

to the exceptional position of urine of pregnant women which causes a marked production of interstitial gland and pseudolutein tissue, without causing hypertrophy of the thyroid gland, there are some indications that the active substance in urine may be different from the active principle in the anterior pituitary.

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Administration of Theelol to the Immature Brown Leghorn Female.*

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The properties of theelol as an estrogenic substance allied to theelin, and the report of atretic degeneration in the ovary of the rat upon continuous administration of theelin¹ suggested the possibility of some action of theelol upon the ovary of the immature fowl.

Using 20 Brown Leghorn pullets, 5 months of age, 5 served as controls (saline injected), and 15 received daily an aqueous solution of theelol intramuscularly. These were in 3 equal lots receiving 2.5, 10, and 20 rat units respectively per day. After 40 days the dosage was double in each lot, and again after 16 days the dose was further increased to 20, 40, and 100 units per bird per day respectively. The birds were inspected and weighed weekly.

As indicated by comb-growth and egg-production, after a total of 96 days of injection, no signs of ovarian stimulation or inhibition were noted. The first bird to lay was a control, followed by 2 birds of the smallest theelol dose, and later by members of the other groups. Laying commenced a week after the heaviest dosage was started, and after 3 weeks, 2 controls, three 20-unit, two 40-unit, and one 100-unit bird was laying. Autopsies revealed only ovaries and oviducts normal for birds of laying age. Thus there was found no inhibition nor stimulation of ovulation by theelol as employed. The problem is being further studied, especially with reference to elimination rate as a possible explanation.

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¹ Doisy, E. A., Thayer, S. A., Levin, L., and Curtis, J. M., *PROC. SOC. EXP. BIOL. AND MED.*, 1930, **28**, 88; Doisy, E. A., Curtis, J. M., and Collier, W. D., *Ibid.*, **28**, 885.