after toxicity induced by 1.5mM-GCDCA, propolis ethanol extract did not show positive effect ($p>0.05$).
CONCLUSIONS: Because there is no sufficient therapy for protection of liver during waiting period before cholestasis operation, and because in-vitro protective effect of propolis has been shown by this study, in-vivo and clinical studies are required to show its effect in human being.

PC083

Effect of Dietary Restriction on Probiotic Bacteria Lactobacillus

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INTRODUCTION AND AIM: Dietary restriction is defined as eating less than normal but without malnutrition. The diet is one of the factors that play a role in the regulation of intestinal microflora. Lactobacillus are among the probiotic bacteria, which are desired to be in the digestive system has many useful health effects such as antidiarrheal, hypocholesterolemic, inhibitor on diabetes, protective to cancer. Aim of the present research, evaluate to effect of dietary restriction on Lactobacillus counts in faeces on rat model.
METHODS: Two groups were composed, each containing average weighs 250 grams, 10 male Sprague Dawley rats. Dietary restriction was carried out first group while second group was consist of control rats and fed by ad libitum. Faeces samples were collected from both groups at 0th, 30th, 60th, 90th, 120th, 150th days. De Man Rogosa and Sharpe (MRS) Agar were used to Lactobacillus isolation and incubated under anaerobic conditions at 37ºC for 72 h. Development showing yellow-cream colored colonies were identified as Lactobacillus spp.
RESULTS: In first group Lactobacillus average count was detected 7.88 log10 kob/g on 1st day and it rised 8.84 log10 kob/g on 150th day. 1 log10 increase, after long time dietary restriction was obtained statistical significant ($p=0.02$). Lactobacillus average count was defined 8.45 log10 kob/g -1st day, 8.62 log10 kob/g-150th day on second group and was not found statistical significance ($p=0.32$). But in the second group significance was occured on 1-90th ($p=0.03$), 30-90th ($p=0.01$), 60-90th ($p=0.01$) ve 90-120th ($p=0.03$) days. Results of statistical comparison between groups was not found significance ($p=0.222$).
CONCLUSIONS: The data showed that long-term diet restriction was the increase 1 log10 number of Lactobacillus. Although statistical significance was not appeared when compared with the control group, determined that 150-day dietary restriction was caused positive effect on the number of Lactobacillus in the intestine as a result.

PC084

The Investigation of Effect of Dietary Restriction and Beta Glucan on Thyroid Hormones

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INTRODUCTION AND AIM: Dietary restriction is a calorie reduction along with essential food intake whitout disturbing the body homeostasis in human and the other species. Dietary restriction is one of the most effective ways known for prolonging the life span and the delay disease in mammals. Beta Glucans are polysaccharide structure compound which are found in variety species's cellwalls. The aim of this study is investigation of the thyroid hormone levels in long term dietary restriction apply with beta glucan that adult male rats.
METHOD: This study planned for four grup. In each group there are 10 male Sprague Dawley rats race: I.Group: Control group fed with ad libitum (Control), II.Group: applied dietary restriction (DK), III.Group: fed ad libitum and applied Beta Glucan (βG), IV.Group: applied Beta Glucan and dietary restriction (βG +DK). Dietary restrictions application is continued for 6 months. Beta Glucan applies 20 mg/kg doses per day for along 14 days by oral feeding tube. The end of this study, TSH, T_3 (triiodothyronine) and T_4 (thyroxine) hormones levels was measured in from blood samples taken from rats.
RESULTS: End of the research, significantly increase (respectively p:0.000, p:0.003, p:0.015) was observed in TSH hormone levels in DK, βG and DK+ βG group compared to the control group. T_4 hormone concentration significantly increased (p:0.001) only in DK+ βG group, also it was higher in DR and βG groups ($P < 0.05$) but not significantly. However, reduction was observed in DR group and increase in βG group in T_3 hormone levels. The result unchanged in DR+ βG group compared to the control group. T_3 hormone concentrations were not statistically significant.