LETTERS TO THE EDITORS

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IN THE PRESENT CIRCUMSTANCES, PROOFS OF "LETTERS" WILL NOT BE SUBMITTED TO CORRESPONDENTS OUTSIDE GREAT BRITAIN.

Gonadotropic Hormones in the Urine of the Giraffe

It has been considered that during pregnancy only the primates excrete gonadotropic hormones in high concentration in the urine, and that pregnant Equidae do not, although the concentration of gonadotropic substances may be increased in the blood. It was not expected that antelopes would give positive results.

We had occasion to examine the urines from a number of captive giraffes and the following preliminary results are of importance.

The first animal, a female 2-para, aged six years, was mated on December 24, 1937, and her female calf was born on April 8, 1939 (468 days).

Examination of the urine for gonadotropic hormone gave a negative result on August 24, 1938, but later specimens examined on November 11 and 26, 1938, showed positive ones when tested on rats and mice by the method of Asheim and Zondek. Thus a group of 12 rats receiving 3.6 c.c. of the latter two urines, which were shaken out with ether before injection, gave the following results:

	No. of rat	Body-weight	Oestrus	Weight of the ovaries	Histology of the ovaries
Nov. 11, 1938.	18871	26.6 gm.	G	11 mgm.	III
	18872	28.0 "	G	9 "	I
	18873	28.0 "	G	11 "	III
	18874	30.4 "	G	13 "	III
	18875	25.8 "	D	9 "	—
	18876	26.8 "	F	14 "	III
Nov. 26, 1938.	19099	29.0 "	G	16 "	III
	19100	27.8 "	A	10 "	I
	19101	26.6 "	A	9 "	I
	19102	27.0 "	G	11 "	III
	19103	26.0 "	A	6 "	—
	19104	30.4 "	B	8 "	I

A=typical anestrus vaginal smear; B=decreased number of leucocytes, increased number of not cornified epithelial cells; G=a vaginal smear with less than 5 per cent of leucocytes and more than 95 per cent cornified epithelial cells; I=enlarged follicles present; III=corpora lutea present.

The typical effects in the ovary of rat 19102 are seen in the two accompanying illustrations; A shows a section from the whole organ and B a young corpus luteum at higher magnification.

The changes produced are comparable with those found in rats after the administration of gonadotropic hormones of the chorionic type (few but large corpora lutea).

Examinations of the urines from other non-pregnant female giraffes and also a male giraffe gave negative results.

Our preliminary results thus indicate that the excretion of gonadotropic hormones during pregnancy is not limited to the primates as is generally assumed, but also occurs in the antelopes. We are continuing this work and are now repeating our observations on the original female giraffe.

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and
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August 31.

Volatile Aldehydes Liberated by Periodic Acid from Protein Hydrolysates

Nicolet and Shinn¹ and Van Slyke *et al.*² have studied the action of periodic acid on hydroxyamino acids, and in the cases of serine and hydroxylysine have demonstrated the rapid formation of one mole-