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CLINICAL LECTURES

DELIVERED AT THE

METROPOLITAN FREE HOSPITAL.

BY MR. BENNETT LUCAS,

Senior Surgeon to the Institution, and one of the Lecturers on Anatomy and Physiology at the Westminster Hospital School of Medicine.

Lecture V.—Jan. 13, 1843.

GENTLEMEN,—When I last had the pleasure of addressing you I made some general observations on the structure and functions of the urethra in both sexes, rather with a view that we should understand each other fully, when speaking of its diseases, than to furnish you with a minute anatomical description of the parts I then spoke of. Such a study is to be best pursued in your dissecting-room and the anatomical theatre, where you can follow out your investigations in the subject itself, and test, by ocular demonstration, the correctness or fallacy of the descriptions you find in your several systems of anatomy—a task, I may here remark, which is especially important to you at present, as the tendency of the examinations now conducted by the constituted authorities is to ascertain how far the candidate has prosecuted the study of anatomy by actual dissection.

In addition to the observations I made when we last met, I am desirous to add that there are three agents, more or less constantly employed in the performance of the healthy functions of the male urethra, and that the actions of these agents are modified or deranged when that canal is the seat of disease.

The agents to which I allude are elasticity, muscular action, and vascular turgescence. In illustration of these I may briefly state to you that the elasticity of the urethra is most remarkable in its membranous and prostatic portions, so much so that calculi of no inconsiderable size will escape from the bladder and traverse the urethra as far as the commencement of the spongy portion of the canal, where they will be prevented from proceeding onwards. Some time since I assisted Dr. Costello in the removal of a calculus, larger than a kidney bean, from a boy four or five years old, which demonstrated the great elasticity of the prostatic and membranous portions of the urethra. The calculus readily made its way to the commencement of the corpus spongiosum, where it was felt through the integuments, but no force or ingenuity could make it advance farther. It was cut down upon and removed, and the little fellow recovered in a short time. The calculus had constantly advanced to the situation I have stated, and had as constantly receded into the bladder.

What has been termed spasmodic stricture is in most instances produced by the unnatural and powerful action of the muscles which surround the membranous portion of the urethra; and this affection is the best example I can adduce of the effect of the second

agent, although in spasmodic stricture vascular turgescence is also in various degrees present. The action of the *compressores urethræ* are often so energetic and permanent as to oppose the admission of any kind of instrument through the membranous part of the urethra; and in order to relieve the retention of urine consequent upon this condition of the canal, bleeding from the arm, the warm bath, and such remedies are successfully employed; and in two such cases I relieved the patients by the warm bath, in conjunction with taking blood by opening the dorsal vein of the penis.

The erectile *corpus spongiosum* is the usual seat of the vascular turgescence—the third agent which I have mentioned as operating upon the urethra. In the healthy condition of the urethra this turgescence takes place for special purposes, and in disease it constantly exists, either partially or wholly, even to hæmorrhage from the urethra itself, as is occasionally met with in the inflammatory stage of gonorrhœa.

Gentlemen, you are all, doubtlessly, aware that the term *gonorrhœa* is applied to a specific disease which affects the urethra of both sexes, and that it is accompanied with a purulent discharge, more or less profuse, which forms one of its most characteristic symptoms. In general this morbid discharge is preceded by symptoms which at once declare its nature, but at other times such is not the case; and here, if in addition the patient is disposed to mislead you, you may experience some difficulty in forming a correct diagnosis.

It is a singular fact, but every day's experience proves it, that patients, both in humble and in affluent circumstances, when affected with venereal diseases, will apply for relief and exhibit the greatest anxiety to be cured, and yet will make statements the very contrary to truth; will, in short, endeavour to mislead the very persons they apply to for relief, never reflecting for a moment that by misleading their medical advisers they mislead themselves. In this institution we often find patients who have confirmed and well marked gonorrhœa, telling us with the most sober faces that it was occasioned by a *strain* in raising a weight, the back being the part usually referred to; by others, that it arose from exposure to cold; and one man, some weeks ago, would persuade us it was the influenza. (Laughter.) Now, all this is far from being uninteresting, as it shows what you will have to contend against in your after practice, when patients of this silly class apply to you for relief.

Although in the strict etymological signification of the term, *gonorrhœa* is an absurd name for the disease under our consideration, yet it is so sanctioned by custom, and we all so well understand what is meant by it, that I shall not endeavour to supply a better. The disease has also been called *gonorrhœa virulenta*, to distinguish it from other discharges of a milder nature

to which the urethra is liable; but for this distinction there is no foundation, either in pathological phenomena or practical experience. It is now well known that the discharges from the urethra, which have been denominated *gonorrhœa simplex*, have very different origins, are very different in their nature, and require very different kinds of treatment from gonorrhœa. I shall, then, dismiss altogether these terms, and shall speak of *gonorrhœa* as a specific disease, admitting of being distinguished into different stages and presenting marked and characteristic symptoms in each.

It has been thought by many surgeons that gonorrhœa and syphilis are one and the same disease, but for this supposition there appears to me but very little foundation. Mr. Hunter thought both diseases were identical, and endeavoured to prove it by inoculating the glans and prepuce with gonorrhœal matter, which he did in the year 1767; this celebrated case, although sores were produced at the points of insertion of the gonorrhœal virus, and a train of symptoms, having secondary syphilitic characters, followed, yet it has with great truth been questioned if the case proves what Mr. Hunter wished to establish. Mr. Hunter states that the train of symptoms which followed the inoculation took three years in their development, and it has most reasonably been asked, did the patient refrain from exposure to new infection all this time?—or might not the patient, previously to his being inoculated, have had syphilis?—which would at once account for all the secondary symptoms; besides, the ulcers which followed the inoculation did not present the characters of chancres. Mr. Benjamin Bell, moreover, repeated these experiments, or rather witnessed their effects in two individuals, with directly contrary results to those stated by Mr. Hunter. The gonorrhœal matter in these cases was applied to the glans and prepuce “by fretting the skin with a lancet and rubbing the parts with the matter of gonorrhœa; slight sores were produced, but they did not assume the appearance of chancres, and they healed easily without mercury.” But the most decisive experiments in proving the non-identity of gonorrhœa and syphilis are those of M. Ricord, which are too numerous to read to you; suffice it to say, that M. Ricord sums up the results of his experiments in these words—“My experiments prove that the ulcers, which are produced by inoculating the gonorrhœal virus, are not syphilitic, and, at the same time, point out the source of errors which may render these experiments, which appear so simple and decisive, of little value.” As regards my own experience, I shall merely state to you that in no one instance have I ever been able to trace, in this hospital, a secondary syphilitic affection as consequent upon pure gonorrhœa, neither have I ever met a patient, amongst the many who have applied here, laboring under gonorrhœa alone, who was ever affected with secondary syphilitic disease after their cure was affected.

I have always viewed gonorrhœa as a local disease on its onset, but, if allowed to pursue its course disregarded, as being capable of involving other parts besides its original locality, either by direct extension of its specific action, or by that sympathy which is so well known to exist between all parts of the urethra and its appendages, both in health and in disease,

Upon these views I have always acted in its treatment both here and elsewhere, and as yet have not had occasion to regret having done so.

Gonorrhœa admits of being divided into three stages, each of which presents characteristic symptoms, and demands very opposite methods of treatment. The first, or, as I may term it, the premonitory stage, may be either present with or without a discharge from the urethra; the second is always accompanied with a well marked purulent discharge from the canal; and the third is that degeneration of the symptoms of the second stage to which the term *gleet* has been given. I shall now proceed to direct your attention to these three stages of the disease in the most practical manner, by reciting to you cases which exhibit the peculiarities of each, and which you have had abundant opportunities of witnessing for yourselves, making, at the same time, remarks on the symptoms which each presents.

First Stage of Gonorrhœa.

CASE.—William —, aged twenty-seven, a waiter at a hotel, had connection six days ago, and yesterday evening he felt a tickling along the urethra, especially at its anterior part. Last night he made water more frequently than usual, but he attributed this to having drank too freely of gin. This morning he observed his linen to be spotted in several places, and when he last made water, which was an hour ago, he had a slight uneasiness, but not amounting to pain. The lips of the external orifice of the urethra are fuller and redder than they naturally are; the upper surface of the glans for three or four lines is of a brighter red than elsewhere; there is no hardness along the urethra, and pressure of the part does not give him pain. A small quantity of thin muco-purulent matter appears at the orifice of the urethra when pressure is made along the canal. The stains on his linen are circular, and yellow in their centre. This is his first gonorrhœa. He is a married man, the father of two children; his penis is well developed, and the prepuce is off the glans, the covering of which and the membrane forming the inner prepuce partake of the characters of skin. On his making water soon after his application, he passed some six or eight ounces, which came from the urethra spirally, and gave him pain.

Now, this case is a very interesting example of gonorrhœa in its first stage. It is seldom in hospital practice you have an opportunity of witnessing the disease so early, for, in general, when the patients have applied here they have either allowed it to advance to its second stage, or have been taking nostrums of one kind or another for its cure.

The moral anxiety which this patient exhibited from the relationship he held to a wife and family, made him suspect the slightest deviation from the natural feelings and appearances of the parts, and which accounts for his early application here. The first symptoms of gonorrhœa this patient felt occurred five days after connection; this is a very usual time for the disease to appear, but it occurs in most instances earlier, particularly if the patient has had the disease before. The latest period I ever satisfactorily traced the disease to occur after connection was ten days, but there are cases on record in which the disease is stated to have occurred as late as four or

five weeks, and the earliest period was from twenty to thirty hours. In ascertaining this fact it is always necessary to be satisfied that the patient had not a gleet upon him at the time of connection, for many cases occur where a gonorrhœa, in the form of gleet, has been comparatively dormant for weeks or months, and has, in a few hours, broken out with its severest symptoms after an unusual excitement of the organ, or from even having partaken too freely of wine or spirituous liquors; a tickling along the urethra was the first symptom he felt, which was soon followed by the muco-purulent discharge which spotted his linen. Although sensations along the urethra very commonly precede the discharge of gonorrhœa, yet it is often found to come on without any premonitory uneasiness. In young subjects, particularly when they are attacked with gonorrhœa for the first time, the discharge is almost invariably preceded by some pain or uneasiness in the urethra; in elderly individuals, and those who have had gonorrhœa often, the reverse of this is constantly the case.

In the stage of gonorrhœa under our present consideration the discharge is never of that thick, yellow, purulent kind which is so characteristic of its second stage, nor is it so profuse. As in the case I have read, the linen is merely spotted in various places, the spots exhibiting the characters of a pus-stain at one part and of a mucus-stain at another; they occasionally, in other cases, are of a greenish hue. Now, if these symptoms are not promptly attended to by decided and energetic treatment, the disease rapidly gets into the second stage, and all the severe symptoms which accompany it are almost certain to supervene.

Although the urethra in this case was fuller and redder at its external orifice than natural, it is unusual to find any marked appearance of inflammation of this part until the second stage, many interesting examples of which I shall have to allude to by and by; and in the condition of glans and prepuce, such as the patient had, redness and swelling of the glans or urethra are not so constant or so severe as in the opposite condition of these parts. The absence of hardness along the urethra, and of pain upon putting it between the finger and thumb, are what we should have expected. As far as my experience in gonorrhœa has extended, I cannot call to mind one case in the first stage of the disease where the discharge was not confined to the two anterior inches of the urethra; nay, even in its second stage it seldom proceeds from more than one inch beyond this distance. It is of vast moment in the treatment of the first stage of gonorrhœa to bear this in mind, and also to recollect that the parts surrounding the urethra are not yet involved in the disease. From the constancy of the locality of the disease being thus circumscribed, the term "specific distance" was applied, to designate the fact, by Mr. Hunter, and since his time this term has been generally acquiesced in. Now, it is an interesting fact that at this very part of the urethra several large lacunæ are situated, particularly that one to which the term *lacuna magna* has been specially applied. From the time I first dissected this part, which is now some fifteen years ago, I entertained an idea that gonorrhœa commenced in these lacunæ, that during an impure coition some portion of

the gonorrhœal virus—the minutest particle would be sufficient—gained access to the interior, was lodged there, and remained until the specific consequences were developed. It has always struck me, in the study of this disease, as a thing very remarkable, that an individual after an impure connection, having made water three or four times, with a view to prevent the disease, should afterwards have gonorrhœa in all its virulence; yet cases of this kind are so frequently met with by every surgeon, that we must either doubt the veracity of a host of individuals who could have had no object in deception, or admit the fact. In such cases I believe the virus enters one or more of these lacunæ, the orifices of which, be it remembered, are directed towards the external orifice of the urethra; and when we reflect upon the condition of the male organ of generation at the time the infection must be received, the alternate spasmodic contraction and repose of the urethral muscles, together with the elasticity of the parts, I see nothing contrary to the laws of the physiology of these organs to forbid such an occurrence.

If, then, a mere particle of gonorrhœal virus, even diluted with mucous secretion, is capable of producing gonorrhœa, which I believe it to be, and that it be lodged in any of these lacunæ, the reason why it is not displaced by micturition is sufficiently obvious; for the stream of urine comes from behind forwards in the very contrary direction to the orifices of the recesses in which I have supposed the gonorrhœal virus might be lodged.

If the gonorrhœal virus, by mere contact for a few minutes with a sound mucous membrane, be capable of producing the disease, then all our reasoning as to its being lodged in some part of the urethra as being essential to the same effect, falls to the ground. However, I do not believe this to be the case, but, on the contrary, that if the virus be freely washed away, even after it has been in contact with the parts for half an hour, no ill effects will follow. I know individuals who have always guarded themselves from this disease by using mild injections or even cold water after having exposed themselves to the risk of infection; and I believe that, if the same precautions were universally adopted, gonorrhœa would not be so frequent. By adopting this course a fluid is injected from before backwards, the most effectual direction to dislodge any virus from the lacunæ—an effect which micturition cannot produce, for the reasons I have already stated; indeed, the total inefficiency of guarding against gonorrhœa by immediate micturition after connection, is best exemplified by the many patients we meet who have taken this precaution, and who, without having exposed themselves to disease subsequently, have had gonorrhœa. It was the opinion of Mr. Hunter that gonorrhœa always extended from the glans, or from the beginning or lips of the urethra to its inner surface. Now, if this were the case, why should it not continue to extend along the canal in almost every case?—or why should we have the "specific distance" admitted so universally as it is? It is rare to find more than two or three inches of the urethra affected with the disease, at least if judging from the extent of the urethra from which the discharge comes is any proof; and although Mr. Hunter conceived that "it is impossible that any of the venereal matter from the

woman can get into the canal during coition," yet he has not mentioned the grounds on which he makes this statement—an omission which is seldom found in Mr. Hunter's writings when he advances an assertion so positively. Mr. Hunter mentions a single case, which he conceives to amount "to almost a proof of this opinion." "A gentleman, on whose veracity I have an entire confidence, when in Germany, where he had not lain with a woman for many weeks, sat in a necessary-house some time; upon arising he found something that seemed to give the glans penis a little sharp pull, and he found a small bit of the plaster of the necessary-house sticking to it. He paid no attention to it at that time than merely to remove what stuck to his penis; but five or six days after he observed the symptoms of a clap, which proved a pretty severe one. The only way of accounting for this is, that some person who had a clap had been there before him, and had left some venereal matter upon this place, and that the penis had remained in contact with it a sufficient time for the matter to dry." This a very old story, and often related to us here by patients who desire to conceal the truth. The gentleman's veracity in question is merely a matter of opinion, and for my own part, in common with many others who have criticised this case, I cannot but believe that he told Mr. Hunter a falsehood.

Whether gonorrhœa extends from the lips of the urethra to the fossa navicularis and lacunæ; or whether it originates at the "specific distance," is of little moment as regards the treatment of this disease in the stage under our consideration; to know that for a time its influence is local and confined to the anterior inch and a half or two inches of the canal, is quite sufficient for all practical purposes; and proceeding upon these views in the case I have read to you and commented upon, I adopted the following method of cure effectually:—With a glass syringe I injected carefully a solution of nitrate of silver of the strength of twenty grains to an ounce of distilled water; taking care that the solution was well and fully applied to the part of the urethra I intended it should be. I held the penis in my left hand and made pressure with my middle finger two inches behind the urethra, and with my right injected the solution; after the injection was allowed to escape, and the lips of the urethra were separated, the mucous membrane had that molten appearance which such membranes present elsewhere on the application of this agent. I repeated the injection the next day, and on the third day he had a thick yellow discharge with soreness in making water, not scalding; these disappeared in forty-eight hours, and the patient has continued free from all symptoms of the disease.

Now, the cases in which the practice I have just stated to you is admissible, are very few; for it is, as I have already said, a rare occurrence to meet in hospital practice cases of gonorrhœa in its first stage; but in private practice the case is often different, and you will find patients tormenting you to get them rid of so troublesome and dangerous companion at any risk. But to such importunities it is our duty to turn a deaf ear, unless we have a stage of the disease such as I have described, and so certain a remedy as that I have mentioned, to "cut it short" or check it. The application of a strong solution of nitrate of silver to

any of the other stages of gonorrhœa, or even as the first stage of the disease is verging upon the second, only adds fuel to fire, and hence the reason in all probability that this remedy has been condemned by others.

In applying a solution of nitrate of silver to the urethra, the patient should never be entrusted to do so, as is so often the case with other injections; indeed, it is very seldom you will find a patient apply any remedies properly when left to himself. On its being used there is always some pain experienced, but this should not prevent our applying it to the entire surface of that part of the urethra between our finger and the orifice. If we only apply it partially we add irritation of a severe kind to a specific disease, and in a short time matters are in a much worse condition than before. I need scarcely tell you that the patient was enjoined to observe quietude, to live temperately, and avoid spirituous drinks—a course which it is always desirable patients similarly circumstanced should pursue.

At our next meeting, Gentlemen, I shall continue this subject.

**CASE
OF
FREQUENTLY-RECURRING PNEUMONIA,
SUBSEQUENT TO PLEURITIS.**

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—I beg leave to enclose you a case of pneumonia, which was particularly interesting to me, and which, if you think of sufficient importance, may be published in the Provincial Medical Journal. I consider it only the duty of medical officers attached to large provincial hospitals to send notes of their more important cases to you, and from my position as physician to the Leeds General Infirmary and to the House of Recovery (Fever Hospital), Leeds, it is not impossible I might contribute occasional cases of interest.

I am glad to say your Journal is giving great satisfaction to the members of the profession in this important county.

I remain, Gentlemen,
Your obedient servant,

R. S. HOPPER, M.D.

3, East Parade, Leeds, Jan. 12, 1843.

Thomas Taylor, aged forty, plasterer, a native of Keswick, was admitted into the Leeds General Infirmary, November 7th, 1842. The patient is of a strong and healthy appearance of body; he states that about five weeks ago, when at Hull, he was exposed to wet and cold, and was seized with the general symptoms of fever; at this time he was also attacked with severe pain in the lower portion of the right side, accompanied by cough, dyspnœa, but very slight expectoration. The pain has remained more or less severe up to this date. Has employed no regular medical advice.

Present Condition.—Complains of considerable pain in the lower portion of right side, increased on coughing, which is of a loud and barking character, and