

BIOCHEMICAL AND ULTRA STRUCTURAL ASPECTS ON EFFECT OF INDUCED HYPOTHYROIDISM IN PREGNANT RATS AND FETUS

Anwar N.Sewan *, Maha k . Ibrahim*, Alaa A. Sawad**

*Department of Biology, College of Science, University of Basrah,Basrah,Iraq

**Department of Anatomy and Histology, College of Veterinary Medicine, University of Basrah,Basrah,Iraq

(Received 24 January 2017 ,Accepted 2 May 2017)

Keywords: propyl thiouracil, ultra-structural, (TSH)

ABSTRACT

The study was evaluated the effect of propylthiouracil(PTU) drug on both maternal and fetus rats (*Rattus norvegicus*). Experimental animals were housed, breeding and adapting, then only (50) virgin females were chosen for mating, the mean weight of the animals was (200±50) gm and (8-10) week of age, all females subdivided into two groups, first group regarded as control while the second group were treated with (PTU) dose as (0.05%) to induced hypothyroidism, then the females mating and the gestation day (G0) was determined. All the biochemical and ultra-structural changes on thyroid gland of maternal rats was clarified at each period of gestation (14.5, 16.5, 18.5, 20.5 and 21.5) days post gestation. Biochemical results in this study referred to non significant increase in (TSH) concentration while there was decrease in (T3 and T4) level on blood serum of pregnant rats related to hypothyroidism group compared to their values in control group at (P≤0.05). Also levels of some oxidative enzymes (GSH and MDA) was determined, the data showed significant increase in the concentration of these enzymes in serum of pregnant rats related to an induced hypothyroidism group compared to their

