Lettsomian Lectures

ON

MIDWIFERY AND DISEASES OF WOMEN.

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BY

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LECTURE II.

ON SOME POINTS HAVING REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF FIBROUS TUMOURS OF THE UTERUS.

MR. PRESIDENT AND GENTLEMEN,—It is not my intention, in this lecture, to enter into a detailed account of all the symptoms of fibroid disease of the uterus, or of the differential diagnosis between it and every other disease with which it may be confounded. It would be, I imagine, as much a loss of your time as it would be objectionable in me, to endeavour to elucidate points upon which you are as well informed as I can be. In an assembly like the present, and at a time when abdominal operations are so rife amongst us, and have proved so successful as a means of relieving disease previously deemed incurable, it is well to aim at the development of surer means of diagnosis; and this I believe to be all-important in the present state of medical experience. Already the published annals of ovariectomy tell strange tales. Not only have pregnant women been operated upon for ovarian disease, but Mr. John Clay has given us an aggregate list of thirteen cases of attempted ovariectomy, where extraovarian tumours were removed. Of these, eleven cases were uterine growths. Mr. Clay has given us, in addition, twenty-three cases where ovariectomy was attempted, and abandoned in consequence of the disease being extraovarian. Of these last, twelve were examples of uterine disease. (Kiwisch on *Diseases of the Ovaries*, translated by John Clay.) Altogether, as I hope to show in the sequel, the operation of gastrotomy for fibroid disease of the uterus has been performed, incompletely in fifteen cases, and completely in some thirty-four cases; yet, with but very few exceptions, ovarian disease has been diagnosed during life. Let me not, however, be understood as arrogating to myself better powers of diagnosis than others. I make no doubt that the larger number of these errors in diagnosis were made at a former period, when knowledge and experience were less general. I also believe that, even now-a-days, accurate diagnosis in some cases is impossible. Still we are in a position at present to be more exact than we were; and this chiefly from the greater number of facts now extant, and the very mistakes previously made; also because we now possess certain instruments which materially assist our powers of diagnosis. Some of these, if I mistake not, will be shown in this room to-night for the first time.

The frequenters of the Samaritan Hospital last year may remember a remarkable case in one of Dr. Savage's beds, which made some noise about that time. This patient had gone the rounds of several of the London hospitals. The eminent accoucheur to one, after two careful examinations, said it was

indubitably pregnancy. Another, similarly circumstanced in another metropolitan hospital, said it was ovarian disease; a third, that it was extrauterine pregnancy; a fourth, that it was a fibroid. An eminent French surgeon, then in England, stated in the most positive terms that it was a fibroid, although unconnected with the uterus. The majority amongst us, however, were of opinion that it was ovarian disease. An exploratory incision verified this diagnosis. Ovariectomy was performed by Mr. Wells, and the case did well.

This example illustrates well the difficulty now-a-days of diagnosis even.

I think the subject of the differential diagnosis of fibrous tumours of the uterus may be advantageously considered under the three following heads.

- I. The mode or positions for examination, and previous history of an affected patient.
- II. The particular notation of special symptoms, and the testing of their relative value.
- III. Particular reference to the differential diagnosis between pregnancy and ovarian disease, the two most common conditions likely to be mistaken for fibroid disease of the uterus.

I. The two points of great importance in the examination and diagnosis of these cases, upon which I wish first to dwell, are: 1. The position in which the patient is placed for examination; 2. The importance of obtaining the particulars of the previous and early history, which throw immense light on cases which otherwise, by mere present examination, it would be quite impossible to make out.

1. As to position for examination, I am satisfied that, in obscure cases, to give true results it must greatly vary. The position on either side, on the back, or even on all fours with the nates raised, and that usually adopted in *ballotement* (the patient standing on a chair and leaning over you), are each necessary in individual cases; and this is at once obvious, if we look to the extraordinary mistakes made. In fibrous tumours this position is especially useful, because patients affected with them, even in flooding cases, are often unusually fat and corpulent; so that palpation externally affords but indifferent help in measuring extent or dimensions; even fluctuation does little, unless it be assisted by the erect position and the finger in the vagina. The weight, then, of the affected organ, allows it to fall and play upon the finger within the vagina; whilst the point from which (if pressure be exerted above on the abdominal parietes) it is felt in the vagina, indicates the height to which the tumour extends within the abdomen, and also the connexion with the uterus by contiguity of surface.

By change of position alone, we can often diagnose the connection or disconnection of the uterus with an abdominal tumour.

I had this fact very forcibly brought to my own mind in a case of ovarian disease. The diagnosis here was very difficult. The uterus was closely connected with a large tumour in the left iliac fossa. In most positions, the movement of the one affected the other, although considerable free movement was possible in the iliac tumour. Was it a pediculated fibroid attached to the uterus, or an ovarian growth? It turned out to be the latter. When the patient was made to lie down inclined to her left side, and when the sound passed within the uterus was depressed at its handle-end, so as to push the uterus away from the left side towards the right side, then

the iliac tumour could be felt to be altogether free from the uterus. The diagnosis, therefore, made was ovarian disease with a short pedicle; and so it proved to be on operation.

Again, the *sound* can be passed in one position, and not in another. The changed position allows the weight of the diseased organ to bear in a different direction; and thus the existence of adhesions or enlargements in particular directions is made out. The os uteri also may only be felt sometimes in one of the positions when the uterus is much displaced by the tumour.

Upon the subject of adhesions, more mistakes are perhaps made than upon any other, more especially if they be pelvic, and when the patient is examined in the recumbent or erect position. The test generally given is a full inspiration; when, if the abdominal parietes move freely over the tumour, adhesions are said not to exist; and *vice versâ*. Unfortunately, however, in fat subjects especially, either this movement is not perceptible, or the skin moves over the muscles; and so we are deceived. Also, if the tumour dip low within the pelvis, it may be difficult to raise it in the ordinary position; and so adhesions may be inferred to exist on one or other side of the pelvis; yet the operation will prove that there were none. The adhesions may be present superiorly higher up in the abdomen. Had the patient been placed on all fours, and slightly on one side, the tumour would probably have moved a little from the pelvis, and the non-existence of adhesions there would have been made out. The stethoscope also, or hand, may make out a *friction-sound*. But this is no evidence of adhesion, only of dryness of the peritoneal covering; and it may disappear next day.

And here I think I had better say a few words upon the use, not of one only, but of at least two sounds, used in two of the pelvic passages at the same time; I mean the bladder, and uterine cavity, and rectum. By their combined action, the position of the fibroid enlargement and its situation can generally be very accurately made out. External abdominal manipulation does a good deal, but it is insufficient. Suppose there be little or no menorrhagia, so that the tumour is most probably a surface or an intraparietal tumour, the finger and sound afford a ready means of exploration *per vaginam*. If it be situated in the posterior wall, the double *touche* will often clear up the case: better still, one finger in the rectum or vagina, with the uterine sound in the cavity. The space in the case between the extremity of the sound will be greatest at this point. So, if it be in the anterior wall, the use of two sounds—one in the bladder, and the other in the uterine cavity and the space included between them—will determine it. In either case, a small fibrous tumour, without this precaution, may be mistaken for retroversion or anteversion. Dr. Atlee mentions several cases of error in this particular. I have seen the same difficulty occur where, besides retroversion, the uterus was congested and large—not an uncommon condition. Where the tumour is high up above the true pelvis, without two sounds I do not think it possible to say whether a given tumour is in the anterior or in the posterior wall. Except in the exceptional case where we have to do with a thin woman, with thin abdominal parietes and an atrophied anterior wall of the uterus, so that the one sound *in utero*

can be felt externally by palpation over the abdomen, I do not think it could be made out otherwise; for the finger is not long enough; and I know positively that an eminent practitioner actually cut through the uterus into the peritoneal cavity, from not having previously satisfied himself, by the use of two sounds, of the thickness of the uterine parietes, or exactly made out the position of the fibroid.

If the tumour be in the lateral wall, even here, I believe, and especially if on the left side (owing to the sigmoid flexure of the colon), the ordinary digital examination *per vaginam* may be assisted by two sounds; one placed in the uterine cavity; the other in the rectum or bladder, and pushed up or down laterally. The direction of the uterine sound, generally inclined to the side opposite to which the tumour exists, is important. It is well, in all such cases, carefully to empty the bladder before manipulation. I have seen a tumour, solid in its contents, in a thin person, because the bladder was pushed against the abdomen, yet convey the feeling of fluctuation, and be mistaken for an ovarian cyst, by the neglect of this simple precaution.

I have dwelt upon the use of a sound in the rectum in some of these cases. I think that, indeed, in some cases it is indispensable, if we wish to make a correct diagnosis. The finger will not always suffice, more especially if the tumour be large and high up.

There is a most interesting case detailed by Dr. Waller, which bears upon this point (*Medical Gazette* for April 1853). The case occurred in the practice of Mr. Evans of Blackfriars Road. He diagnosed a large exostosis, of stony hardness, occupying the promontory of the sacrum; so that the antero-posterior diameter of the upper pelvis was reduced to an inch and three-eighths. The lateral diameter was also encroached upon. From its hardness, immobility, and apparent connexion with the sacrum, from which it could not be separated, he also concluded it was an exostosis. The Cæsarean section was performed. The patient, unfortunately, died. At the *post mortem* examination, the case proved to be one of fibrous tumour of the uterus, of the hysteromatous variety.

But the use of two ordinary sounds has some disadvantages. The distance between them, when out of sight, cannot be always accurately measured when an attempt is made to replace them for purposes of measurement, out of the body, in the position they occupied within it. The cavities may be of different lengths, and so preclude measurement altogether. To remedy these inconveniences, I have constructed the instrument I now show you, and which I have called the *pelvimeter*. It consists of two sounds, but of unusual length. On one of these there is a moveable pin, which, by means of a screw, can be made to move up and down, or fixed at any point. This sound is graduated upon its inner side by the ordinary inch degrees, which are marked 1, 2, 3, 4, etc. The other sound has along its middle two-thirds a slit, within which the end of the pin before alluded to may be moved to and fro. At the lower end of this is a screw, to which is attached a transverse bar, also graduated in inches and eighths of inches; but, to avoid confusion, they are marked by letters. The sounds, the upper parts of which are very soft, being placed in any two cavities, and bent in any manner required, are then locked, and the position noted and marked by the transverse bar; and when the two parts of the instruments are removed separately,

and readjusted, out of the body, as they were within it, the exact distance of the extreme ends can at once be measured. But, in practice, we sometimes meet with difficulties. Supposing the bladder do not reach as high as the uterine cavity, or *vice versa*, then the thickness of the anterior wall must be determined another way. We must put one blade within the bladder, and the other on the outside of the abdominal parietes. Thus the thickness of the abdominal walls may be determined. Then, the second time, if one blade be placed within the uterine cavity, and the other upon the abdominal parietes, the distance between these two points, *minus* the known thickness of the walls, is the thickness of the anterior wall. So also, upon the same principle, with one blade within the rectum and one upon the spine first, and then, secondly, one on the spine and the other within the uterine cavity, the difference made out will determine the thickness of the posterior wall. Sometimes the folds of the rectum render the passage of the rectal sound difficult. In this case, the passage of a largish gutta-percha or caoutchouc tubing, properly prepared, may precede that of the sound; and the sound needs only to be passed within the tube. It is especially in cases where the tumour is high up, or extends above the true pelvis, that this instrument will be found so necessary, if we wish to make a correct diagnosis. In its absence, I have seen a tumour in the anterior wall taken for one in the posterior wall, the examiner being deceived by the position of the os, which was near the pubis.

2. The second point upon which I wish to dwell is the necessity, in these cases, of a very close and cross-questioning examination into the particulars of the previous history. Important as this is in most cases, it is exceedingly so in uterine fibroids. I believe that many errors of diagnosis may be referred to imperfect inquiries in this respect; parties examining such cases taking, as it were, the cue too readily from the idea of the patient, or mere external and internal manipulation. Thus the ideas of presence or absence of pregnancy are sometimes so strongly set up by the patient, who perhaps has had several children before, that the physician is often taken off his guard. I have known several women who actually asserted that they have felt the movements of the child in cases of simple fibrous tumour. For, although at first sight the difference between such cases appears very simple, we shall find in the sequel that it is not always so. Then there are many cases in which an ordinary examination will not suffice to make out the distinction between cellulitis or hæmatocele and fibrous tumour. I have seen the former two affections frequently confounded; and have myself been quite at a loss to say, even after very close examination, whether such tumours were fibrous or not. Suppose, in fact, a large tumour *in utero*, and chiefly pelvic, impacted within the pelvis. You find the uterus fixed. You come against a large tumour. You can detect no fluctuation; all you can ascertain is, that it involves the uterus. Fibrous tumours, you will say, are not generally fixed; and the cellulitis is generally more extended on one side than on the others. Granted. But the latter is not always the case; and, in fibrous tumours, the uterus may, either from its size or from some adhesions, lead to a conjoined fixation of the uterus. Here, therefore, is one advantage of knowing the early history. The suddenness of the symptoms in

hæmatocele, the marked inflammatory symptoms in cellulitis, and the tense fixation of the uterus, which is generally much less marked in fibrous tumour, will assist the diagnosis, more especially if conjoined with menorrhagia.

But there is another way in which we can usually distinguish between cellular abscess and hæmatocele and fibrous tumour, more especially if the latter be not impacted *in utero*. The instrument which I now show you, and which, for want of a better name, I would speak of as the uterine *kinometer* (*kineō*, I move), will enable us to measure the amount of uterine movement very accurately. It is, in fact, a speculum, closed at the vaginal end by a caoutchouc membrane. The distal end terminates in a glass tube bent at a right angle, in a part of which there is a tap. The whole is filled with coloured water. In one which Mr. Coxeter has made for me, there is at the distal end, instead of a glass tube, a watch plate duly graduated, upon which a needle in connexion with the water moves. The vaginal end being pressed upon in the first case, the coloured water rises in the tube; in the second, the needle moves. When used, however, in the vagina, the tap in the first case, a screw in the second, is closed; so that the fluid is not forced outwards. Both are opened after the introduction of the instrument. We then notice two movements—one synchronous with the pulse, a *pulsatory* movement; the other with the respiration, a *respiratory* movement. If a healthy person be made to hold her breath, at each pulse you will observe the fluid rise and fall in the tube. The rise in this case is slight. If, however, you desire her to make a long inspiration, the fluid rises in the tube considerably, and as completely goes down with the expiration. The uterus, in fact, comes down with the diaphragm, like the ordinary viscera; and so the extent to which the water rises in the tube, or the needle moves round, is the index of the mobility of the uterus, which can often be more forcibly pushed down by the hand. In hæmatocele and cellulitis, the respiratory movement is mostly absent altogether, and the pulsatory alone remains.

In fibrous tumours, both are generally obvious, unless the growths be situated so high up that the instrument cannot reach them, or firmly impacted—a comparatively rare complication.

[To be continued.]

HYDROPHOBIA. J. Leshman, a joiner, of Liverpool, was admitted into the Southern Hospital on the 19th inst., suffering from hydrophobia. It appears that he was bitten by a dog on November 28th last. The lacerated parts were at once cut out, and caustic applied. Up to Monday he appeared quite well, but in the afternoon he began to experience some difficulty in swallowing, and soon after well-marked symptoms of hydrophobia set in. He gradually grew worse, and died on the following day, about thirty-six hours after the symptoms first set in.

SPONTANEOUS GENERATION. At the scientific meeting of the Sorbonne, on April 7th, M. Pasteur treated of spontaneous generation. The importance of the subject in its bearing on other questions, such as that of the existence of the Deity, the eternal duration of matter, etc., was pointed out by the learned professor, who then put forth the various arguments in favour of and against the doctrine, showing the objections in a forcible manner, and altogether treating the subject with a masterly hand. (*Chem. News.*)