

pituitary gland extracts, furthermore that Wiesner has demonstrated luteinization following injection of his placental extract. It is possible, therefore, that overdosage might in the end result in sterilization, due to excessive lutein formation. For this reason, any clinical trials must necessarily be carried on with the greatest caution.

6. The laboratory results reported in this preliminary communication are based on assay studies of 150 immature rats, as well as on 12 digestion experiments and 9 feeding experiments. Upwards of 500 microscopic preparations have been made and examined.

It is a great pleasure to acknowledge the kindly interest and co-operation of Prof. W. W. Chipman, and to thank him for placing the material of the Royal Victoria Maternity Hospital at our disposal. Our thanks are also due to Dr. S. Langevin and the Sisters of the Misericordia Hospital for kindly supplying material.

We wish especially to thank Dr. Wiesner for bringing the problem to this laboratory for investigation.

We also desire to acknowledge the most valuable technical assistance of Mr. M. McPhail, of Miss J. Williamson, and of Mr. A. A. Long. We are also indebted to Professor F. E. Lloyd for assistance with the photography.

## REFERENCES

1. ALLEN AND DOISY, *J. Am. M. Ass.* **81**: 819, 1923.
2. ASCHHEIM, S., AND ZONDEK, B., *Klin. Wchnschr.* **6**: 248, 1927; *Ibid.*, **6**: 1322, 1927; *Ibid.*, **7**: 8, 1928.
3. BROUHA AND SIMONNET, *Liège méd.* **20**: 679, 1927.
4. FELS, E., *Arch. f. Gyn.* **130**: 606, 1927.
5. FRANK, *The female sex hormone*, Charles C. Thomas, Springfield, Mass., 1929.
6. LOEWE, VOSS, AND PAAS, *Endokrinologie*, **1**: 323, 1928.
7. SIEGMUND, *Zentralbl. f. Gyn.* **52**: 1189, 1928.
8. SMITH, P. E., *Am. J. Physiol.* **81**: 20, 1927.
9. SMITH, P. E., AND ENGLE, *Am. J. Anat.* **40**: 159, 1927.
10. WIESNER, B. P., "Nature," March 31, 1929. Personal communication.
11. ZONDEK, B., AND ASCHHEIM, S., *Arch. f. Gyn.* **130**: 1, 1927; *Ibid.*, *Klin. Wchnschr.* **7**: 831, 1928.

## ON THE CLINICAL USE OF THE OVARY-STIMULATING HORMONE OF THE PLACENTA

### PRELIMINARY REPORT

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SINCE it has been shown\* that the "ovary-stimulating hormone of the placenta" has a specific effect in activating the ovary of the immature rodent, it has been deemed advisable also to carry out clinical experiments with this substance. These experiments obviously demanded great caution, and every care was taken in carrying them out.

Selected cases of ovarian hypofunction were therefore placed under treatment by oral administration of the extract. At first a very small dose was given, but it was soon discovered that the dosage could be greatly increased.

It is too early to make a definite pronouncement upon the value of this treatment, for numerous clinical factors have yet to be considered, as well as the question of dosage and duration of

administration. It may be said, however, that definite results of a most encouraging character have been obtained in five cases of oligo-menorrhœa, in two cases manifesting distressing menopausal symptoms, and in two cases of dysmenorrhœa.

The following case reports are submitted from this series.

#### CASE 1

A girl, unmarried, Canadian, aged 17, who complained of amenorrhœa for three years.

*Personal history.*—Menstruation had begun at the age of 14, appearing as a slight "spotting" on two occasions within the first year, at intervals of four months. For the past two years she had had so-called nocturnal epilepsy, but there had been no headache, no symptoms of indigestion or constipation, no pelvic pain, and no leucorrhœa.

*General examination.*—She was of an exceedingly well developed athletic type. The integumentary and glandular systems were negative. The general distribu-

\* See this issue, page 215.