

Clinical Lecture

ON

DIGITAL EXAMINATION OF THE UTERUS.

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GENTLEMEN,—I propose to speak to-day on a subject introductory to the study of the diseases of women—namely, the methods of examination which assist us in obtaining information with respect to those diseases. The difficulties in practice are not so much difficulties in regard to treatment as to diagnosis. Moreover, mistakes in practice are more frequently due to errors in diagnosis than to any other cause. The knowledge of the physical condition of the generative organs was formerly a matter very much of conjecture. Physical examination was only carried to a slight extent. True, ages past, some old physicians, such as Aetius, as was not long since pointed out in one of the medical journals, had been acquainted to a certain extent with the physical alterations of the uterus, which must have been derived from a careful examination by means of the finger. It is a fact, however, that until comparatively recent times the investigation of the physical condition of the generative organs was carried to a very slight extent.

Within the past thirty years much attention has, however, been given to this subject. For some time the speculum was the instrument almost exclusively used in obtaining information as to the physical condition of the uterus. This method of investigation has been followed, in too many cases, to the exclusion of all other methods of examination. One cannot, therefore, be surprised at finding that in many instances very remarkable physical alterations of the uterus remained quite undetected, since the examination was confined to a visual inspection of the os uteri. It is, however, from digital examination of the uterus that we are able to learn most regarding the condition of the uterus. This is a point I am most anxious to impress upon you; and I now desire to explain to you how this examination is to be made, and what are the results to be expected from it. I was exceedingly pleased to find in a work recently published by M. Courty, of Montpellier, that the extreme importance of the digital examination of the uterus is so fully recognised. Unquestionably the speculum, and above and beyond that the sound, give completeness and exactness to the investigation in particular cases; but still the digital method stands first, and you will do well to recognise this as the primary one.

By means of the finger educated to the proper degree, you can become acquainted with the size and position of the uterus, the state of the vaginal canal, with the condition of the organs lying in the immediate vicinity of the uterus, the ovaries; with the presence of a tumour lying in the pelvis in the same situation, and affecting the uterus. You can make this examination by the vagina, or you can make it by the rectum. Another method consists in a sort of double examination, one finger being inserted into the vagina, and one or two fingers being placed over the symphysis pubis. When the patient is in a favourable position, you can get thus most important information. So also a double examination from the rectum and over the pubes can be made by placing one finger in the rectum and two over the pubes. You endeavour to bring the two together, and, if the patient is not very stout or fat, you can do this in such a perfect manner as to make it absolutely certain, for instance, that there is no uterus in a case in which that organ is congenitally absent. Thus also you can determine the shape of the top of the uterus. In fact, there seems to be hardly any limit to the information that can be gained from it under tolerably favourable circumstances. Much, however, depends on the position in which the patient is placed, and by far the best position for such double examination is lying on the back, not on the side, with the knees drawn up, and the observer standing at the patient's right hand. The first or second finger of the right hand is then

passed in as far as possible; then two fingers of the left hand are placed over the pubes, and pushed inwards and downwards into the pelvis. In this way the two fingers can be brought into close proximity, the abdominal walls being in this position completely relaxed.

I will next describe the digital examination of the vagina only. A proper position is very essential; and the only good one is for the patient to lie on the couch on her left side, with the hips close to the edge, and the knees drawn well up. It is quite impossible to make a satisfactory examination with the patient lying in the middle of a soft bed.

The examination is usually conducted by means of the forefinger of the right hand. To arrive at the aperture of the vagina, place the left hand upon the great trochanter of the patient, and immediately under that you will find the vulva. Remember the distinction between the vulva and the vagina. The former is nearly an inch in depth; and, after passing on for that distance, the finger comes to the position of the hymen, the beginning of the vagina proper. If no impediment is created by the existence of the hymen, the finger of course passes inwards as far as the vagina extends; and the normal length of the vagina, including the part belonging to the vulva, is represented pretty exactly by the length of the forefinger, which has to pass in almost as far as it can be inserted before its tip reaches the cul-de-sac behind the os uteri.

Thus the first thing that is determined by this examination is the length of the vagina. That is determined at once. Next comes the condition of the uterus; and the facts relating to this must be set down under several heads.

The first point is the condition of the os uteri. Normally, in the woman who has not borne children, the finger finds merely a small aperture. In women who have had children the aperture is generally larger, it may even be so large as to admit one or two fingers.

Next determine the length and shape of the cervix, and recollect that it really occupies nearly one-half of the length of the uterus. The part which can be felt by the finger in the vagina is, however, only a small portion of the cervix—the “vaginal part,” as it is called; the greater part of the neck is above that. You have to determine the length of this vaginal portion. In women who have not borne children this is not more than half or three-quarters of an inch. It may be much longer, or it may be shorter, and the latter point becomes very important with reference to the diagnosis of pregnancy. The cervix is not really shortened in that condition, but it is drawn up out of the vagina so as to appear shorter.

Next the density of the vaginal part of the cervix has to be investigated. There is a considerable softness about it normally, and yet it is pretty firm. In pregnancy it becomes very soft, and in the latter part of pregnancy it becomes as soft as velvet, so that towards the end you have a difficulty in making out that there is an os uteri at all.

The symmetry of the os uteri should next engage your attention. Is it symmetrical in form? Is it symmetrical as regards density? Nodulation or cicatrization is an important sign. In cancer, for instance, there is a complete loss of symmetry both as regards form and density; it is irregular in outline, nodulated often, harder than natural, and the increased density is always greater on one side than on the other.

If you are a beginner you will find that this part of the examination will occupy you at least several minutes. The more practice you have the more rapidly will you be able to determine these several points.

After thus investigating the condition of the os, you may next proceed to examine the neighbourhood of the uterus. This may conveniently be regarded under four divisions: (1) that in front of the uterus; (2) that behind it; and (3, 4) those on each side of it.

Commencing with the examination of the anterior region, the finger is pushed forwards and upwards in front of the neck. It displaces the vaginal wall before it, and can thus be made to rise to a considerable distance in the pelvis between the uterus and the bladder. You will readily understand that, if the uterus is bent forwards unduly, the finger will thus come upon it and touch it. So, also, if there is a tumour in front of the uterus, the finger will come upon it. Thus this examination will inform you of the presence or absence of a tumour there, or of anteversion or anteversion

of the uterus. Sometimes anteversion will escape notice thus. The finger, being pushed forcibly up in front of the uterus, causes the organ, as a whole, to turn on its axis backwards, and you may fail to find the tumour because it retreats before the finger. The longer the disease has existed the more likely is this to occur, since after lapse of time the uterus gets rigid and fixed in its abnormal shape. This examination in front of the uterus will enable you to eliminate pregnancy. If a patient has arrived at the third month of pregnancy you will certainly be able to detect the enlargement of the uterus; while if you can detect no tumour in front of the cervix you may be pretty sure that pregnancy does not exist. Pelvic tumours of various kinds are liable to be met with there. An ovarian tumour may be felt there. A tumour growing out of the uterus itself may be found there. Peri-uterine hæmatocele, consisting of an effusion of blood, may be situated in front of the uterus, and cause a hard and rather firm tumour in this position. In pelvic abscess and cellulitis there is an induration in the pelvis which may also be situated in this locality.

The neighbourhood behind the uterus is equally important with that in front of it; and its examination ought never to be neglected. When the uterus is in a proper position, the finger, passed up behind the cervix, is unable to explore the uterus higher than a point just above the junction of the vaginal wall and the cervix; and nothing can be felt beyond that point. But we often do find a tumour in that situation. Its most common cause is retroflexion of the uterus; and then the finger comes upon the body of the uterus behind its neck. In all cases of retroflexion, except those in which the amount is very slight indeed, you will find a tumour there. Certainly, in ninety-nine cases out of a hundred you will be able to detect it. I have frequently known marked retroflexion to be missed solely from the practitioner neglecting to examine the part behind the neck, and confining the investigation to the condition of the os itself. Finding a tumour there, you have next to make out its shape; and the most important thing to ascertain is whether the tumour is symmetrical and in the middle line. The retroflexed fundus is usually, as might be expected, symmetrical, and generally nearly in the middle line. But the tumour may be due to other conditions: one of the ovaries may be displaced, and may lie near the middle line behind the uterus. It is not common; but the ovary may be found there, enlarged and painful. You would separate it from the uterus by making out that it was not continuous with the cervix. The point of the finger is made to travel slowly from one point to another; and, if it be an ovary, you find a break between the two. A fibroid tumour growing from the back of the uterus is not very rarely met with in this same position, which may be of any size, and may simulate very closely retroflexion of the uterus. The diagnosis between the two is made with the greatest possible ease by means of the sound. Sometimes a fibroid tumour is associated with retroflexion, and is, indeed, its cause, pulling the uterus back. Another tumour often met with there, is that caused by pelvic cellulitis. This is usually found to one side; it is hard, dense, and resistant in the chronic stage, and the parts are evidently all matted together. It is sometimes difficult to distinguish this tumour from one that consists of a fibroid tumour alone. Peri-uterine hæmatocele is more common in that situation than in any other.

By examining the lateral aspects of the uterus you become acquainted with the condition of matters in the broad ligaments—the space which intervenes between the two surfaces of the peritoneum which are reflected over the Fallopian tubes, and enclose a dense mass of cellular tissue and an immense quantity of vessels, veins, arteries, and lymphatics. It is in this situation that inflammation so frequently occurs. If you suspected that a patient had pelvic cellulitis, you would, as a rule, expect to find the swelling on one side or other of the uterus. Tumours do not so often grow from the sides of the uterus as from the front and back, or at all events are not so obvious on a vaginal examination. Effusions of blood may also occur at the sides of the uterus. Sometimes the uterus is turned over to one side, giving rise to lateral version; and this is very commonly combined with anteversion. In retroversion it is common to find the uterus a little to one side of the middle line, but not so much as in anteversion.

Having thus examined the os uteri and the region round it on all sides, by means of the double examination I have before referred to, you may extend this, and render some things certain which before were uncertain.

ON DIGITAL EXAMINATION OF THE UTERUS
AND OF THE PELVIC CAVITY.

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 13th you have published a lecture on Digital Examination of the Uterus, by Dr. Graily Hewitt, in every respect worthy of the reputation of the author. It contains, however, statements, no doubt unwittingly made, which are calculated to mislead the junior members of the profession with regard to the history of this department of medicine, and this must be my excuse for addressing you.

Dr. Graily Hewitt says: "Within the past thirty years much attention has been given to this subject. For some time the speculum was the instrument almost exclusively used in obtaining information as to the physical condition of the uterus. This method of investigation has been followed, in too many cases, to the exclusion of all other methods of examination," &c.

I have no hesitation in stating that Dr. Graily Hewitt is totally and entirely wrong on this point. I have been so thoroughly mixed up with the history of uterine pathology during the last thirty-five years that my testimony must carry weight with it. In 1836 I was in Paris attending the practice of the eminent surgeon Lisfranc, at La Pitié. Lisfranc was the first after Recamier to take up the then all but unknown subject of uterine pathology. He had a ward always full of uterine cases, the celebrated Salle St. Augustine, which I paced for years, and he constantly lectured and wrote on uterine subjects. One of his favourite subjects was "digital examination," which French pathologists call "*le toucher*," and I have repeatedly heard him devote an entire lecture to its elucidation. I may say the same of Velpeau, of Gendrin, of Emery, of Jobert de Lamballe, whose pupil, dresser, and house-surgeon I successively became, and who, one and all, paid special and exceptional attention to uterine pathology. In all the pamphlets and works that were then published, "*le toucher*" occupied a prominent part. In my own clinical lectures, given for years in the Paris hospitals, on uterine cases, I devoted the same attention to this mode of investigation. The specular examination was always by everyone considered secondary and supplementary. I can appeal to Dr. Barnes and Dr. Tilt, my then companions in Paris. Once settled in London, I continued to practise and teach the same doctrine—the primary importance of digital examination. In the first edition of my work on Uterine Inflammation, published in 1845, twenty-six years ago, I adopted the French term *toucher*, and well remember the friendly smiles with which it was received. In the second edition, in 1848, I used the term "digital examination." I became personally acquainted with Sir James Simpson in 1845, and was constantly in communication with him afterwards, and can testify to his having throughout his career given due importance, both in theory and in practice, to the digital investigation of the organs contained in the pelvic cavity. Indeed, I do not think a single author whose works I have read has omitted to do so.

There are two points alluded to by Dr. Hewitt that require a few words of notice. He thinks the usual British obstetric position the best and sufficient. For my own part, I think the patient should first be examined on her side, and then on her back, and that without this latter examination the information obtained is incomplete. The side position is perfect as far as the sacral portion of the pelvic cavity and the iliac region opposed to the one on which the patient lies are concerned. But the pelvic contents necessarily fall on the opposite pelvic and iliac regions, on those on which the patient lies, and prevent accurate investigation. Moreover, it is not so easy to depress the abdominal walls when a woman lies on her side as when she lies on her back in the lithotomy position.

Dr. Graily Hewitt, speaking of the os uteri in women who have borne children, says "the aperture may be so large as to admit one or two fingers." Now I believe this to be an error, if it is meant that such a condition is compatible with a thoroughly healthy cervix and uterus. I do not deny that such may very exceptionally be the case; but I assert without hesitation that nineteen times out of twenty such a state of the os uteri means disease, and ought to lead us to make a careful examination with a large bivalve speculum. Such an examination will usually reveal a very diseased state of the mucous membrane lining the cervical canal of the open os. An open os is one of my most trusted guides and sanctions when I wish to decide whether more than a digital examination is justified and required.

I am, Sir, your obedient servant,

J. HENRY BENNET, M.D.

Grosvenor-street, May 18th, 1871.

ON DIGITAL EXAMINATION OF THE UTERUS
AND OF THE PELVIC CAVITY.*To the Editor of THE LANCET.*

SIR,—I am much obliged to Dr. Henry Bennet for his friendly criticism of my lecture on the above subject. When, however, Dr. Bennet says that my statement as to the very great prevalence of the use of the speculum, to the exclusion of other methods of examination, is "totally and entirely wrong," I must be excused for repeating that, on the contrary, it is true. It is a fact which has been daily brought before me for some years past, in hospital and in consulting practice.

I am quite aware that digital examination of the uterus is not a new procedure. I never stated that it was. The object of my lecture, introductory to the course of clinical lectures I am in the habit of delivering in University College Hospital, was to inculcate its primary importance.

It affords me much gratification to be made aware that Dr. Henry Bennet so entirely agrees with me as to the "primary importance" of digital examination of the uterus.

a m, Sir, faithfully yours,

May 29th, 1871.

GRAILY HEWITT.

To the Editor of THE LANCET.

SIR,—In a clinical lecture given by Dr. Graily Hewitt, lately published in THE LANCET, I find the following statement:—"Within the past thirty years much attention has been given to the investigation of the physical condition of the generative organs. For some time the speculum was the instrument almost exclusively used in obtaining information as to the physical condition of the uterus. This method of investigation has been followed, in too many cases, to the exclusion of all other methods of examination. One cannot therefore be surprised to find that in many instances very remarkable physical alterations of the uterus remained quite undetected, since the examination was confined to a visual examination of the os uteri."

These assertions, so contrary to fact, show how little Dr. Graily Hewitt is conversant with the works and the teaching of Recamier, Lisfranc, Velpeau, Dupuytren, Trousseau,

and Gendrin, who, while fully recognising the precision of diagnosis to be often derived from the use of the speculum uteri, only admitted its value as supplemental to a digital examination, of which they always recognised the paramount importance. I have no hesitation in affirming that all subsequent writers of any eminence on diseases of women have taught the same lesson either by example or by actual precept; and I only claim to have made myself the intelligent echo of those who have preceded me, when I stated in my Handbook of Uterine Therapeutics, "that no other mode of examination gives so many valuable elements of diagnosis as a digital examination, that it is often the only one required, and the only one that is not fraught with danger."

A little further on, in the same lecture, Dr. Graily Hewitt leads his pupils to believe that the extreme importance of a digital examination has at least been recognised in a recent work by Dr. Courty.

I do not know how far my friend Dr. Courty will like being singled out for praise, equally well deserved by so many of his predecessors and contemporaries; but I beg to enter my protest against Dr. Graily Hewitt's mode of writing history for the pupils of University College.

I am, Sir, yours obediently,

Grosvenor-street, May 24th, 1871.

EDWARD J. TILT.