

*Treatment of Gonorrhœa in the Female.* By JOHN J. BLACK, M. D., one of the Resident Physicians to the Philadelphia Hospital, Blockley.

THE following is a *résumé* of the treatment and its results as practised in one hundred and seven cases of gonorrhœa in the female during the

past winter. In many patients the mucous membrane of the upper part of the vagina was involved, as well as its reflections over the neck of the uterus. In no instance was there any great constitutional disturbance from implication of the pelvic viscera, although in some cases where the patients had neglected to place themselves under proper treatment at an early day, the cavity of the neck of the uterus appeared to be affected with subacute inflammation, doubtless a result of the prior trouble. All cases were examined by the speculum at the first visit, the size of which was regulated by the amount of inflammation present. Although many authorities reprobate the use of this instrument in the inflammatory state, our experience with it here is most satisfactory, as we are thus enabled to make a thorough examination and obtain a full view of the parts implicated. Using, as we do in these cases, the smallest size glass instrument, well oiled, and introduced with gentleness, it gives the patient very little inconvenience.

In regard to the management of gonorrhœa, we acknowledge but one rational plan of treatment; we regard it as an inflammation, and treat it as such, whether in man or in woman. If the inflammation be very acute, we give antimonial mixtures, with some soporific if required; decrease the diet, and make applications of lead-water and laudanum, or a large flaxseed poultice over the external genitals. At the same time we generally order injections of water, of a temperature best suited to the feelings of the patient, medicated with a little extract of opium, to be used every three or four hours. This plan of conforming the temperature of all applications to inflamed surfaces to the sensations of the patient we have found to be of the greatest importance, especially in these cases, and productive of the greatest benefit. Under this treatment, generally in from twenty-four to forty-eight hours, the tumefaction and redness subside, and the patients express themselves as much relieved. In twenty-four hours more, the local inflammation subsiding, we commence with astringents and other such remedies. Now come the important questions: In what form shall we apply these remedies? Of what strength shall we use them? And what advantage does any one possess over another? First, as to the form. After a short trial of injections, we abandoned them in this stage of the disease. Their application was more or less annoying to the patients, and if trusted to themselves they were imperfectly applied or neglected altogether. The application of ointments spread upon cloth we found more efficacious than injections. The citrine or red oxide, or comp. iodine ointments, diluted from four to seven times with lard, were found to be among the best. Far preferable to either of the former methods is packing the vagina with strips of patent lint or soft cotton cloth, five inches long by two inches wide, soaked in a solution of the required salt. We found those cases to do best where the vagina was packed moderately full, care being taken not to interfere with the urethra. This packing was allowed to remain twenty-four hours, and the patients appeared to suffer little or no inconvenience. The great advan-

tage gained by this method is the keeping the walls of the vagina entirely separated. Of course this dressing must always be applied by the medical attendant, and always with the speculum. One great objection to it, as well as to injections, is that they both more or less soil the clothes from the contact of the remedies used; unfortunately the best remedies leaving the most indelible stains. In view of the objections to these remedies, after a little thought, we were led to use vaginal suppositories, made of some mild substance as a vehicle.

The result has more than equalled our anticipations. The vehicle being bland and soothing, the patient experiences no unpleasant sensation from the presence of the suppositories. The ease of their application is one of their greatest recommendations, the patient being able and willing to apply them herself; whereas they cannot or will not apply the cloth packing so as to be productive of any real benefit. By their use the frequent introduction of the speculum is avoided, which is a great relief to the patient. We have found them to be equally available for the application of remedies to the vagina and os uteri in non-specific discharges.

We herewith present several formulæ, which we have used very extensively and with great satisfaction.

R.—Ol. theobromæ, ℥xij; morphiæ sulphatis, gr. vj; liq. ferri persulph., gtt. cxliv; cerat. adipis, ℥iijss. M. et fiant suppositoria xij.

R.—Aluminis pulv., ℥iij; acid. tannici, ℥ij; ext. opii, gr. xij; ol. theobromæ, ℥xij; cerat. adipis, ℥x. M. et fiant suppositoria xij.

R.—Ol. theobromæ, ℥xij; ungt. iodinii comp., ℥vj; morphiæ acetatis, gr. vj. M. et fiant suppositoria xij.

R.—Ol. theobromæ, ℥xij; morphiæ acetatis, gr. vj; unguent. hydrarg. nitratis, ℥v. M. et fiant suppositoria xij.

R.—Ol. theobromæ, ℥x; morphiæ acetatis, gr. vj; ol. copaibæ, gtt. cxliv; cerat. adipis, ℥viiij; acaciæ pulv. q. s. M. et fiant suppositoria xij.

The favourable action of the local application of copaiba is contrary to what has generally hitherto been reported concerning it.

R.—Ol. theobromæ, ℥xij; morphiæ acetatis, gr. vj; liq. zinci chlor., gtt. cxx; cerat. adipis, ℥x. M. et fiant suppositoria xij.

We also tried the oil of turpentine by this method, but it appeared to exert no influence over the disease. Bromine was also tried, but its volatile nature prevented its use in this manner. We selected a number of cases as nearly alike as possible for this suppository treatment; all the cases being recent. The average number of days required for the cure was as follows: Liq. ferri persulph., nine days; alum, tannic acid, etc., nine and one-half days; ol. copaibæ, twelve days; comp. iodine ointment, thirteen days; citrine ointment, fourteen days; chloride of zinc, nineteen days.

The suppositories were not applied during the menstrual period, but that time was deducted in the average. I think they might be used during the

menstrual period, and thus possess an additional advantage in not causing a suspension of treatment during that time.

These cases were all thoroughly cured, having been examined ten days after treatment ceased, and found to be well.

We generally ordered one suppository to be inserted every other day, having found by repeated examination that the action of each continued at least that length of time, especially those of the iron, and those of the tannic acid and alum.

Then, to sum up: We claim for the treatment of gonorrhœa in the female by vaginal suppositories the following advantages:—

1. Efficiency equal to, if not greater than, other remedies. 2. Cleanliness. 3. Portability. 4. Ease of application. 5. Soothing properties, while rags and the like irritate. 6. Frequent application of speculum avoided. 7. Their presence not disagreeable. 8. They can be used at all times.

In regard to the strength of the remedies used, our experience with the suppository treatment has demonstrated that the combinations and proportions used in the accompanying formulæ are entirely satisfactory.

As to solutions for packing the vagina, we used them chiefly of three different strengths: gr. iij ad ℥j; gr. v ad ℥j; and gr. x ad ℥j; and altogether obtained much the best results from the three and five grain solutions. Even if the case was old and the parts almost destitute of sensibility, we still found, in the great majority of these cases, that the strong solutions were inferior to the weaker. Now and then we found one of those chronic cases, which we could overwhelm with a strong dose, but generally they proved irritating and rendered the patients uncomfortable for a time, whereas the milder proportions in like cases steadily and rapidly effected a cure. If we wished an immediate and positive impression, we now and then pencilled the walls of the vagina and cervix uteri lightly with solid nitrate of silver, and then kept the walls apart by inserting a strip of cotton cloth. We do not think that even this procedure had any advantages over milder and less unpleasant applications. In gonorrhœa within the cervix uteri we always used the solid stick of nitrate of silver, and with good results, as the membrane here seemed far less sensitive than that outside. Where the gonorrhœa extended into the urethra, which was rare, we generally injected a three or five grain solution of persulphate of iron or nitrate of silver with most satisfactory results. Now in regard to the remedies used, they were numerous, and each submitted to a fair and impartial trial:—

Persulphate of iron; nitrate of silver; permanganate of potassa; sulphate of copper; sulphate of zinc; acetate of zinc; tincture of iodine; and chloride of zinc.

We were pleased with the results from the persulphate of iron above all others, acting, as it did, as a powerful astringent and stimulant. From three to five grains to the ounce of water is the best proportion in which to use this salt. Next we preferred the nitrate of silver in the same propor-

tions. Next to the nitrate of silver we obtained the best results from the sulphate of copper, seldom using it over five grains to the ounce of water. Next comes the sulphate of zinc. Next the acetate and chloride of zinc, in about the same proportions, using for the latter the liq. zinci chlor., from three to six drops to the ounce of distilled water. From the tincture of iodine we did not receive very favourable results. Diluted one-half, as recommended by some, it proved very irritating, and produced excoriation of the parts. Still more diluted, its action was far inferior to any of the above mentioned remedies.

From the foregoing observations, then, we conclude, that in treating gonorrhœa in the female (and our experience is the same in non-specific inflammations of the vaginal mucous membrane), the milder remedies are superior to the stronger, whether the trouble be of longer or shorter duration. The comfort of the patient is more surely maintained; the disease more rapidly advances toward a cure, and the parts are sooner returned to their normal sensibility.

As not altogether foreign to the subject we wish to make known here the very favourable results obtained by us from the application of bromine as a caustic to chancre. It was applied thoroughly by means of a pine stick or glass rod to the sores, and then covered with an oiled rag for a few hours, and afterward treated, generally, by what we prefer in these cases, the common black wash with extract of opium added. In a short time the slough comes away, and leaves a beautiful healthy granulating surface. It does its work thoroughly and efficiently, whether the chancre be hard or soft, and in the phagedenic chancre we found nothing whatever to approach it in effectiveness. One application was generally sufficient, and its virtue seems to rest in its great destructive power, which causes it to clear away at once the unhealthy tissue, which act it takes several applications of most of the popular remedies to perform.