

like those in a normal adult ovary, with little atresia of the follicles or ova.

I found no indication of a mutual antagonism of the sex glands, as first stated by Steinach,³ but unconfirmed by Moore⁴ and others.

The formation of an ovariogonad, or an ovarian graft of any type, depends primarily upon the vascularization of the graft, but the development of the follicles of the graft depends upon the amount of the gonadal-stimulating hormone which is available to the ovary. Since the testis with its established circulation will utilize the hormone of the intact hypophysis of the host, additional hormone must be added by the glandular transplants to obtain the optimal follicular development in the grafted ovary. The uniform success of the earlier investigators in obtaining good follicular development in ovarian grafts in castrated animals is explained by the fact that the hormone of the normal, intact hypophysis of the animal will furnish sufficient stimulus to the follicle, provided that good vascularization of the graft has occurred. It is not implied that pituitary transplants have any influence on the primary vascularization of the grafts.

¹ Smith, P. E., *PROC. SOC. EXP. BIOL. AND MED.*, 1926, **xxiv**, 131.

² Smith, P. E., and Engle, E. T., *Am. J. Anat.*, **xxxiv**, No. 2.

³ Steinach, *Arch. f. Entw. Mech.*, 1916, **xlii**, 307.

⁴ Moore, C., *J. E. Z.*, 1921, **xxxiii**.

3704

Pregnancy Following Super-Ovulation in the Mouse.*

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The daily transplantation of the mammalian anterior pituitary into the adult albino mouse or rat results in the development of a greatly increased number of ovarian follicles,¹ and is followed by super-ovulation. The number of ova liberated by one ovary varies from 20 to 48, as determined by a study of serial sections of the uterine tubes.²

Daily intramuscular transplantations of 2 mouse pituitaries into adult female mice, beginning the first day of the dioestrus, resulted

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in mating within 12 hours after the second treatment. The animals were killed on the ninth or tenth day of pregnancy. The number of uterine implantations found on the ninth or tenth day was between 19 and 29. Recovery of normal fetuses at this time has not been constant, because of failure of fertilization or implantation in some cases. Another group of similarly treated animals will be permitted to go to term.

¹ Smith, P. E., *PROC. SOC. EXP. BIOL. AND MED.*, 1926, xxiv, 131.

² Smith, P. E., and Engle, E. T., *Am. J. Anat.*, xxxiv, No. 2.

3705

Glycogen of the Edible Mussel, *Mytilus Edulis*, L.

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Whether or not all glycogens are identical has been investigated repeatedly,¹ but no general agreement has been reached. The report by Samec and Isajevic² that dog-liver glycogen contains 0.721% P_2O_5 , suggests the possibility that the question of the identity of all glycogens may be solved by ascertaining their respective phosphorus contents. The purpose of the present investigation was to compare the phosphorus content of *Mytilus* glycogen with that of the glycogen examined by Samec and Isajevic.

Samec and Isajevic give no information concerning the method by which their glycogen was prepared. The *Mytilus* glycogen used in the present investigation was prepared by the method of Pflüger, as modified by Starkenstein and Henze.³ In addition, it was repeatedly precipitated from slightly acidulated solutions. Difficulties were encountered in filtration so that the material was unavoidably exposed for a long time to strong KOH. The glycogen finally obtained had a P_2O_5 content of 0.1168% as determined by the method of Embden and an ash content of 0.25%. It was white and contained iron, calcium and phosphorus.

Certain investigators have obtained glycogen free from ash. The attempt was, therefore, made to remove the ash of *Mytilus* glycogen by electro dialysis with ultrafiltration in a Bechold-König apparatus, using a 10% acetic acid-collodion solution for the membranes. Dialysis was continued until the readings of the ammeter connected with