

777

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THE EFFECT OF OLANZAPINE ON PITUITARY - GONAD AXIS AND SPERMATOGENESIS IN ADULT MALE RATS

Hypothesis / aims of study

Olanzapin is a specific Inhibitor of reabsorption of serotonin and dopamine. In addition , it act as antagonist serotonin and dopamine receptors . Since this medicine is used in treatment of psychosis and shizophrenia, then side effects of this medicine at different endocrine axis are important

Study design, materials and methods

In present research, 50 male wistar rat were divided into 5 groups of 10 ,including ,control ,Sham and experimental groups I, II and III which orally received 5, 10 and 20 mg/kg olanzapine solution for 28 days respectively. 24 hours often the last treatment, blood samples were taken from the heart, centrifuged and sera were evaluated for the concentration of LH, FSH, testosterone and prolactine via RIA method. In addition testes were removed weightd, sliced and stadies with seriological methods

Results

The result show that, there was a significant increase in the body weight group receiving 20 mg/kg olanzapine solution

Interpretation of results

There were a significant increase in prolactiue and asignficant decrease in testosterane group receiving 20 mg/kg otanzopine solution

Concluding message

probably present changes due to compounds in olanzapne solution that affect on body weight and serum concentration of prolactine and testosterone hormone in groups receiving 20 mg/kg olanzapine solution

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Is this a clinical trial?	No
What were the subjects in the study?	NONE