A Clinical Lecture

ON

OPERATIONS FOR DISEASES OF THE UTERUS AND SOLID OVARIAN TUMOURS.

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I HAVE tabulated the last fifty operations which I have performed for diseases of the uterus and solid tumours of the ovary in order that you may judge of the conditions most commonly demanding operative treatment; for it is surprising how slowly the knowledge of what is and is not a fit case for a surgical procedure seems to be appreciated; and often as you may have seen me perform hysterectomy, you have probably still more often seen me reject as unsuitable cases that have been sent in for operation.

Of these fifty cases, seven were solid tumours of the ovary, and I have included them because, as many of you know, the irregular and nodular surface which often obtains may lead to confusion in clinically diagnosing them from myofibromata of the uterus. Beyond this I do not propose to refer to solid ovarian tumours, as I have somewhat recently given a lecture on the subject of ovarian tumours generally.¹

Of the remaining forty-three cases, thirty-one were operated upon for uterine myofibromata, six for uterine cancer, and five were cases of hysteropexy. As the great bulk of the cases were myofibromata I shall deal mainly with that subject, after a few remarks on uterine cancer and hysteropexy.

HYSTERECTOMY FOR CANCER.

The operation of hysterectomy for cancer is very unsatisfactory in its remote results. You might suppose that cancer of the uterus would be more amenable to a radical operation than in many organs of the body, and yet we practically find that comparatively few cases do not recur within three years of the time of operation. Good results are obtainable in cases that come early, but there is an appalling amount of ignorance amongst women as regards the early symptoms of cancer of the womb, and this combined with the natural insidiousness of the disease and an objection which many patients raise to the necessary examination, determines the fact that in about five cases out of six we have to decline a radical operation. I discharged such a case a few days ago, where a woman, of about 52 years of age, had had a sharp attack of uterine haemorrhage about two months before she sought advice, and until direct questions were put to her she made no complaint of the existence of the other cardinal symptoms of pain and discharge which were present. Yet this patient had an extensive adenocarcinoma of the cervix uteri invading the broad ligaments, base of the bladder and utero-sacral ligaments, causing complete fixation of the uterus, and rendering the case unsuitable for any radical operation.

Every woman who has reached the menopause should know that it is highly desirable that she should submit to a thorough examination in the event of the occurrence of uterine haemorrhage. When such a patient is examined the existence of cancer may or may not be evident. There is often little difficulty in correctly diagnosing that variety of epithelioma of the vaginal portion of the cervix which springs from the outer surface; but, it is otherwise in those forms of adenocarcinoma which arise from the epithelium of the mucous membrane lining the cervical canal or the body of the uterus. In the early stages of these latter cases the os uteri is frequently closed, and nothing is to be seen or felt; but before giving an opinion on the nature of the case it is your duty to dilate the cervix, and if the disease is not obvious, a portion of any suspicious tissue or a scraping of the mucous membrane should be taken for microscopic investigation. Only by taking such scrupulous care will you be able to give the patient the chance which an early operation affords, and hysterectomy for cancer would be attended with better results.

For cases diagnosed early I believe that colpohysterectomy is the best operation, and all of the six cases in this list were so treated. Abdominal hysterectomy offers certain advantages—we can cut more widely of the disease, and the sacral glands can be removed, bringing the operation into line with

operations for cancer in other parts of the body; but, practically, the results are not so good as in cases of colpohysterectomy, where the primary mortality and incidence of recurrence are distinctly lower. We must be selective, for though colpohysterectomy is the best for early cases there are others for which abdominal hysterectomy is more suitable, though at present it seems undesirable to adopt this latter operation as the routine procedure.

ABDOMINAL HYSTEROPEXY.

Little need be said of the comparatively simple operation of abdominal hysteropexy, of which there are five cases in the list. With the exception of one case—where a very heavy, enlarged uterus had been completely extruded outside the vulva by an ovarian cyst—all the operations were performed for painful retroflexion uncontrollable by ordinary means. I prefer the abdominal route, because it enables the surgeon to deal with the adhesions that are not infrequently present. I do not wish to speak of the details of the operation, but I would remind you that the correct place to put the sutures is on the anterior aspect of the uterus near the fundus, and not at the top of the uterus. The risk of abortion, should the patient become pregnant, is very small if the sutures are placed properly, and a few days ago a patient came to show herself who had been delivered of a child at full term after I had performed hysteropexy in the manner referred to.

HYSTERECTOMY FOR MYOFIBROMA.

We have now to deal with the 31 cases of hysterectomy for myofibroma. Of these 21 were treated by supravaginal division of the cervix, 2 by panhysterectomy, and 9 by myomectomy.

You must not suppose that the mere presence of a tumour is a sufficient excuse for operation; it is the duty of every surgeon, before he advocates the removal of a myofibroma, to show either that it is dangerous to life or that it produces so much discomfort as to render existence more or less intolerable.

The presence of a myofibroma is in many cases a menace to the life of the patient, and Matthews Duncan says: "I am sure the fatal number of cases is greater than is generally supposed." One of the most common causes of death is from the pressure effects of a large myofibroma, and I have been called upon several times to operate for intestinal obstruction in cases of neglected myofibroma. Fatal results may also follow pressure on the urethra or ureters. Haemorrhage may cause death as a direct result of excessive bleeding, or indirectly from extreme anemia. I have also seen death occur from necrotic changes in the tumour and producing a septic peritonitis. Should pregnancy occur in association with a myofibroma fatal results may follow from abortion, which is common, or from interference with natural delivery and haemorrhage.

A great deal of misunderstanding exists as regards the influence of the menopause on myofibromata; women are so often led to suppose that when once the "change of life" occurs all their troubles will cease, and much valuable time is thus often lost by relying upon a false hope. Not only is the menopause often, indeed generally, delayed for some eight or ten years at least, but in many cases the tumour grows more rapidly at the time when it is usually supposed that a diminution in size may be expected.

Much depends upon whether the myofibroma is of the "hard" or "soft" variety. In the hard myofibroma, which is generally multiple, comparatively non-vascular, and slow-growing, a temporary enlargement may occur with menstruation and pregnancy, and after pregnancy and during the menopause it commonly shares in the physiological involution of the uterus which then occurs. On the other hand the soft myofibroma, which is usually single, is much more vascular and has a more rapid growth, which appears to be independent of uterine conditions and unaffected by the menopause. It is this form which so commonly becomes larger as the functional activity of the uterus declines. It is, therefore, highly necessary that the late occurrence of the menopause and the uncertain effect of that epoch on many of these tumours should be borne in mind when we are dealing with a case of myofibroma in a patient who considers that under normal circumstances the final cessation of menstruation should soon occur.

We may now consider the chief indications for operative treatment in cases of myofibroma. The mere size of the tumour may, under certain circumstances, afford a sufficient indication for removal. The largest tumour in this series weighed 15½ lb. after about 3 pints of blood had escaped from

it after removal. It was 28½ in. in the transverse and 30 in. in the vertical antero-posterior circumference.

It is commonly ten or twelve years before a myofibroma reaches the size of a pregnant uterus at full term; but when the tumour extends to a point 2 or 3 in. above the umbilicus it frequently causes considerable annoyance from its bulk, even apart from any definite or important pressure symptoms. A comfortable existence is scarcely possible in many of these cases, and often, in addition to the inconvenience of getting about and attending to the duties of life, a condition of chronic invalidism is induced by repeated haemorrhages and more or less constant pain. In the more wealthy classes a sufficiently tolerable existence may be dragged out on a sofa, but in others, where a necessary wage-earning capacity is seriously interfered with, the risk of operation is generally considered preferable. In single women, too, much mental distress may be caused by the comments evoked by the prominence of the abdomen, and the unjust suspicions to which they are subjected may induce them to seek the relief which removal of the tumour affords. There was a poor servant girl in the house some time ago in whom the loud souffle which is so often heard over a myofibroma was mistaken by several medical men for a placental souffle, but her character was cleared by the performance of hysteromyomectomy.

Haemorrhage is one of the commonest symptoms of myofibromata, and is also one of the most important indications for operation on account of the insidious way in which the patient's health and strength are gradually undermined by its repetition. It is, however, quite remarkable how easily a woman recovers from a very considerable loss of blood, though occurring again and again, and therefore we must not be led to advise operation simply because there is a severe menorrhagia.

Profuse haemorrhage—menorrhagia or metrorrhagia—occurs in about 50 per cent. of cases of myofibromata. It is associated with all forms of these tumours—the large and small, hard and soft, subperitoneal, interstitial and submucous—though doubtless it is more common and more severe as the tumour approaches the uterine mucosa.

The size of the tumour is not necessarily indicative of the amount of blood lost. At first the "periods" occur at regular intervals, but the flow is excessive, and later on with the growth of the tumour the flow is of longer duration, the amount lost is increased, and the intervals between the periods are shortened. Definite "floodings" may also occur. In the early days the patient fully recovers in the intervals the effects of the excessive flow at the periods, but with the progress of the disease she becomes increasingly anaemic and utterly prostrate.

Recognizing the very severe effects of prolonged haemorrhage, we have to decide when operation is required in these cases. The blood comes from the increased surface of the endometrium (for the uterine cavity is enlarged), but haemorrhage is also favoured by the endometritis which so commonly accompanies the growth of the tumour. This, perhaps, explains the highly satisfactory relief which may be afforded by curettage, though this operation is impracticable in cases where there is much displacement and the uterine canal is tortuous. But where minor measures have failed and the patient is steadily losing ground there should be no hesitancy in resorting to a radical operation. This should be advised when the patient ceases to regain in the intervals the loss of strength incidental to the excessive flow at the periods. As soon as we are convinced of this fact, operation should be undertaken. Delay means further prostration, and jeopardizes the successful result of removal of the tumours.

The occurrence of pain as an indication for operation presents some difficulty. Most fibroids give rise to a sense of dragging and some tenesmus, and these are increased at the menstrual epoch, owing to the exaggeration of the vascular engorgement, which normally takes place at that period. But even severe and persistent dysmenorrhoea must be accepted with great caution as a plea for radical cure, for the degree of pain is difficult to gauge, and is apt to be unduly emphasized in neurotic subjects.

It is somewhat different, however, with a persistent intermenstrual pain. This is often associated with pressure symptoms in the pelvis, or with degenerative changes in the tumour, which I shall presently refer to.

A diseased condition of the ovaries and tubes frequently coexists with myofibromata. Pelvic peritonitis, resulting in the fixation of ovaries and tubes in the pelvis, with hydrosalpinx or pyosalpinx, may occasion attacks of pain, or the

pain may be due to dragging on the adhesions so produced. At all events, the development of pain in a case which has hitherto caused no trouble, or any marked increase of pain, requires serious consideration; and where pain of a more or less persistent character is so distressing as to produce a condition of chronic invalidism in spite of sedatives, rest, and massage, a radical operation is indicated.

A rapid enlargement of the tumour, especially if associated with pain, may almost certainly be regarded as demanding operative treatment. Such symptoms are generally indicative of serious degenerative changes in the tumour itself. Of these there are many—cystic, suppurative, calcareous, fatty, myxomatous, and neoplastic—but I cannot do more now than refer thus briefly to them. I have certainly seen myofibromata associated with malignant disease some four or five times in as many years, and therefore it cannot be regarded as of so infrequent occurrence as was at one time supposed. Elevation of temperature and other constitutional disturbance sometimes occur with the rapid increase in size of the tumour, and in cases associated with suppuration or sloughing the patient may exhibit all the phenomena of a severe sapraemia.

Practically it may be said that operative interference is required if examination at intervals of three months shows a myofibroma to be rapidly increasing in size, and that it has reached nearly up to the level of the umbilicus or beyond.

The discomfort and chronic invalidism produced by large myofibromata are partly dependent upon the pressure effects due to the presence of a tumour occupying so much space. As a consequence the intestines, stomach, liver, and diaphragm are pushed upwards, and considerable interference with circulation and digestion may occur. Flatulence is often very distressing. In other cases pressure upon the ureters results in hydronephrosis or other changes in the kidney, and pressure on the bladder causes frequent micturition or perhaps cystitis. The necessity for removal in these large tumours has already been considered.

Even worse pressure effects are produced by smaller tumours incarcerated in the pelvis and prevented from expansion upwards by the sacral prominence. Pressure on the urethra may cause complete retention, and the use of the catheter may be necessary. Severe pain arises from pressure on nerves, causing a false sciatica, and in all cases of obscure pain in the region supplied by the sacral nerves the pelvis should always be carefully examined. Pressure on the ovaries, especially if prolapsed, causes a pain of a sickening character, and results in those pathological conditions of the ovaries and tubes which so often accompany myofibromata and to which I have referred. Pressure on the rectum causes piles and severe constipation, amounting, in some instances, to a definite obstruction, though it is remarkable how great a degree of pressure the rectum will tolerate without causing urgent symptoms.

In many of these cases the tumour can be displaced above the pelvic brim, with consequent relief of symptoms, much in the same way as a retroverted gravid uterus can be rectified; but great care must be exercised in the manipulation, lest an undue traumatism may cause tearing of adhesions or degenerative changes of a serious nature in the tumour itself. If rectification is impossible or undesirable, a radical operation should be undertaken without delay, and it is highly desirable that we should not wait for the development of urgent symptoms when we have ascertained that there is a growing tumour choking the pelvis. Such a tumour often presents great difficulty in removal, for its situation on the top of the vagina prevents it from being delivered through the abdominal wound, and the filling of the pelvic cavity leaves little room for the fingers to tie the ovarian and uterine vessels; hence the need for prompt relief in the early stage of a tumour confined to the pelvis in its development. One case of this class was only 25 years of age, which is the youngest age at which I have been called upon to perform hysteromyomectomy.

Owing to the presence of endometritis, or a diseased condition of the ovaries and tubes, which so commonly accompany myofibromata, sterility is fortunately common. The coexistence of pregnancy with uterine myofibroma is a serious condition, but, bearing in mind that two lives are involved, it appears unjustifiable to adopt radical measures unless the symptoms are urgent.

Before the child is viable operation may be required, because of excessive pain or rapid growth, as in non-pregnant cases; and it is worth remembering that in some of these cases the myofibroma may be shelled out without interfering with

the normal course of pregnancy. So, too, when the tumour occupies such a position that delivery cannot be effected *per vias naturales*, operation must be undertaken, though some pelvic tumours with a long pedicle can be displaced upwards into the abdomen, where they no longer menace the safe continuation of pregnancy and delivery. If, however, the patient has gone almost to full term with a myofibroma, which would, if left, require removal at a subsequent operation, it is better to effect delivery by Caesarean section, and then proceed to the removal of the myofibromatous uterus.

These, then, are the various considerations which should guide you in the selection of cases for operation. If operation is decided on, the best time is about a week before the expected "period," but in all cases it is desirable that the patient should be brought into the best possible condition before any operation is undertaken.

Myomectomy is the operation of choice in young women, provided that the general condition is fairly satisfactory, that the tumour does not extend much above the umbilicus, and that there are no important complications such as severe inflammatory disease of the tubes and ovaries or advanced anaemia. Within proper limits the operation of shelling out the tumour should always be adopted, as by this means the functional activity of the uterus is unimpaired.

In cases where myomectomy is undesirable I prefer the operation of retroperitoneal hysteromyomectomy rather than the so-called panhysteromyomectomy. When the myofibroma is associated with malignant disease, nothing short of the removal of the whole uterus and tumour would be desirable, whereas in ordinary uncomplicated cases there is no *prima facie* reason for the removal of any more of the uterus than is included in the supravaginal operation of retroperitoneal hysteromyomectomy; but though we may regard the last-mentioned operation as the method of election, it would be foolish to insist on a slavish adherence to it under all circumstances.

These various procedures are of such severity that they should not be undertaken if any grave organic mischief in other organs coexists. Advanced disease of the heart, lungs, or kidneys should certainly be regarded as contraindications to operation.

REFERENCE.

1 BRITISH MEDICAL JOURNAL, 1904, i, 354.

A TUBAL PREGNANCY OF SOME YEARS' (?) DURATION.

SAC CONTAINING MACERATED FETUS: FISTULAE BETWEEN SAC AND BOWEL AND BETWEEN SAC AND BLADDER:

LAPAROTOMY: DEATH.

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THE following case seems worthy of publication, if only for criticism. I was asked to see a patient, aged 45, who had a large abdominal tumour, faecal urine, pneumaturia, hectic temperature of long duration, and great emaciation and cachexia. I received the following notes from a gynaecologist:

Breasts do not look active; right nipple retracted; children all suckled at left breast.

Abdomen.—Central swelling reaching within two fingerbreadths above umbilicus. Skin over abdomen takes impression of stethoscope readily.

Auscultation.—Crackling sounds heard over swelling.

Percussion.—Resonance over swelling.

Abdomen is distended as a whole, though not very large.

Per Vaginem.—Uterus fixed. Vaginal cervix small and not soft. Hard mass (fixed) in front of uterus continuous with swelling felt by abdomen; felt more to the left than right.

Catheter passed. A few drops of yellow, purulent, offensive fluid withdrawn (patient had previously micturated). Sound passed rather less than normal distance into uterus.

On cystoscopy the bladder was comparatively healthy, but I noticed it was bulging forwards, and under the prominence was a fistulous opening. I diagnosed suppurating ovarian dermoid, and cut into the tumour above the pubes. It was evidently intraperitoneal, but adherent to the abdominal wall, so that the peritoneal cavity was not opened. Pus, faeces, and gas escaped in large quantities. After a thorough irriga-

tion a bare fetal femur appeared at the incision, and then a humerus. I now felt a macerated fetus lying in a puddle of faeces, pus, and liquid rottenness, and gradually enucleated it piece by piece. Parts of the skull bones were adherent to the walls of the sac, and had to be peeled off with some force. I then tried to open the peritoneal cavity at the sides, in order to dissect out the wall of the sac in which the fetus had been, but the bowels were not only adherent to it, but so greatly softened, that I desisted. Finally, I was forced to pack the

Fig. 1.—Tubal pregnancy of some (?) years' duration breaking into bladder and sigmoid bowel.

big cavity of the sac. The patient rallied, and died in a few hours.

Before she died I was able to obtain a history from her, but it is open to doubt as regards the accuracy of the time.

She stated that eight (?) years before she came under my care she became pregnant, and when she was decidedly big she made arrangements for her confinement. The various symptoms of pregnancy, however, gradually disappeared, and her abdominal swelling subsided slightly, but for the last seven (?) years she has had a "large lump" in her right side, which remained after her belly had gone down. Three months ago she received a severe blow on this lump, and two days later she had great pain in her belly, and sickness. Since then she has been ill.

On *post-mortem* examination it was evident I had been dealing with a left tubal pregnancy, which had suppurred, become adherent in every direction, and perforated into the bladder and the sigmoid bowel. The sac which had contained the fetus could not be dissected away from the hollow viscera which surrounded it. The bones of the fetus were examined by an expert, and stated to be about the fifth month.

THE PHILADELPHIA COLLEGE OF PHYSICIANS.—Plans have been adopted for the erection of a new building for the College of Physicians at Philadelphia. The estimated cost is £48,000. The building will comprise a library with shelves for 30,000 volumes, a floor for museum exhibits, a large lecture and assembly room, with other rooms and modern conveniences. The College has at its disposal, including cash and real estate, about £74,000.