

appears striking to note that normal oestrous activity can be restored at all with salt therapy in the absence of the adrenal glands. Further, the gonad-stimulating power of the hypophysis of adrenalectomized rats remains unimpaired in the majority of instances on salt treatment. Mating was successful in 3 instances. It is possible that adrenalectomized rats showing impairment in ovarian and hypophyseal function may not have ingested adequate sodium chloride. However, these findings further emphasize the secondary importance of the adrenal cortex on gonadal activity. They also confirm the contention that the suprarenal cortex exerts no direct estrogenic effect,<sup>1, 2</sup> since as many rats showed normal oestrus as those that did not.

If the prevalent theory of corticoadrenal function to maintain the normal osmotic balance of the body is correct, perhaps the administration of sodium chloride in adrenalectomized rats serves to restore the normal electrolytic equilibrium of hypophyseal and ovarian tissue in a manner similar to its action on renal tissue.<sup>5</sup>

*Conclusion.* Sodium chloride therapy in suprarenalectomized rats during our period of observation was effective not only in prolonging life but also in restoring normal hypophyseal-ovarian activity in 55% of the cases.

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### Cultivation of Rabies Virus.\*

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Webster and Clow<sup>1</sup> and Kanazawa<sup>2</sup> reported the first success in cultivating rabies virus. The former accomplished this with a medium consisting of Tyrode solution containing normal monkey serum and minced mouse embryo brain, while the latter propagated the virus in Tyrode solution in the presence of rabbit embryo brain tissue, but without the addition of serum.

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<sup>2</sup> Fitzhugh, O. G., *Am. J. Physiol.*, 1937, **118**, 677.

<sup>5</sup> Ingle, D. J., Wilson, H. W., and Kendall, E. C., *Am. J. Physiol.*, 1937, **118**, 302.

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<sup>1</sup> Webster, L. T., and Clow, A. D., *Science*, 1936, **84**, 487.

<sup>2</sup> Kanazawa, K., *Jap. J. Exp. Med.*, 1936, **14**, 519.

We wish to report our confirmation of the observations of Webster and Clow, since by the procedure which they describe, we have been able to carry the virus through 16 subcultures. Material from the final culture has proved infectious for Swiss mice in dilution of  $10^{-2}$ . In addition a series of passages carried out on the same medium, but with an equivalent amount of normal rabbit serum in place of normal monkey serum yielded results which were similar in all respects to those obtained with normal monkey serum.

Attempts to propagate the virus on media containing a larger ratio of serum to Tyrode and considerably smaller amounts of tissue proved unsuccessful. The fact that Kanazawa propagated the virus in a medium containing rabbit embryo brain, without the addition of serum, suggests that possibly the concentration of serum may have been a factor and that a low concentration of serum or no serum at all, may be more favorable to growth.

Twelve separate attempts were made to propagate the virus on the chorio-allantoic membranes of developing chicks. All yielded entirely negative results. This is in accord with the experience of Waldhecker.<sup>3</sup>

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#### Differences in Spread of Dye in Skin of Normal and Tuberculous Guinea Pigs.

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In a study of the skin of guinea pigs, it has been found that the tuberculous animal reacts differently from the normal in regard to the spread of dye which has been injected intradermally.

We have made tests to see if differences could be detected in the spread of dye in the skin around the zone of primary inoculation as contrasted with other areas. The work was started in the course of completing a study of the Koch phenomenon which had been begun by the late Henry Sewall. He had obtained evidence that there are differences in sensitivity in different areas of the skin of the tuberculous guinea pig.

The dye used was pontamine sky blue which we obtained through

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<sup>3</sup> Waldhecker, M., *Centralbl. f. Bakt., O.*, 1935, **135**, 259.