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A Positive Friedman Test in a Case of Teratoma Testis with Gynecomastia.

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(Introduced by S. Goldschmidt.)

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Zondek,[1] Heidrich, Fels and Mathias[2] and Hady[3] have reported obtaining a positive Ascheim Zondek reaction in cases of chorionepithelioma testis.

Stimulated by these reports we have had the opportunity to study a case of testicular tumor admitted to the surgical ward of the University of Pennsylvania Hospital.

The patient, H. A., a white male, age 24, was admitted with a history of a firm mass the size of a golf ball in the right testis of two months duration. There was a slightly visible and definitely palpable intumescence and induration about 4 cm. in diameter under each areola of the breasts.

The right testicle and the distal end of the spermatic cord were removed at operation and a tumor 3 cm. in diameter involving the lower pole of the testis and infiltrating the seminiferous tubules was found.

Three months later, with no clinical evidence of the presence of metastasis of the tumor, a morning specimen of urine was obtained and 24 cc. of urine were injected intravenously into an isolated non-pregnant female rabbit according to the method described by Friedman and Lapham.[4] On sacrificing the rabbit several corpora lutea and corpora hemorrhagica were found in both ovaries resembling exactly the reaction obtained on injection of urine of pregnancy.

The pathological report by Dr. Joseph MacFarland on microscopic examination of the tissue after the test was teratoma of the testis.

In view of these results it is quite evident that this reaction may be of value in establishing a diagnosis of teratoma testis and also in the determination of the presence of metastatic tumor tissue of this character.

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[1] Zondek, B., *Chirugie*, 1930, **2**, 1072.

[2] Heidrich, L., E. Fels u. E. Mathias, *Beitrage zur Klin. Chirugie*, 1930, **150**, 349.

[3] Hady, *Zentralblatt für Gynäk.*, 1931, **55**, 912.

[4] Friedman, M. H., and Lapham, M. E., *Am. J. Obstet. and Gynecol.*, 1931, **21**, 405.

The determination of the nature of this reaction and its clinical value as an aid in diagnosis must await further study.

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Extirpation Experiments Upon the Pouch Young of Didelphis Virginiana.

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Extirpation experiments upon the embryonic forelimb of the rat demonstrating their inability to regenerate have been described.[1] In order to carry on this type of investigation with a more primitive animal the pouch young of the Virginia opossum, *Didelphis virginiana,* were subjected to a series of experiments to determine their capacity for regeneration.

The anesthetized female with new born young was stretched dorsicumbent on an operating table and the extremities fastened down. The pouch was held open by retraction and the pouch young[2] were operated upon with fine iridectomy scissors.

These preliminary operations were made in order to ascertain whether any particular locality was preferred for such treatment. Gross examination of these specimens after fixation in Bouin's fluid showed no signs of regeneration. In these experiments 1 to 5 digits or 1 foot from a posterior limb, or 1 posterior limb, or the tail were removed from a series of 16 animals. The specimens were killed and preserved at intervals from 33 to 315 days after the operation.

Unfortunately, due to the difficulties of maintaining the opossum in the laboratory, half of the experimental material was lost. Further work is planned using the young immediately at birth and, as before, confining the experiments to the posterior region of the body, which is less developed at the time of birth.

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[1] Nicholas, J. S., PROC. SOC. EXP. BIOL. AND MED., 1925, **23**, 436.

[2] Hartman, C. G., *J. Morph. and Physiol.*, 1928, **46**, 1. Hill, J. P., *Proc. Zool. Soc. London,* 1917, **24**, 337. Langworthy, O. R., *J. Comp. Neur.*, 1928, **46**, 201.