

Melatonin quantitative changes and antioxidant system activity of heart muscle cells.

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We have studied intensification of lipid per oxidation and antioxidant system activity impact of melatonin quantitative changes undergoes prolonged isolative chronic stress.

The experiments was conducted on six groups of animals: I 30 days group under dark conditions, II 30 days isolation under dark conditions, III 30 days group under permanent light conditions, IV 30 days isolation under permanent light conditions, V control (group) VI control (isolation)

Results indicates, that antioxidant system activity has no significant changes in groped animals, compared to control, impact of melatonin as endogenous compound , which has antioxidant properties. The changes was observed, when was animals isolation under prolonged (30 days) stress condition.

Analogical data was resulted in animals' heart muscle cells, which were under prolonged (30 days) permanent light stress conditions and hormonal studies showed melatonin decrease in blood.

Thus, our studies shows, that activation antioxidant system is more sensitive under isolation-induced stress and is less sensitive melatonin quantitative changes in blood.