

The Effect On Fibrinolytic System Of Blood Plasma Of Wister Rats After Feeding Them With Coix Mixed Diet

Abstract:

Experimental wister rats were fed on coix-mixed diet for 30 days in a view to study the effect of Coix feeding on the state of haemostatic mechanisms. Blood plasma which was obtained after cardiac puncture was analyzed for fibrinogen levels, euglobulin lysis time, fibrinolytic activity by protamin sulfate degradation and inhibitors of plasmin. These experimental models were set with a view to analyze situations mimicking processes associated with haemostasis and interpolate such situations in changes associated with the development of atherosclerosis. To study the plasma fibrinogen levels in experimental and control animals, spectrophotometric method was applied. Feeding the animals with coix-pellets mixed diet caused a decrease in fibrinogen levels as compared with controls. An overall decrease of this plasma protein was observed in both sexes. It was shown that euglobulin lysis time (ELT) was insignificantly changed in the experimental animals. However, fibrinolytic activity by degradation of protamin sulfate showed an increased fibrinolytic potential in experimental animals. In the same experimental models the analysis for the activity of inhibitors of plasmin showed no significant differences in mean values. It was found that coix has got vital nutritional value in lowering fibrinogen levels while at the same time creating a tendency of reducing fibrinolytic activity. More experiments should be conducted to show the possible mechanisms by which the observations can affect the development of atherosclerosis in man.