

## **PROTECTIVE EFFECT OF ESPA-LIPON IN BRAIN TISSUE IN EXPERIMENTAL DIABETES MELLITUS**

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45 male Vistar albino rats with alloxan diabetes, 200-240 grams weight, were studied for lipid peroxidation activity, electron microscopic appearance of capillary endothelium and neurones.

1 month after the onset of diabetes the activity of superoxide dismutase (SOD) and contents of malondialdehyde (MDA) were elevated. Electron microscopy revealed the increase in microvesicular activity and activation of protein synthesis processes.

2 months after the onset of diabetes the SOD activity diminished, and MDA contents continued to increase. Electron microscopy showed the persistent activation of protein synthesis. .

Microvesicular activity decreased ' significantly.

The intraperitoneal injections of lipoic acid (Espa-lipon, Esparma GmbH, Germany) in daily dose 20 mg/kg during 1 month lead to decrease in accumulation of lipid peroxidation products in brain tissue and thrombocytes. Electron microscopic changes in brain tissue were less distinct.