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Production of Oligospermia in a Man by the Use of Testosterone Propionate.*

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This preliminary report deals with the effect on spermatogenesis of 10 to 25 mg of testosterone injected subcutaneously for 266 days in a 67-year-old man who was under daily observation for 17 months beginning August 9, 1937. The accompanying graph (Fig. 1) illustrates the effect on sperm counts.

The number of spermatozoa in the semen decreased during the administration of testosterone, increased after testosterone withdrawal, decreased when testosterone was again administered and increased after termination of the therapy.

It is of interest that recent experimental evidence appears to indicate that the male hormone may maintain, but not initiate spermato-

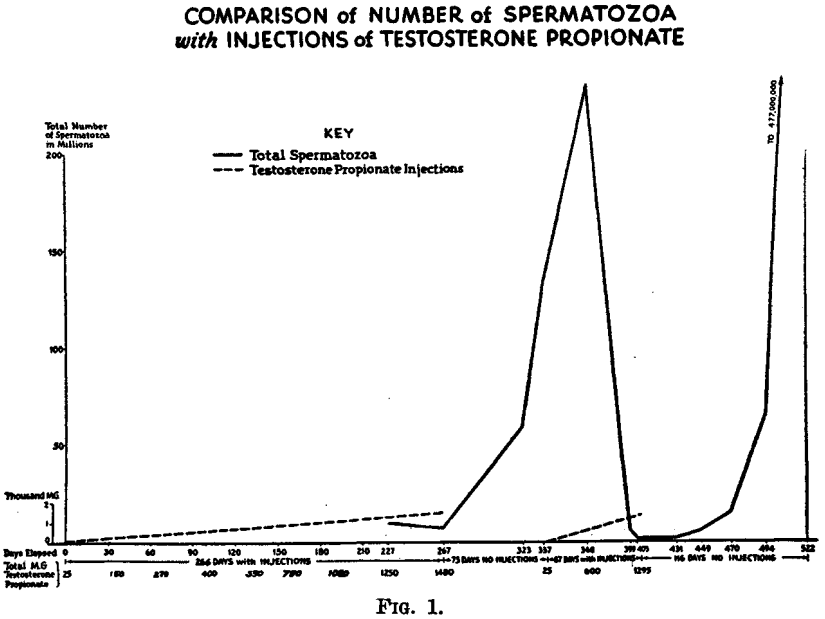

FIG. 1.

* The Schering Corporation kindly supplied the Oreton (testosterone propionate) used in this study.

genesis in the hypophysectomized rat.[1] It will also maintain, or repair damage to, the accessory reproductive organs of the castrated rat.[2] However, it does produce injury to the seminiferous tubules of young, growing, normal rats.[3]

The determinations of the number of spermatozoa in an ejaculation were obtained by counting them in a blood counting chamber (the diluent containing 5% soda and 1% formalin), multiplying the result by 1000 to obtain the number per cubic centimeter, and again multiplying the result by the number of centimeters of semen. The result plotted was the average of at least 2 to 4 determinations on each specimen.

Summary. The daily subcutaneous injection of 10 to 25 mg of testosterone depressed the spermatozoa count in a 67-year-old man. After its withdrawal the number of spermatozoa increased and during a second period of testosterone therapy the number of spermatozoa again decreased. The duration of the 2 periods of treatment, the daily dosage, and the variation in the spermatozoa counts are presented in the graph.

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Skin Transplantations Between Hairless and Haired Rats.*

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The experiments reported here are an attempt to determine whether genetic hairlessness in the rat (inherited as a simple recessive) is due mainly to factors in the skin or to an endocrine abnormality. Emery[1] discusses a possible relationship between the hypophysis and the hairless condition. But Martin and Gardner,[2] feeding equivalent amounts of cysteine, cystine and glutathione to hairless rats, concluded that

1 Walsh, E. L., Cuyler, W. K., and McCullagh, D. R., *Am. J. Physiol.*, 1934, **107**, 508; Nelson, W. O., and Merckel, C., PROC. SOC. EXP. BIOL. AND MED., 1937, **36**, 825.

2 Callow, R. K., and Deanesly, Ruth, *J. Biochem.*, 1935, **29**, 1424; Moore, C. R., and Price, D., *Endocrinology*, 1937, **21**, 313; Moore, C. R., and Price, D., *Anat. Rec.*, 1938, **71**, 59.

3 Moore, C. R., Lamar, Jule K., and Beck, Naomi, *J. A. M. A.*, 1938, **111**, 11; Moore, C. R., and Price, D., *Anat. Rec.*, 1938, **71**, 59.

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1 Emery, F. E., *Am. J. Physiol.*, 1935, **111**, 392.

2 Martin, G. J., and Gardner, R. E., *J. Biol. Chem.*, 1935, **111**, 193.