

عنوان مقاله:

Interactive Effects of Endurance Swimming and Curcumin Supplementation on Serum Levels of Liver Alkaline Phosphatase in Male Rats Following Ethanol Abuse

محل انتشار:

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خلاصه مقاله:

In this study, 48 male wistar rats approximately 12 weeks old with 240 ± 10 g weight are selected. (1st) 8 rats were randomly separated as control group and 40 rats in 8 equal group were gavaged with ethanol ($5-7$ g/kg weight of body) every 8 hours for 4 days. Six days after the final binge, (2nd) the rats were randomly divided into groups of alcohol with any intervention, exercise, curcumin, sham and exercise + curcumin. Endurance swimming training program was conducted for two weeks, daily and 20-60 min, equally in groups with exercise. There was daily intra-peritoneal injection of curcumin (5 mg/kg weight of body), equally in groups with curcumin. Rats in sham group were injected with curcumin's solvent (dimethyl sulfoxide). The data were analyzed by ANOVA and Tukey's post hoc test at the significant level of $p < 0.05$. Plasma level of ALP enzyme ($p = 0.0001$) significantly increased in the alcohol group compared to the control group. Also the result show that the was significantly decreased in training + curcumin group in comparison with curcumin and training groups. According the finding, alcohol abuse significantly increase Plasma level of ALP enzyme. It seems that Short-term exercise with curcumin, can inhibit enzyme that enhanced by alcohol abuse.

کلمات کلیدی:

Endurance swimming, Curcumin supplementation, Alkaline phosphatase, Ethanol abuse

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