THE CONTROL OF THE DISAGREEABLE SYMPTOMS OF THE SURGICAL MENOPAUSE BY THE HYPODERMIC INTRAMUSCULAR ADMINISTRATION OF CORPUS LUTEUM EXTRACT. A PRELIMINARY REPORT.

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CORPUS luteum extract in tablet form has been in use for a considerable time, and I have used it with varying success in the treatment of scanty menstruation, and the menopause both natural and surgical. I find that in this form, large doses are required, and that in many cases nausea has resulted, which necessitated the discontinuance of administration. In sufficient doses it is also an expensive remedy. In the surgical menopause my results with mouth administration have been distinctly disappointing. With many misgivings as to success, I tried corpus luteum extract intramuscularly by hypodermic with gratifying results, as the following cases will show:

CASE I.—Miss S., forty-one years old. Hysterectomy, supravaginal, for a fibroid of the uterus, with profuse bleeding. Operation done October, 1914. Symptoms of surgical menopause were severe, especially the hot flashes and intense nervousness. Gave bromides in large and small doses; corpus luteum tablets by mouth (working up to fifteen tablets a day) with only slight amelioration of symptoms. The corpus luteum tablets had to be discontinued on account of nausea. In August, 1915, when symptoms had considerably diminished but were still severe enough to cause much discomfort, began the hypodermic (intramuscular) administration of corpus luteum extract. Hypodermics were given at first daily (20 milligrams) equivalent to 15 grains. After eighteen doses, it was given every other day for four weeks. Then bi-weekly until the end of November since which time none have been needed. The disagreeable features (flashes of heat, etc.) began to improve rapidly after about six doses had been given, and since November, patient has reported every two weeks. She does not feel the need for any further injections, and is practically free from symptoms. There was no nausea from the hypodermic corpus luteum.

CASE II.—Mrs. C., aged forty-three. Large fibroid, reaching



three fingers above umbilicus. Supravaginal hysterectomy March, 1915. Severe flashes of heat and excessive nervousness. Hypodermics of corpus luteum begun in late September, 1915, patient having been away from city all summer. When begun they were given daily for three weeks. Then patient became irregular in attendance because she was much more comfortable. Intervals were irregular and since December 30 she has refused any more. Flashes of heat still present but negligible. Nervousness still extreme, but patient expresses herself comfortable, and has not shown

any tendency to retrogress. Total doses thirty-two.

CASE III.—Mrs. L., aged forty-three. Supravaginal hysterectomy for moderate sized fibroid of uterus. Flashes of heat began within forty-eight hours of operation. Delayed administration of corpus luteum extract until eighth day, by which time the symptoms of menopause were well established. Two doses daily for twenty-four doses and stopped to watch the effect. The flashes of heat had almost disappeared, and the nervousness was decreased by about 50 per cent. Within a few days the flashes of heat reappeared, but moderately, and the patient was not sufficiently inconvenienced to demand further treatment. Arrangements were made to continue the hypodermics at her home, should they be required. She has had none for one month, and describes herself as sufficiently comfortable not to require them. She has as yet shown no symptoms of retrogression.

CASE IV.—Miss H., aged thirty-five. Supravaginal hysterectomy for fairly large fibroid. Administration delayed as in Case III for eight days. Then, as symptoms were marked, two doses daily for twenty-four doses. Then stopped to watch effect. Within three days, developed grippe and then pneumonia complicated later by lung abscess. Was exceedingly ill for four or five weeks and no further corpus luteum medication attempted. She was much improved while the treatment lasted, but has since relapsed and is considerably bothered by the hot flashes. Treatment will be continued as soon as her condition permits.

CASE V.—Mrs. K., aged thirty-nine years. Large fibroid. Supravaginal hysterectomy. Corpus luteum hypodermically started the evening of the day of operation. Two doses a day. So far (ten days after operation) the flashes of heat and other symptoms of the menopause have not appeared. She is still under treatment

and her case will be included in a later report.

The number of cases treated thus far is too small to draw conclusions from. I am encouraged to hope, however, that more extensive trial will demonstrate that unpleasant symptoms of the surgical menopause can be controlled, and even prevented from appearing, except in a diminished degree, by the hypodermic use of corpus luteum extract. The correct dosage is a matter for further study; I believe the doses I have been using can with benefit be greatly increased. I also believe that experience will show the effect to be cumulative, and that the interval between doses can be gradually lengthened and then the use discontinued, without a



return to the previous symptoms. Just how long a period of dosage will be required I am not yet able to state, as this must be concluded from further trial. There have been no unpleasant reactions from the dosage at present employed, and I would not look for any even from much larger doses.

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