Selected Articles.

TREATMENT OF GONORRHEA IN THE FEMALE.*

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The object of the treatment is to remove promptly and often the secretion from the mucous membranes and destroy the gonococci in the locality. The first aim is obtained by repeated and prolonged irrigations with antiseptic solutions; the second, by applications of remedies capable of causing a superficial necrosis of the epithelium, thereby reaching the gonococci which enter into the epithelial cells and find their way to the subepithelium layers of the mucous membrane. In regard to the first method, irrigations are made with solutions of bichloride of mercury, 1 to 5,000, or with permanganate of potassium, 1 to 5,000. These irrigations are easily applied to the external genitalia, to the vagina, and to the vaginal portion of the cervix. With an ordinary fountain-syringe the woman can herself take the douches with one of these solutions twice a day. These will remove the mucopurulent secretion, will diminish the inflammation, but of course will not help the urethra nor the condition of the uterus. Every two or three days I insert a bivalve speculum, and with a solution of permanganate of potassium, 1 to 5,000, thoroughly irrigate the vagina; then with small tampons of cotton the secretion from the cervix is carefully removed. When abundant discharge is flowing from the cervical canal I insert a Talley or Haynes douche-tube in the cervix as far as the internal os, and with a mild stream of the same solution the cervical canal is washed. When symptoms of urethritis are present the urethra is also · irrigated with the same permanganate solution. This is also done by means of a short recurrent catheter. I do not find it useful to fill up the female bladder as in the male by the Janet method. The sphincter of the bladder in the female offers a great resistance to the passage of the fluid, and a forced injection into the urethra is accompanied by pain. The fluid is carried into the bladder only with difficulty. For this reason I prefer to introduce a recurrent catheter any time I have to irrigate a female urethra and the bladder. Under ordinary circumstances I seldom make use of irrigation to the cavity of the uterus unless the discharge is very profuse. Ordinarily I use instillations with a 1 per cent. solution of protargol.

The most effective antigonorrheal remedies so far known are

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ichthyol and the silver preparations. Ichthyol has a beneficial action, especially in cases of acute gonorrhea in the female, and in my clinics every case of acute vaginitis and vulvitis easily yields to a few applications of tampons dipped in a preparation of ichthyol and glycerin, equal parts. In the subscute and chronic cases, however, the silver preparations are much more desirable. Nitrate of silver in substance, in a thin, flexible rod, so much used in the past years to cauterize the cervical canal, has been nearly discarded in ordinary cases. I reserve this cauterization for cases in which granulations are to be destroyed. In the same way I use strong solutions of the same salt only when the cervix shows excoriations with granulations. Protargol I have found so far to be the best antigonorrheal remedy, and since the time I introduced it in my clinic I have many times spared the patient a curettement of the uterus. · Protargol has been used in from 1 to 3 per cent. solution as a urethral injection in cases of urethritis, as an injection into the ducts of the Bartholinian glands when affected, and especially in endocervicitis and endometritis. One of the instruments already referred to, the Talley or the Haynes double tube, has been introduced very gently into the cavity of the womb, care being taken to fill the tube with the fluid before introduction, otherwise some air is carried into the cavity. The instrument being in place, the fluid is pushed out of the syringe very slowly, drop by drop. I leave the catheter in for a short time so as to give the fluid a chance to flow back. Without this precaution, if some of the fluid remains in the body of the uterus, the woman may suffer from cramps and uterine colic. After removing the catheter a tampon is introduced to maintain the fluid in contact with the cervix.

The instillation of protargol into the uterus causes only a sense of heat in the hypogastrium, which lasts about half an hour. From this treatment the results have been exceedingly gratifying. Five to ten applications have been sufficient to bring the womb to its normal condition. Protargol in the beginning increases the discharge, which gradually diminishes, and is reduced to a thin crystalline mucus. As soon as the genococci have disappeared from the secretion, the instillations with protargol are discontinued, and the woman uses douches of a mild solution of permanganate of potassium or of bicloride of sodium.

So far I cannot agree with Calmann on the superiority of formalin in this treatment, and I find that protargol is safer and more effective in subacute and chronic cases of gonorrheal endometritis. During treatment it is of great importance to watch the menstrual periods. While the woman improves, her menses return to the normal condition, and the accompanying

pains gradually disappear, yet after the menstruation some mucous secretion passes from the uterus. This secretion must be carefully examined for the gonococci. If gonorrheal germs still remain in the glands or in the folds of the mucous membrane of the uterus, with the presence of the blood, with the menstrual hyperemia, it seems that they take on more vitality, and are to be found again in the mucus. For this reason, before discharging a patient as cured, it is best to wait until her menstrual period occurs, and then to examine the secretion.

I must add a few remarks on the curettement of the uterus in chronic gonorrheal endometritis, which has been resorted to as the only and last treatment. This operation should not be performed in cases in which the inflammatory process is still active. It increases the inflammation, and often is the cause of the spreading of the gonorrheal process to the tubes and In chronic cases for several years I have found curettement to be the only remedy for chronic gonorrheal endometritis. From my hospital records I find that in 1895 I curetted in 14 cases, in 1896 in 30 cases, and in 1897 in 50 After I began to use the treatment of instillation of protargol in 1898, I curetted in 6 cases, and in 1899 to the present month, only in 2 cases. This shows clearly the beneficial effect of this treatment, and I am gratified to state that in our ward in the last two years no complications have arisen in connection with the tubes, the ovaries or the peritoneum. During the treatment one must not forget the general condition of the woman. Constipation is often present, and for this I advise her to take half a glass of a mild purgative mineral water, with preference for apenta, which corresponds very well to the indication. At the same time the hypohemic condition must be altered by the administration of a mild ferruginous preparation.

Before concluding I must remind you that gonorrhea sometimes complicates pregnancy and the puerperium. Acute gonorrhea affecting the endometrium of the pregnant uterus is the cause of abortion. In chronic cases, however, pregnancy progresses without any trouble. In these cases the woman will irrigate the vagina with a mild solution of permanganate at a pleasant temperature, but the cervix and uterus cannot be treated directly with injections or with cauterizing agents, as they would without doubt cause miscarriage. At the same time rest should be recommended in order to spare the womb shocks, which might result dangerously. After childbirth chronic gonorrhea of the cervix may spread to the endometrium and cause subacute endometritis, which is accompanied by severe pain, and a copious discharge of seropurulent secretion, which, mixed with the lochia, may give an idea of a septic condition.

Differentiation, however, is easily made between gonorrheal endometritis and septic endometritis by the temperature curve which in gonorrhea is mild or absent and in the septic endometritis is very high and by the odor of the lochia which in the gonorrheal condition have no offensive smell, but which in septic endometritis have a nauseous, unbearable odor. It is unnecessary to say that a woman must be kept in bed in a state of absolute rest. Morphin must be administered to relieve the pain. Hot applications to the hypogastrium have a beneficial effect. Warm irrigations with antiseptic solutions to wash out the vagina and remove the secretions should be carried out. Stronger applications are reserved until after the puerperal period is over.

Gonorrhea is not difficult to cure when every affected organ is treated. The trouble is in the possibility of reinfection. For this reason one should recommend, especially to a married couple, when both have suffered from gonorrhea, the use of a

condom for a long time, until both are completely cured.