

TABLE I.

Total No. of monkeys injected	Ave. No. of days of epithelial growth	No. of monkeys menstruating	Ave. No. of days of menses	No. of monkeys failing to menstruate	Ave. No. of days after last injection that menses started	Total units injected in each monkey
6	7	3	3 2/3	3	11	30
9	7 8/9	6	5 1/3	3	10 1/6	48
12	8 1/2	10	4 1/2	2	12 2/5	60
7	9 6/7	6	4 1/3	1	10 1/6	72
6	8 2/3	5	5 1/5	1	9 3/5	84
2	6 1/2	2	5 1/2	0	10 1/2	90
3	7 2/3	3	5 1/3	0	9 1/3	96
2	7 1/2	2	4	0	10 1/2	120
2	7	2	5 1/2	0	9 1/2	240

Thus far it is impossible to say just what the minimum effective subcutaneous dose is for a monkey. Failures are reported up to 84 units, but the largest number of failures occurred at 30 units and 48 units. At present we can only say that at 30 unit dosage about 50% of the monkeys responded and no failures occurred where over 84 units were injected.

4459

The Male Hormone: Its Standardization.

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Method of Extraction: The hog testes used was first carefully freed of all extraneous tissue, and then put through a sausage mill. The substance was then thoroughly washed with weakly acid ice-cold water, and filtered, to remove the spermatic element. Half the volume of ether was added, and the whole agitated in a pressure drum for 12 hours or more, and then filtered. Thus the lipoidal substance desired was obtained in the filtrate. The filtrate was then placed in a separating funnel and allowed to separate into layers for several hours. The upper 2 yellow layers of liquid retained. On experimentation it was found that the lower 2 layers contained nothing of value. The retained liquid was then evaporated to vaseline consistency and extracted with acetone, and again filtered. The filtrate was evaporated to dryness and then extracted with distilled

water at 37° C. and filtered. Aseptic precautions were taken at every step, and the final solution was placed in sealed flasks in a refrigerator, for standardization.

Determination of Toxicity: Adult male rats were used to determine the toxicity of the solution and varying amounts of the solution were injected to see if there were any ill effects from the possible presence of spermatotoxin. It was found that there were no ill effects from the injection of the solution prepared as above.

Measurement of Hormonic Value: Adult bull frogs in hibernation were used for standardization of the solution. These frogs were kept in winter temperature of about 10° C. Their body length was about 8 cm. and they weighed about 50 gm. each. Each frog was tested before injection for the absence of the clasping reflex. A tuberculine syringe was used, and one tenth of a cc. of the solution was injected into the dorsal lymph sac of each frog. The concentrated solution that would just bring the frog into a state of reaction to the clasping reflex was taken as the unit of measurement, and thus the unit of potency.

Conclusions: This is a preliminary report, and although the observations are rather conclusive it is felt that more work needs to be done before it is decided that the method outlined above is the best procedure for the extraction of the male hormone, although it is felt that the clasping reflex is a valuable index for standardization of the potency of the extract.

4460

A Practical Method for the Immunization of Horses by Type Specific Pneumococcic Pleural Exudates.

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(Introduced by G. B. Wallace.)

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Following the intratracheal injection into horses of virulent pneumococci of the 3 fixed types in broth cultures, there develops frequently a massive pleural effusion either as a purely local phenomenon or associated with underlying pulmonary consolidation grossly resembling lobar pneumonia, the pleural surfaces of the animals showing all the gross and microscopic evidence of an acute serofibrinous inflammation with the presence of as many as 30 litres of