

Dissertation "The influence of corticosterone and corticoliberin on damage of the hippocampus and their relation to cognition" deals with the cognitive, behavioral and histological changes in experimental rat strain long-evans that closer describe the consequences of long-term continuous application of corticoliberin and/or corticosterone. Testing of the behavioral changes was divided into two phases. The first one - within three or four weeks respectively administration of these hormones, therefore until their early effects - and the second phase – after four weeks of completion of the first phase at the time of the possible late effects. In the twelfth week the experimental animals were killed and in the group which had exogenously elevated corticosterone, the morphological changes in the hippocampus were monitored and measured. In all experimental groups alteration of behavior was observed. Histological and morphological changes in the brain we have found. Layout of experiments in two testing phases allowed differentiation of the early changes and the late and persistent changes. The arrangement of experiments allowed the choice of tests to compare not only individual effects of both hormones (corticoliberin and corticosterone) but also their coactioning and biological responses to them. Using a wider range of behavioral tests facilitate the detection of subtle changes, that some individual tests not reveal.