the antibodies developed during rabies-immunization are heterophilic in nature but do not belong to the special Forssman group.

Summary. Heterophilic antibodies developed during rabies-immunization differ from the heterophilic antibody developed in true serum sickness and from the heterophilic antibodies present in cases of infectious mononucleosis.

11004

Correlation between Movements of Gravid Uterus and Formation of Histamine.

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Harding and Fort[1] first noted the presence of a considerable amount of histamine in the placenta. This has been confirmed several times since. As an accumulation of histamine could be dangerous for normal pregnancy it seemed consistent to investigate whether histaminase is present in the placenta. Danforth and Corham[2] found histaminase to be present in the human placenta though in extremely variable amounts. Danforth[3] demonstrated that the amount of histaminase to be found in the placenta "shows some correlation with the efficiency of uterus contractions of women during labor."

During researches—Daels and Donatelli[4–6]—on the motility of the cat's uterus (about 150 animals) we had the opportunity to examine the motility of the uterus of 7 pregnant cats. These observations seem to us to be in correlation with the problem mentioned above and this is why we want to publish them. The cats in our experiments were narcotized with chloralosane; the distal end of one uterus horn was fixed by a thread which was connected by a Jackson tube to a level which registrated the movements. The abdomen was closed, the animal warmed.

Table 1 shows the results of these 7 experiments.

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1 Harding, V. J., and Fort, C. A., *J. Biol. Chem.*, 1918, **35**, 29.

2 Danforth, D. N., and Corham, F., *Am. J. Physiol.*, 1937, **119**, 394.

3 Danforth, D. N., PROC. SOC. EXP. BIOL. AND MED., 1939, **40**, 319.

4 Handovsky, H., and Dael's, J., *Internat. Congress of Physiology*, 1938, Kongressbericht II, p. 209.

5 Handovsky, H., and Daels, J., *C. r. Soc. Biol.*, 1939, **131**, 150.

6 Daels, J., *Arch. internat. Pharmacodyn.*, in press.

TABLE I.

No.	Length of foetus, cm	Period of pregnancy*	Uterus movements	Blood pressure during contraction of the uterus
16	10.0	46 to 57 days	Every 2 min one movement lasting 1 min (see Fig. 1)	No change
28	2.3	< 14 days	,,	,, ,,
30	2.2	,,	,,	,, ,,
77	3.4	,,	,,	,, ,,
56	3.2	,,	,,	Short fall of pressure
62	5.2	15 days	,,	,, ,, ,, ,,
141	4.5	14 to 15 days	,,	,, ,, ,, ,, (see Fig. 1)

* Calculated according to Gros, G., *Le cycle génital de la chatte*, Thèse, Université d'Alger, 1936, p. 110.

While pregnant uteri of other species hardly show any movements[7] the uteri of our 7 pregnant cats showed movements of similar kind: every 2 minutes there arises one movement, which lasts about 1 minute. (Fig. 1).

In 3 animals out of the 7 the general blood pressure dropped for about half a minute (Fig. 1) at the moment when the uterus started contracting. We never observed that phenomenon in the uteri of non-pregnant animals. We cannot explain why all the 7 gravid

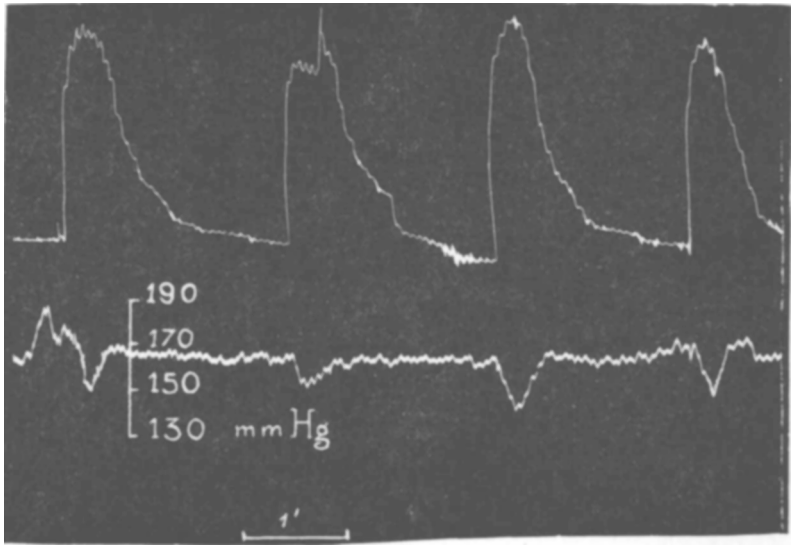

FIG. 1.
Cat 141. (Table I. Uterine movements. Blood pressure. Time.)

[7] *Cf.* Reynolds, S. R. M., *Physiology of the Uterus*, New York, 1939, p. 1.

uteri showed movements of the same type in spite of the different periods of pregnancy and why in 3 cases only the fall of blood pressure occurred.

We suggest that inside of the pregnant uterus (in the placenta) of the cat a rhythmic production of histamine occurs, which provokes the contractions of the uterus, and that a certain amount of histamine may escape the destruction by the histaminase, come into the general circulation and cause the short, but distinct fall of blood pressure. This hypothesis would agree with the hypothesis of Danforth mentioned above.

11005

Further Observations of Phenothiazine in Experimental Trichinosis.*

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A variety of therapeutic agents have been tried in experimental *Trichinella spiralis* infestations with but limited success.[1] A recent preliminary experiment indicated that 6 weeks' continuous use of a diet containing 0.25% phenothiazine reduced the severity of trichinous infection in rats 74%.[2] Further observations of the actions of this drug have been made and are herewith reported.

Methods. Adult white rats of the Wistar strain were used throughout. The general methods of drug administration, infection and muscle larvae counts were the same as before[2] except as noted in the individual experiments. Each experiment ran for 6 weeks. The results were evaluated by calculating the standard error of the mean for the larvae counts of the 4 animals in each group, and by calculating "t", according to Fisher's methods.[3] Variations with a chance

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† Food Research Division Contribution No. 464.

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3 Fisher, R. A., *Statistical Methods for Research Workers*, 1934, 5th Ed., Oliver and Boyd, Edinburgh.