

days after castration; 26 rats, 36 days after castration; 6 rats, 27 days after castration.

To facilitate graphic presentation of the data, the weight of the gland in milligrams was divided by the weight of the rat in grams and this factor multiplied by a constant. The result was designated as F K.

There was a slight variation in the experimental group as a result of variation of the dosage. This was not marked but the tendency seemed to indicate that the increase in weight of pituitary and adrenals is not in direct proportion to the dose.

The pituitaries were increased in weight 29.7%, the adrenals 37.5%, and the thyroid 8.4% as compared with the non-injected control group.

Conclusion. Antuitrin "S" increased the weights of the pituitaries, adrenals and thyroid in castrate rats.

6972 C

Effect of Theelol on Weights of Pituitary, Adrenal and Thyroid.

GEORGE M. LEIBY. (Introduced by John C. Burch.)

From the Department of Obstetrics and Gynecology, Vanderbilt University, School of Medicine.

Theelol* and Theelin* differ in their quantitative estrogenic action, in their chemical structure and in their absorbability from the human intestine.^{1, 2} The morphological changes, as evidenced by organ weights, produced by estrin in the form of Amniotin (E. R. Squibb & Co.) have been studied by Leonard, Meyer and Hisaw.³ No such data is available for Theelol.

We present the variations in weights of the pituitary, thyroid and adrenal glands following injections of Theelol.

Eighteen sexually mature albino rats weighing between 160 to 220 gm. were oophorectomized. Twenty-two days were allowed to intervene before injections were begun. Theelol was furnished in

* We are grateful to Parke Davis & Co. for a generous supply of Theelol and Theelin.

¹ Thayer, S. A., Levin, L., and Doisy, E. A., *J. Biol. Chem.*, 1931, **91**, 655.

² Mazer, C., and Goldstein, L., *Clinical Endocrinology of the Female*. W. B. Saunders Co., Phila., 1932.

³ Leonard, S. L., Meyer, R. K., Hisaw, F. L., *Endocrinology*, 1931, **15**, 17.