ON THE TREATMENT OF GONORRHOEAL AND MIXED INFECTIONS OF THE FEMALE GENITAL TRACT BY LACTIC ACID BACILLI.

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GREAT diversity of opinion and of practice exists as to the most effective method of treating septic infections of the female genital tract. The objective of the most thorough is the sterilization of the whole tract. Others, recognizing the impossibility of completely destroying the infection, go as far in the same direction as they think they can without risk of forcing the disease into higher channels than are already involved. Thus, for an acute gonorrhoea one authority recommends an immediate dilatation of the cervix under an anaesthetic, curetting and tamponage with gauze saturated with antiseptic, and an equally drastic treatment of the urethra. Others, fearing to infect the tubes and bladder, content themselves with vaginal and cervical swabbing and sitz baths.

I think most observers will admit that the result of all treatment is merely a mitigation of symptoms until the patient has acquired immunity and further extension of the disease stops, leaving, however, more or less vaginal discharge, probably infective if transferred to a fresh soil.

The treatment at the Glasgow Lock Hospital has been varied from time to time within recent years in the attempt to dismiss the cases within the shortest period completely free of cervical or vaginal discharge. Douching with different antiseptics was at one time largely employed. Later, vaginal swabbing, cauterization of the cervix, and, when the internal os was patent, curetting and cauterizing the uterus followed by careful drying of the whole tract, was the treatment most favoured.

I do not propose to enter here into the details of the antiseptic treatment nor to discuss the relative merits of the various antiseptics and astringents we have tried. The result, whatever method or combination of methods was employed, was on the whole disappointing, both as regards the length of time required for treatment and the permanent disappearance of the discharge.

Some months ago it occurred to me that the antiseptic treatment, while inefficiently dealing with the pathological micro-organisms, had effectively exterminated the natural flora of the vagina and thus weakened its resisting and recuperative powers. The acid-forming bacillus of Doderlein being the accredited protector of the vagina, the lactic acid bacillus now so readily obtainable suggested itself as a suitable substitute, and the result of its use has justified my expectations.

The preparation I am now using is obtained by filtering "Sauerkultur" made from skimmed milk by the Glasgow Dairy Company. Filtering separates the casein and leaves a slightly opalescent whey containing lactic acid bacilli in large numbers as well as lactose, lactalbumin, and salts. The solution can be strengthened by the addition of sugar of milk, and if desired a powdered tablet of lactic acid bacilli.

After a thorough disinfection of the parts (including curetting when necessary) all excess of disinfectant is removed and the lactic fluid introduced into the vagina.

The first effect of the treatment may be an increase in the amount of discharge, which, however, is completely altered in character. The purulent appearance ceases, and the discharge is white and thin. This is removed daily by gentle swabbing with dry wool through a speculum. In the most favourable cases the secretions are normal in a few days. In other cases the treatment is repeated weekly until cure is complete, usually in two to three weeks. Even cases in which the tubes are involved seem to benefit by the treatment, and can be discharged from hospital earlier than used to obtain.

Apart from lock hospital work many cases are met with at a gynaecological out-patient department, and also in general practice where treatment is called for on account of a purulent vaginal discharge. In my experience the majority of such cases respond excellently to the above method of treatment. As regards the use of lactic acid bacilli for urethral discharge in the male, I have not had

the opportunity of sufficient tests, but in two cases remarkable results were obtained.

In this preliminary notice I am unable to give extended statistics or to refer to the bacteriological examination of cases before and after treatment, but I may say that what has been done in this direction corroborates the clinical finding. For instance, the normal number of inmates of the Lock Hospital was formerly from fifty to sixty. Now there are from thirty to forty in hospital, and this number will be further reduced as we eliminate those kept unnecessarily long for observation purposes and control cases not receiving this treatment.

A CASE PRESENTING THE EARLY SYMPTOMS OF GENERAL PARALYSIS, WITH RECOVERY UNDER SOAMIN.

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THE following case exhibited some remarkable features. The history and early symptoms foreboded a sad termination in paralytic dementia; but happily for the patient and his relations he made a good recovery. General paralysis of the insane occurs so infrequently in medical practice that the opportunity for repeating the treatment adopted in this case may not present itself again for many years. This must be my apology for drawing attention to a single case. I hope that others may be induced to give the treatment a trial.

On June 23rd last I was summoned to see Mr. X., aged 53, married, the father of seven healthy children. He had landed from South Africa on the previous day, having travelled by himself. He was head of a large department which had a great deal of clerical work. In the beginning of 1908 the staff was reduced from thirteen to five. Being over-zealous to keep abreast of his work, he "was at it till eleven o'clock at night and all day Sunday," with the result that his health broke down. About September, 1908, it was remarked that his manner began to alter; he suffered from headaches and became irritable. He used to be devoted to his family and very hospitable; his children now worried him, and he did not want to see visitors. He also looked ill. In his business transactions he got very forgetful and gave wrong orders, which brought his condition to the notice of those in authority. In the beginning of April, 1909, he was ordered to go up country for three weeks' rest. There was very little improvement in his condition on his return, so that he was, on the advice of his doctor, given leave to take a voyage home.

He looked sallow; his hair was very grey, the conjunctivae were muddy. He stooped very much. He had passed a very restless night; a sister had to sit at his bedside, because when he awoke he was in great distress at finding himself alone. This was a feature of his complaint until well on towards recovery. There was amnesia; he did not remember the names of his sisters, although he had been at home six years before, and he said to his mother, "You have some daughters married?" (one had been married about twenty years). He had forgotten the names of his own children. His speech was slow and indistinct. The tongue was furred; the pulse 84, soft and irregular; the temperature 98.4° F. There were marked fibrillar tremblings of the lips and tongue; the pupils reacted sluggishly; the knee-jerks were exaggerated. During the voyage he had been very constipated, and now suffered from external piles. At times he had pains in the abdomen, the stomach was greatly distended with gas. I prescribed for him a mixture of sodium hypophosphite, lacto-peptine, acid, nitric. dil., and liquor strychninae, and an ointment of oleate of zinc and opium.

The gastric and intestinal troubles improved rapidly, as the result, probably, of careful dieting and the administration of salines in the morning when necessary. His physical state was now fairly satisfactory; the pulse and temperature were normal, the tongue clean, and the bowels regular. He used to be very fond of outdoor games, and was recommended to be in the open air as much as possible. He played croquet when the weather permitted, and took occasional walks, but he could not go far without fatigue, and was so timorous that he could with difficulty be persuaded to go into the public streets. He accompanied me one day on my rounds in the motor car, but he appeared to be in perpetual dread of meeting or passing other vehicles, pointing them out when a long way off; he slept very badly that night. About a fortnight after his return an old friend called to see him, but he told his sister that he wished that gentleman had not come; there was a good deal of singing of old songs and piano-playing that evening, in which the patient tried to join, but he hardly slept all night, and was so fidgety next morning that he began to eat his porridge with a knife. He was very keen over the games of croquet, which he was allowed to win, and was greatly elated over his victories. His natural temperament was one of exceptional amiability and gentlemanliness. At this