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DIAGNOSIS OF PELVIC TUMORS.

I have been invited by your president to make a few remarks with reference to the diagnosis of pelvic tumors, and the indications for operation. This is a subject, I am sure, which will interest all of you, and of which there is not much written in the text-books. There is a good deal said about abdominal tumors, and when they become large they are comparatively easy to diagnosticate, but nearly all of these have been at one time pelvic. The next step in progress is in finding them out when they are little, before they are abdominal tumors, when they are not so easily distinguished.

I think you will all recognize the very great addition to safety in operating on such things when they are small; yet it is not generally appreciated that something like sixteen or seventeen per cent. of the ovarian growths become malignant when they get large, so that in operating on one hundred large ones something not very far from sixteen are found to be malignant, with great increase in mortality, and a strong disposition to return. Again: When large they pass through all forms of danger incidental to obstruction and adhesions, and it is often very difficult to dissect them out, whereas the small tumor without adhesions is the simplest thing in the world to remove.

In diagnosticating these cases, when is one to use ether? My experience is, that in examining patients there is an involuntary pressing down upon the organs of the pelvis, which comes from the abdominal tension, and especially is that the case when the parts under examination are at all sensitive. Therefore, in cases requiring operation, it is not fair to yourselves or to others to expect a satisfactory diagnosis in a case which is

at all doubtful without the benefit of ether. With that aid many cases are wonderfully cleared up.

Now, in regard to the varieties of the tumors within the pelvis: leaving out fibroid uterine tumors, we have to refer them to the uterine appendages and to the broad ligament and its contents.

We have, in the first place, the stroma of the ovary, which is apt to become cystic and have a multilocular development. At first such a tumor is small, but it constantly enlarges by little new points of development, daughter-cysts forming in the walls of the first cyst, until it makes a composite tumor. One cyst is usually much larger than the others. I have brought with me some specimens, and have here a little tumor of that kind. In the first stages, such a tumor will be found to be perfectly movable, not adherent or fixed. The tumor here shown was discovered accidentally, the woman being under examination for some other trouble. The removal of a tumor like that, at that stage, with only a thin pedicle, is absolutely insignificant in comparison with the severity of the operation if that same tumor or growth is left until it is larger, until it becomes adherent, or has given rise to attacks of localized peritonitis, and, moreover, if not removed, it is liable to become malignant. You will see that a tumor of that kind is usually single, very movable, smooth, nearly round, hard, but not as hard as the fibroid. It is painless, and when small is found to be on one side or the other, in the region of the ovary. It can be pushed up and felt from above, or pushed down, or behind the uterus.

Secondly. We have a tumor coming from the hilum of the ovary, or, it may be, coming from the vertical ducts of the parovarium. It is not simple; it has sacs filled more or less full with fluid and papillary excrescences. I have such a one here, a little larger than the other shown you, but still it is a little tumor, growing between the folds of the broad ligament. It has no pedicle, and when it is small it is very easy to shell it out, but when it becomes large it is a very difficult matter. What do these papillae do? They finally may fill up the tumor, and if there is some weak spot in the walls, they are liable to come through, and the tumor is turned inside out. If

the tumor bursts, or if you tap it, these masses of rapidly growing cylindrical epithelium will infect the peritonaeum in thousands and thousands of places, so that it may be all covered with little papillae. This tumor grows, as already stated, from the vertical ducts of the parovarium, from the hilum of the ovary, or from the remains of the duct of Gärtner, and in the latter case it is found in the walls of the uterus. Papillomatous cysts are apt to be double, and, growing between the folds of the broad ligament, they contract firm unions and adhesions, becoming, if neglected, very dangerous and formidable.

The third kind of tumor of the broad ligament is a very simple one when little. It is a simple cyst containing serous fluid and lymph, growing between the folds of the broad ligament. These cysts are liable to develop, growing larger and larger. When little, as with the other tumors spoken of, they are easily removed, and if discovered in time and removed, or even if punctured, they seldom return. They are found on one side only.

The next that we have is the dermoid cyst. Here is such a one, that was found growing in the pelvis in a young woman. It was developed from the ovary. Another in the other ovary was larger, containing hair and teeth. One of these is very likely to make a great deal of trouble eventually. It is likely to be painful as it grows, and if it is broken or tapped the contents will spread about and set up inflammation. These cysts are filled with fat, hair, and teeth, and I have no doubt that you will find this one so. I will open it for you, as I do not know of an occasion where it can be put to better service. You will see the hair, and it is very likely that, if it were examined closely, teeth could be found. Dermoid cysts are not limited to the ovary, they are occasionally found in the strangest places. They are considered to be congenital, and may be carried through life without trouble, but rarely. They are apt to be double.

Totally different from the ovarian tumors are the myomata of the uterus, commonly called fibroids. In most cases there is not any great difficulty in making a diagnosis of these, at least under anaesthesia and with the aid of bimanual palpation, and the measurement of the depth of the uterine cavity with the

sound, if necessary. The long duration, the history of hemorrhages, the comparative freedom from acute pain in uncomplicated cases, the slow growth, the irregular shape, the hardness, the distortion and elongation of the uterine cavity, all facilitate the diagnosis. Nevertheless there are cases where these signs fail, or are conjoined with others which are confusing. Precisely the cases which give most trouble and most require an accurate diagnosis are those where it may be impossible to say with certainty before operation whether a fibroid is present or not, and whether, if present, it is uncomplicated. For those small fibroids, which cause most suffering, and on account of which the question of operation is most frequently raised, are those in which there is also present an inflammation of the Fallopian tubes, with repeated attacks of violent pain and of pelvic peritonitis, so that the fibroid is imbedded in masses of exuded lymph, and is fixed, tender, and perhaps not very large.

On the other hand, any of the forms of tumor above mentioned may be present, together with a uterine fibroid, and each may mask the presence of the other more or less. Where there is no fibroid, the masses accompanying the diseases of the tubes, which will be next considered, may be so large, so hard, of such long duration, and so complicated with menstrual hemorrhages, that a diagnosis is only possible on opening the abdomen. At least operators of great skill and experience are frequently unwilling to make a positive diagnosis before operation, and the greater the experience, the greater is apt to be the unwillingness.

These other morbid enlargements of this region are not tumors in the common acceptation of the word, nor yet are they growths, but masses, and they have to be distinguished from the tumors. They are the diseases of the Fallopian tubes, or abscesses of the tubes and their vicinity, forming what is often called cellulitis. These may closely resemble in size the fibroid or the ovarian tumors, but in almost all of these cases there will be inflammation from the first. With most of the other kinds of tumors described above the inflammation comes later, from the irritation of the peritonaeum, torsion of the pedicle, rupture of the cyst, or obstruction of the intestine.

These tubal affections are caused often by gonorrhoea; often by puerperal disease; sometimes, perhaps, by simple inflammation connected with menstrual troubles. The history is generally obscure, and one has to come back to the fact that there has been at one time a very severe inflammation, with more or less complete recovery.

Now, here is a case where a woman (and she was a faith-curist, by the way) concluded to undergo an examination. There was a distinct history of inflammation, history of pain, and difficulty of menstruation, etc. This mass could easily be found, and when it was removed, it was three times as large as it is now after preservation in alcohol. In examination under ether such a mass is not movable, as the small tumors are: it is fixed there. In fact, it is generally supposed to be in the broad ligament, but it is not. It is in and around the tube. That woman was on her feet going about, and had been suffering for a long time. This big tube was full of pus. This cyst, formed by the other tube and ovary, with adhesions to neighboring parts, was full of serum. It broke in removing it.

Now you see that these are about the size of the smaller forms of tumors. They, however, are not movable, and there is great sensitiveness and inflammation which do not accompany the tumors. The tubes are full of pus, or cheesy masses, and the uterus itself may be turned back, and it will generally be found to be pressed out of place by the pus-tubes.

Here is another of these doubtful tumors. In this case, the woman lay in bed three years, with violent menstrual hemorrhages and much pain. It was difficult to tell what the trouble was. The bunch was hard, and it was not evident whether it was in the tubes or was a fibroid. It proved to be the former; the tubes were removed, and the patient recovered very nicely.

The second thing that we have to anticipate in the tube is tuberculosis. Here is a case which shows it very perfectly. This was removed in my presence, and was given to me by my friend Dr. Reamy, of Cincinnati. You can see the little miliary tubercles on the walls of the tubes, as well as the cheesy matter in their cavities. One ovary by chance contains or is turned into a dermoid cyst as large as an egg. That represents the early stages.

Here is another case where the tuberculous condition had gone on further. The woman was run down; she had lost forty pounds within a few months. It was thought that she had a fibroid tumor, but upon operation there was found this diseased condition of the tubes, reaching clear down to the wall of the uterus.

In regard to operating on women run down in health, who appear to have some pelvic difficulty, and especially such a severe case as this last, I would say, that although it would appear at first as though the patient could not recover, even though undergoing an operation, it seems as though the cases published by Hegar and others, showing recovery after operations for tuberculosis of the tubes, furnish hope that a favorable result may ensue, and a justification for such operations.

The only other diseased conditions which I think of that are liable to occur in this region are the malignant affections and extra-uterine pregnancy and pelvic haematocele. Cancer of the uterus comes in for discrimination, but only that form which, originating in the fundus, spreads to the neighboring parts and causes an infiltration of the broad ligaments, with fixation of the uterus. In these cases the age, the pain, the rapid loss of strength, and usually the sanious and malodorous discharge, make a diagnosis not difficult. Earlier in the history of the case, when the disease is limited to the mucous membrane, with enlargement of the uterine body and repeated hemorrhages, the uterus being movable and the pelvis free from other disease, there may be a doubt whether the affection in question is a malignant adenoma or a uterine fibroid. The fact that the former is in most cases a disease of women who have passed the menopause, is generally a strong ground of diagnosis; but as the symptoms require curetting, the slightest inspection of the masses removed will distinguish between the presence of a fibroid and that of an adenoma, while the microscope will show whether the latter has already undergone cancerous degeneration. These uterine adenomata, before the uterus is fixed by malignant degeneration and infiltration of the broad ligaments, form the most suitable and useful field for vaginal removal of the whole uterus. Malignant disease may also spring from the ovaries, tubes, or intestine, giving rise to great

difficulties of diagnosis. Cancerous ovaries usually are associated with a great accumulation of fluid in the peritonaeum.

The cases must be very rare where extra-uterine pregnancy could be confounded with pelvic tumor. In the first place, an opportunity is seldom offered of examining a case of ectopic gestation before the rupture of the tube in which it lies has either precipitated symptoms of abdominal collapse and acute anaemia, which are sufficiently characteristic and are soon fatal, or by rupturing into the cavity of the broad ligament has caused a pelvic haematocele. If such an opportunity does occur, the physical symptoms are not sufficient to warrant a diagnosis, and the distinction from tubal distension of other varieties must be made by the history of the case and the other signs of pregnancy. Such a diagnosis is not usually possible, in the opinion of Tait, as he says "we may guess but we cannot affirm." Although undoubtedly some such cases have been recognized, yet these are the rarities. On the other hand, I know of a case where a competent operator removed a diseased and distended tube, and was much astonished afterwards to find that it contained a little foetus. In another celebrated case, which has been quoted as an example of the possibility of making a diagnosis before rupture, I am credibly informed that at a consultation held on the afternoon previous to operation it was held to be impossible to decide what the tumor was.

If the tube ruptures in such a manner as to cause a pelvic haematocele or haematoma, the symptoms are so sudden and violent that there is no great probability of confounding the condition with anything else. The tumor which is produced is low down, and although at first on one side, it soon passes around behind the uterus which it encircles like a collar, pressing it forward, and also pressing on the rectum. The symptoms of haematocele are well known, and are described at length in the text-books.

I would like to say a few words in regard to operation on pelvic growths. I think everybody is agreed that an operation is warranted as soon as a tumor is diagnosticated. The danger of letting such a growth remain until it becomes large is so great, and the operation on a small one is so insignificant, that no one should hesitate for a moment what course to pursue.

The indications to warrant operations on pelvic inflammatory diseases are much more difficult to define. Where there is pus, where there is fever, and when the woman is confined to her bed and is incapacitated, nobody need hesitate to advise an operation. Where, however, the woman is only somewhat incapacitated, not obliged to keep her bed, an operation depends somewhat upon her circumstances and condition. In case of a woman who has a home, who can be supported, and can have her work done for her, not being obliged to labor, I think there is quite a conservative feeling among surgeons as to the necessity for operation. An operation on these chronic diseases of the tubes is much more difficult and dangerous than on a tumor. Therefore an operation on chronic catarrhal salpingitis is dependent very largely upon the necessity of the patient for labor. The woman who must work for her living, who loses one place after another, who has no home to go to, is perfectly willing to undergo the dangers of an operation rather than to live on in that way. A woman in that position, I think, has a right to have that wish respected and receive the operation. As I have said before, where the woman is able to be about, and is not obliged to work, there is much less necessity for an operation; but where the woman has to keep her bed, where the tubes are full of pus, and where there is constant inflammation, that patient is not going to get better without an operation, and I believe that it is a neglect of duty to advise against its performance.

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