شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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EFFECT OF SOME PLANT EXTRACTS ON HYPERPROLACTINEMIA IN EXPERIMENTAL ANIMALS

By

ANAN ATEF MOHAMED MOHAMED
B.Sc. Agric. Sc (Agric. Biochemistry), Fac. Agric Ain Shams University, 2015

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This thesis for M.SC. degree has been approved by:

Dr. Esam Ahmed El Malt
Prof. Emeritus of Biochemistry, Faculty of Agriculture, Minia University

Dr. Hany Abd Alla Srour
Head of the Department of Biochemistry, Faculty of Agriculture, Ain Shams University

Dr. Farouk Guindi Moawad
Prof. Emeritus of Biochemistry, Faculty of Agricultue, Ain Shams University.

Dr. Magdy Fouad Twfik
Prof. Associate of Biochemistry, Faculty of Agricultue, Ain Shams University.

Date of examination: / / 2021

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Under the supervision of:

Dr. Farouk Guindi Moawad
Prof. Emeritus of Biochemistry, Department of Agricultural Biochemistry, Faculty of Agriculture, Ain Shams University (Principal Supervisor)

Dr. Magdy Fouad Tawfik
Associate Prof. of Biochemistry, Department of Agricultural Biochemistry, Faculty of Agriculture, Ain Shams University

Dr. Hemmat Abd El Fattah Ibrahim
Associate Prof. of Biochemistry, Department of Agricultural Biochemistry, Faculty of Agriculture, Ain Shams University

ABSTRACT

Anan Atef Mohamed Mohamed: Effect of some Plant Extracts on Hyperprolactinemia in Experimental Animals. Unpublished M.Sc. Thesis, Department of Agricultural Biochemistry, Faculty of Agriculture, Ain Shams University, 2021.

Hyperprolactinaemia is the occurrence of an endocrine disorder that has led to an increase in the level of the hormone prolactin (PRL) in the blood above normal levels in cases other than the natural increase in pregnancy and lactation In the present work, hypoprolactinaemic effects of alcoholic extracts of sage leaves, marjoram leaves and celery seeds were evaluated. Sixty male and female rats were divided to 12 groups each group containing 5 male and 5 female. Rats of 5 groups were administered with metoclopramide (150 mg / kg / day) to induce hyperprolactinaemia. After one week rats were treated with (250 mg / kg / day) for 30 days of alcoholic extracts of sage leaves or marjoram leaves or celery seeds or (25 mg/kg/day) bromocriptine. The sixth group was act a negative control group.Through the biochemical analysis of blood hormones, the results showed that treatment rats with metoclopramide drug (150 mg / kg / day) for a week led to hyperprolactinaemia in positive control group compared to negative control group of the experiment. The results indicated that the alcoholic extracts of sage leaves, marjoram leaves and celery seeds led to significant reduction ($P<0.05$) in serum prolactin. Also, the other sexual hormones (progesterone (PRG), estrogen (E2), testosterone (TST), Follicle-stimulating hormone (FSH) and Luteinizing hormone (LH)) did not show any significant changes due to treatment with these alcoholic extracts. Rats returned to normal appearance after the treatment with these extracts during the trial period. The results Cleary suggested that the observed effects of the investigated plant extracts could be due to estrogen receptors and /or dopamine receptor.

Keywords: Hyperprolactinaemia, Prolactin hormone**,** Metoclopramide**,** Sage, Marjoram, Celery.

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LIST OF ABREVIATIONS

ALB	Albumin.
ALP	Alkaline phosphatase.
ALT	Alanine aminotransferase.
AST	Aspartate aminotransferase.
CBC	Complete blood count.
D2R	Dopamine D2 receptor.
DA	Dopaminne.
E2	Estradiol.
FDM	Formula malt decoction.
FSH	Follicle stimulating hormone.
GERD	Gastroesophageal reflux disease.
GnRH	Gonadotropin-releasing hormone.
HCT	Hematocrit.
HDL	High density lipoprotein.
HGB	Hemoglobin.
LDL	Low density lipoprotein.
LH	Luteinizing hormome.
MS	Multiple sclerosis.
PE	Phytoestrogen.
PLTs	Platelets.
PRG	Progesterone.
PRL	Prolactin.
RBCs	Red blood cells.
T.P	Total protein TST Testosterone.
TBIL	Total bilirubin.
VLDL	Very low density lipoprotein.
WBCs	White blood cells.