Lectures

ON

DISEASES OF THE MALE URETHRA.

BY

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LECTURE II.

DIAGNOSIS.

In the study of urethritis the most important thing of all is accurate diagnosis—first as to whether a patient has the disease or not; secondly, if he has the disease, the stage of the disease—namely, acute anterior, acute posterior, or chronic urethritis; finally, if the disease is in the chronic stage, the accurate diagnosis as to where the disease is lurking, in what glands, or beneath what portion of the mucous membrane.

Why is accurate diagnosis so important? In the first place, many a man comes to me who affirms that he has gonorrhoea and his doctor affirms the same. Yet when I come to examine his urethra by accurate methods, I find he has no signs of disease whatever. Secondly, many a man comes to me passed as cured by his doctor when in reality he is not cured at all. These are the men who spread the disease broadcast. Again, many and varied are the short cuts to cure published every year. Yet if you will analyse carefully the papers written on the subject, you will find that many of those who publish these short cuts have no accurate standard of cure. They publish as "cures" large numbers of cases which are in reality by no means cures. These "cures," fortified by the assurance of their healers, launch forth afresh and infect other women, and so the disease goes round.

Practitioners are persuaded to trust these new methods when in reality the methods may not be curing but merely rendering the disease latent. It is so easy to render the disease latent and to persuade yourself you have obtained "a cure."

Again, take the question of marriage. How disastrous to let a man get married to a healthy woman unless you really can say that he is free from disease!

Inced labour this point of accurate diagnosis no longer. Enough has been said to show the extreme impor-

tance of an accurate standard of diagnosis as to whether the disease is present at all, and if so in what stage and to what extent.

Now I am open to criticism of my treatment. Many may say it takes too long and may wish to shorten it, but I am convinced that my methods of diagnosis as to cure are extremely accurate. When by my methods I say that a man is not cured I am willing to swear to it, and so for the converse. No one, then, should embark on trials of

a new treatment until he has first been thoroughly trained in accurate diagnosis, and until he realizes how easy it is to get rid of urethral discharge and obtain an apparent cure.

I propose, therefore, to start this lecture by describing my method of tackling a case of chronic gonorrhoea or gleet and of establishing the diagnosis. I will then describe my method of tackling an early acute purulent case. Note at once that the two methods of approach are poles asunder.

I. DIAGNOSIS OF A CASE OF CHRONIC GONORRHOEA OR GLEET.

First Step.

We will suppose that the man has held water for some hours. He will probably complain of no discharge, but will state that the lips of the meatus are stuck together, and that he notes threads in the urine, or a gleet discharge on rising from bed.

Strip the urethra, collect any discharge that can be obtained, and spread it out on several slides. Note that many a man has gonorrhoea from whom not a trace of discharge can be obtained. Fix and stain the films appropriately, and examine for pus cells and gonococci. If only pus cells are present the man is suspect, though the case is not proven. This is the easiest and simplest proposition. But the man may have no obvious discharge, so that further investigation is needed.

Second Step.

Let the man pass urine into two glasses. The urine may be hazy with pus—that is to say, the haze does not disappear when acetic acid is added to the first glass, and becomes ropy if potassium hydrate is added to the second glass. This proves that a deep urethritis or a cystitis is present. Note here that if a man is taking sandal oil, then his urine may be hazy with fat droplets. This point will be dealt with later. If the urine is clear, but contains threads, the man is suspect. Place a thread under the microscope. If it contains a large number of pus cells the man is almost certainly infectious. The urine may be clear and contain no threads. Even so the man may be infectious, as can be proved by the third step.

Third Step.

Ask the patient to kneel on a couch. Cover the right index finger with a rubber finger-stall. Insert the finger into the rectum, and proceed very gently to massage the prostate in the manner to be described later (Fig. 2). After a minute or so several drops of opalescent

FIG. 2.—Directions in which to massage the prostate.

FIG. 3.—Prostatic fluid. A, Healthy; B, purulent.

fluid will drip from the meatus. Collect a drop on a slide, spread out and stain with borax, methylene blue, or carbolfuchsin. Examine under a microscope. Healthy prostatic fluid consists of masses of amorphous bodies of varying sizes staining a deep blue. These masses are "lecithin bodies" or droplets of fat, prostatic fluid being an emulsion of fat, or, in other words, a lubricating fluid. A few epithelial cells are seen, but no pus cells. If the contents of the vesicles are also expressed, large pale blue discs of

vesicular secretion are seen, and sometimes large numbers of spermatozoa. If pus cells are also detected you can be certain that the man is suffering from prostatitis (Fig. 3). If many pus cells are present, you can be sure the disease is still infective, even though you fail to detect gonococci. If only a few pus cells are present the help of a clinical pathologist is needed, and the fluid should be examined by him on several occasions. Such examinations should include differential stainings and cultural methods. The clinical pathologist will state if gonococci are still present. If so, the man is not cured. If absent on several examinations other bacteria will probably be detected, such as staphylococci, streptococci, or bacilli of the colon group. These are generally caused by secondary infection, and are not contagious to a woman.

Fourth Step.

Suppose the man has passed all these tests satisfactorily, you have still to examine the urethra with the urethroscope.

No man should be passed as cured unless he has undergone this method of examination.

When I note a man writing or teaching that the urethroscope is of no use, then I know that he has not tried sufficiently hard to train himself in the use of this instrument—a task that requires much patient perseverance—and I know that his published results cannot be trusted.

With the urethroscope it is possible to detect the presence of common lesions such as infected glands of Littre, soft submucous infiltrations, fibrous strictures, and rarities such as warts, polypi, pouches, and so forth. In many cases that are constantly relapsing the cause is at once detected as a suppurating gland of Littre which can be destroyed through the urethroscope, and the case is at once cured, or it may be found as a soft stricture which needs dilatation.

Once more I wish to emphasize the fact that it is no good sending a man away labelled "cured" when you have not used the urethroscope, as you may be sending him away with an early soft stricture, which in this early stage can rapidly be cured by dilatation, but which later on may become hard, fibrous, and perhaps incurable. This is one of the most important reasons why it is impossible for a bacteriologist to treat urethritis by vaccines alone in his laboratory. Even if he stops the discharge he has not done his duty by his patient if he has not excluded stricture with the urethroscope.

Fifth Step.

Finally, if there still remains any doubt, all treatment is discontinued and the patient is asked to take alcohol daily for a week or a fortnight. At the end of this time he is again put through the tests. Alcohol increases the signs of inflammation if disease is present.

When Doubt as to Case Still Remains.

After this series of tests we can usually say that the man is or is not cured. But in a small number of cases there is still doubt. These cases occur in men who have ridden hard a horse or a bicycle or who have undergone long treatment at the hands of those who are not versed in the antiseptic ritual of urethral instrumentation. In such cases there is a persistent glycerine-like or milky gleet, not increased by alcohol, and the prostatic fluid shows a fair number of pus cells. Yet prolonged treatment does not appear to benefit the condition but rather to aggravate it. In such cases also the urine may show a most persistent haze consisting of bacteria and a few pus cells, or the urine may be clear and contain light floating threads.

In such cases at least three complete tests must be made, a clinical pathologist being present, who should take cultures and films of all the various secretions above described, the man being on alcohol. If all these tests are negative for gonococci, and show simply the presence of staphylococci or streptococci or bacilli, then the patient can be passed as cured of his gonorrhoea, can be allowed to marry, and should discontinue all treatment. Treatment only seems to irritate such cases, whereas if it is discontinued in a year or less the gleet dies away of itself.

A Note on Threads.

If the threads are a bright yellow colour, and sink at once to the bottom of the glass, you can be certain they are rich in pus, and are infective.

If the threads appear as tiny yellow commas, which sink fairly quickly, you are dealing with little plugs of purulent secretion squeezed out of the prostatic ducts (prostatic or comma threads).

If the threads are small and glycerine-like and rise to the top of the glass, you will find that they consist of epithelial cells and an excess of mucus. The case is probably cured, but the urethral mucosa and glands have been irritated by prolonged treatment into secreting an excess of mucus and epithelium.

If the threads appear as long coils of greyish mucus which neither sink nor float to the top, you are probably dealing with a secondary infection.

Note that the threads simply mean pus or mucus of urethral origin. The secretion lying on the wall of the urethra is swept up into threads by the stream of urine. A large number of healthy men pass threads in their urine, consisting of mucus from the urethral glands and a few spermatozoa. This is especially so for a day or two after a seminal emission. Discourage your patients from inspecting their urine for threads. Many a man passes threads who is quite healthy.

II. DIAGNOSIS IN A CASE OF ACUTE PURULENT URETHRITIS.

It is most important for you to learn that the diagnosis of an early acute purulent case (a few days to a few weeks after infection) is made in quite a different manner to that of a subacute or chronic gleet case (two months or more after infection). Unless I can get this idea firmly fixed in your minds you will suffer confusion.

The diagnosis in an acute purulent case is usually easy as regards the gonococcus itself. Profuse discharge is present. Take and stain a film, which will show at once the presence of pus cells and gonococci. What further facts do you need to know?

You want to know if the disease is still confined to the anterior urethra or if it has spread to the deep urethra.

This is easily determined by the glass test. Wash out the anterior urethra with 1000 oxycyanide of mercury by Janet's method until the washings come away quite clear, as tested by pouring them into a glass and holding them up to the light; that is to say, till all the pus in the anterior urethra has been washed away. Now ask the patient to pass water into a clean urine glass.

If the urine is clear you have proof that there is no pus coming from the deep urethra. *Diagnosis: Acute anterior urethritis.*

If the urine is hazy or purulent (exclude phosphates and sandal oil), then you have proof that the pus is coming from the deep urethra. *Diagnosis: Acute posterior urethritis.*

Why is it so vital to ascertain these facts? If the disease is still confined to the anterior urethra you can hope for a cure in from one to three weeks (abortive treatment). If it has spread back further, then you cannot by any means hope for a cure in under two or three months at the earliest, especially since you ought not to employ antiseptic washes to the posterior urethra at the outset (five to eight weeks) with the idea of aborting the disease.

The Object of the Test is for Prognosis.

If the diagnosis is acute posterior urethritis, explain the case to your patient, and warn him that though you can soon cause the obvious discharge to disappear, yet he will not then be cured; but that he will have to live carefully and undergo treatment for many weeks before you can promise a real cure.

This is all there is in the glass test. You will read of a two-glass, three-glass, five-glass, and even a seven-glass test. There is no need for all this complication of what is, after all, a very simple matter. One glass alone is required, and one enamel pot and an irrigator.

Place the patient on a couch and wash out the anterior urethra with a clear liquid into the pot until the washings, as seen by pouring them into the glass and holding them up to the light, are seen to be clear of haze and threads. Empty out the glass and then ask the patient to rise and

pass water into it. If the urine is clear, the deep urethra is clear. If the urine is purulent, the deep urethra is purulent.

What could be more simple than this? It tells you if the patient is suffering from anterior urethritis alone, or if he is suffering also from posterior urethritis. This is the vital fact you want to know, as you want to explain matters to your patient.

RECTAL EXAMINATION.

Tactile Diagnosis of Inflammation of the Prostate and Vesiculæ Seminales.

In all cases, and especially in cases of acute posterior urethritis, examine the rectum with the right index finger encased in a rubber cot. The prostate may not be swollen at all. Do not, however, massage the prostate, as you will only irritate. (Only in exceptional circumstances is it wise to massage the prostate during the acute stage (five to eight weeks).)

The prostate may be swollen up to the size of a Tangerine orange on one or both sides. This means that there is a prostatic abscess containing several drachms of pus. There is seldom any need to open such an abscess. The exceptions will be considered later. Leave it alone to burst naturally into the deep urethra, unless there is concomitant retention of urine. In that case it is justifiable and often helpful to press gently on the abscess and partially empty it into the deep urethra, with relief of the retention. This is one exception to the rule given above.

In other cases the prostate is not swollen, but one or both vesicles can be felt to be swollen above and outside the prostate. These cases need great care in handling, and should be put to bed. They suggest the likelihood of an approaching epididymitis or of swollen joints and iritis.

I repeat, "Do not as a general rule begin to massage the prostate or the vesicles until at least five to eight weeks from the onset of the disease"—that is to say, only when the chronic and quiescent stage is approaching in the natural course of events.

A gonorrhoeal vesicle is sometimes mistaken for a tuberculous vesicle by the injudicious. The diagnosis is seldom in doubt if a proper history and examination has been made. Do not begin to think of tuberculosis unless there exists no history of exposure to infection or of urethral discharge, but a history of spontaneous epididymitis of a nodular type, the urine remaining clear of pus.

THE DIAGNOSIS OF EPIDIDYMITIS.

Do not forget that by far the commonest cause of epididymitis is gonococcal urethritis, but that at the onset of this complication the urethral discharge in the anterior urethra often suddenly dries up. Ask the man to pass water. You will find it full of pus in a gonorrhoeal case, and, if still in doubt, the urine can be centrifugized, and specimens of gonococci and pus obtained.

In the absence of venereal history and with a clear urine a sudden epididymitis is probably tuberculous. Suspend and rest the testicle a few days, when the acute hydrocele will subside, and it will be possible to distinguish the nodular craggy epididymis, with perhaps isolated nodules or beadings in the vas, an unfailing sign of tuberculosis. If necessary apply the tuberculin tests, and search the urine or the prostatic fluid for tubercle bacilli.

There is, however, another trap for the unwary not mentioned in the textbooks. It is not uncommon for men who are run down by exposure and fatigue to develop suddenly an acute epididymitis with fever, pyuria, pain at the end of micturition, increased frequency of micturition, possibly pain in the back, and even a slight urethral discharge. The pathology is as follows: Being run down, such persons absorb colon bacilli from their bowel into the blood and throw it out through the kidney and prostate. The bacilli lodge and set up inflammation, and spread to the epididymis. Such cases often suppurate; gonorrhoeal epididymitis never suppurates.

The diagnosis is made by cultural examination of the urine, which reveals the colon bacillus in pure growth. I have many instances in my notes of this trouble. Such patients often have a concomitant stricture or senile enlargement of the prostate.

Finally, if a testicle has suppurated and you detect a sinus then you may be certain you are dealing with the tubercle bacillus or the colon bacillus.

DIFFERENTIAL DIAGNOSIS.

Be on your guard against making a rash diagnosis of urethritis because you see pus issuing from a long foreskin. Many a case of balanitis is wrongfully labelled as urethritis. If there is phimosis and pus is present under the foreskin—

1. Make a film and stain. In balanitis no specific diplococci are seen, only mixed cocci or bacilli.

2. Wash away all the pus from under the foreskin and then ask the patient to pass water. If the water is clear you have proof that there is an absence of acute urethritis.

3. Slit up the foreskin if it cannot be retracted and inspect the parts beneath. Usually soft sores, or a chancre, or septic warts will be found, and occasionally even a cancerous or phagedaenic ulcer. Do not, however, forget that specific urethritis may be present as well as balanitis.

4. Another common lesion of the foreskin or glans penis is herpes. Herpetic sores are usually multiple, a little larger than a pin's head, with well-defined punched-out edges, a yellow or grey floor, and painful and tender to the touch. Once a man has developed herpes he is constantly liable to relapse of the trouble. The exact pathology of herpes of the penis is not known, but I believe these little ulcers are caused by some specific germ which, once contracted, lives on the penis, and from time to time works up its virulence and causes ulceration. Probably mechanical excoriation during coitus plays a part in each relapse. A little urethral discharge with pain on passing water is quite common in herpes, and is due to ulceration inside the meatus. The urine is clear, and the microscope proves the absence of gonococci.

5. Do not forget how common it is to find the burrows of scabies not only in the foreskin, but on the surface of the glans itself.

6. Remember also that ulcers about the fraenum may be simple mechanical tears, not infected by any specific organism.

THE CLINICAL ASPECT AND TREATMENT OF ACUTE BACILLARY DYSENTERY.

BY

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BACILLARY DYSENTERY may exist in an acute or chronic form, but I intend to confine my remarks entirely to the acute variety, and in connexion with it shall omit all reference to the bacteriological and pathological aspect of the disease, as my own experience is purely clinical.

Since January 1st, 1916, I have treated 183 cases of acute bacillary dysentery. They have been drawn from the camps in the vicinity of this hospital, and almost all have been admitted within forty-eight or seventy-two hours of the onset of symptoms. Some, indeed, are admitted during the first five or six hours of their illness, and occasionally I have been fortunate in obtaining the case before blood and mucus have had time to appear in the stools. The cases seem to fall into six groups, which clinically merge insensibly one into another, but all can be recognized as true dysentery by the isolation of dysentery bacilli from the motions.

1. Catarrhal Cases.

The onset is sudden, with perhaps ten or more motions in the first twenty-four hours. Afterwards, if untreated, these patients continue to pass frequent diarrhoeic stools containing possibly a trace of clear mucus. Clinically, the cases are distinguishable from simple gastro-enteritis by absence of vomiting and colic, a clean tongue, and preservation of a good appetite. There is also a marked tendency for the bowels to be freely open in the early morning and after a meal. The only absolute proof of the diagnosis is isolation of one of the dysentery bacilli, and this has been done in a number of cases. These patients present no serious symptoms, and generally are easily amenable to dieting and medicinal treatment, though in some of the cases diarrhoea persists until serum is administered.