

# THE EFFECT OF PINEALECTOMY AND MELATONIN ON THE CIRCADIAN RHYTHM OF CORTICOSTERONE SECRETION IN RATS PLASMA

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Corticosterone plasma level was measured by RIA in rats, after pinealectomy and a single dose of melatonin (100  $\mu$ g/rats). Blood samples were taken at 0 and 60th min after injection. There were no changes in corticosterone levels in the sham-pinealectomized rats treated with melatonin. In pinealectomized rats a significant decrease in corticosterone level was found. Treatment with melatonin increased the corticosterone concentration. The results show that pinealectomy disturbs the circadian rhythm of corticosterone secretion.