

The urine was examined daily for albumen, red blood cells and casts to study whether any damage was done to the kidneys. No evidence of any such damage was found during the month following the injections. In fact these findings improved along with an apparent improvement in the circulation.

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Effect of menotoxin on the viability of spermatozoa.

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Macht and Lubin have called attention first in these Proceedings and again in a more extensive publication appearing elsewhere to the remarkable phytopharmacological properties of menotoxin, the toxin present in the blood and other secretions of women at the beginning of menstruation. It was pointed out that while this toxin was extremely poisonous for plant protoplasm it was comparatively very little poisonous for animal tissues, although differences in toxicity between normal and menstrual blood for animals have been found. This difference between the phytopharmacological and zoöpharmacological actions of menotoxin were shown to hold for microscopic organisms as well. Thus menstrual serum was quite toxic for bacteria such as *B. coli* which are generally classed with plants on the one hand, and the same serum was but slightly toxic for trypanosomes which are more closely related to animals, such as the flagellates, on the other. In this connection it was interesting to inquire into the toxicity of menotoxin for spermatozoa.

Fresh and actively motile spermatozoa were obtained from men and the effect of various toxins was studied on the same in hanging drop preparations. It was found that menstrual serum was not more toxic for spermatazoa than normal serum. The authors made further studies on the effect of various chemicals which seem to be closely related to menotoxin. As has been pointed out by Macht and Lubin, menotoxin exhibits chemical

and pharmacological properties resembling oxysterol on the one hand, and the bile acids on the other hand. Experiments were made with emulsions of oxysterol in normal serum, with solutions of cholic acid and other closely related chemicals. It was found that neither oxysterol nor cholic acids had any marked toxic effect on spermatazoa. The results obtained with these various substances agreed with the findings in the case of menstrual serum and further substantiate the close relationship between the chemical nature of menotoxin on the one hand and oxysterol and cholic acid on the other hand.

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The effect of corpus luteum on behavior of rats.

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The effect of corpus luteum extracts were studied on the behavior of rats in the circular maze according to the methods described by the senior author elsewhere. Sixteen young adult, female rats were trained in the maze until they could solve the problem in the shortest period of time without committing any errors. They were then given injections subcutaneously or intramuscularly of "lutein", a protein-free extract of corpus luteum of the sow, prepared by Hynson, Westcott and Dunning. It was found that injections of doses varying from 0.2 to 0.5 cc. of lutein in the rats the average weight of which was about 150 gm. produce a distinct stimulation in their muscular activity and cerebro-spinal efficiency. This effect was noticeable 15 minutes after injection of the extracts and persisted for 24 hours. Injections of the corpus luteum in ovariectomized rats produced a similar stimulation in the behavior of the animals. A few experiments performed with injections of extracts of whole ovary yielded the same results. Further details to appear elsewhere. (Journal of Comparative Psychology).