the mobility of the organ is impaired, or in which any thickening is palpable either in the broad ligament or in the cellular tissue around the cervix. In short, I would apply strictly the rule which is sound in surgery as regards malignant disease in other situations, not to operate unless the whole disease can be thoroughly removed.

In conclusion, I would appeal once more to the great body of the profession for early and careful examination in suspicious cases, and for prompt appeal to surgical aid when either sight or touch seem to them to corroborate other suspicious symptoms.

I consider that supravaginal amputation is the least dangerous and most satisfactory procedure as regards after-health in suitable cases, but I would leave the question of partial or complete operation in cases of disease of the vaginal portion open for farther observation. And I would insist that the sound surgical rule, only to operate for malignant disease in cases in which the whole disease can be removed, should be applied here. I dwell on this point because I think there is a tendency to operate in hopeless cases, a tendency which is fostered by the urgent appeals of patients and their friends, often backed up by their medical advisers, to what they call "give them a chance."

If the patients escape immediate death in such cases they are left with sores which cannot heal, or they have such speedy recurrence, that it was not worth all the anxiety and danger of an operation, and operations which are triumphs of surgical science in properly selected cases, are brought into discredit. I have given no statistics such as I have published of most of the other operations I have performed, because the number of cases operated upon is too small to make them valuable for any statistical argument, and they would be only misleading unless there was time to elaborate their separate details, and show wherein are to be found the causes of success or failure. I know of nothing more misleading than the publication of small groups of cases to support a statistical argument; every operator of large experience knows that he has runs of success or of failure, and it is quite remarkable how an operator of small experience often leads off with a run of good fortune which makes it appear that his success is quite phenomenal till the other run comes.

THE EARLY DIAGNOSIS OF CANCER OF THE UTERUS.¹

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It is a well-known fact that in all classes of society an early diagnosis of cancer of the uterus is an exceptional occurrence, and that case after case comes before us with a history sufficiently characteristic, of some months' duration, too far advanced to admit of any but the routine palliative treatment of the symptoms; and when we ask the reason of this delay, the answer is either that the patient has feared to consult her doctor, hoping that the symptoms would pass away, and afraid, perhaps, of the verdict, or that she has regarded the irregular hæmorrhage as of little importance; or the reply is that her doctor prescribed for her without making any examination.

It is necessary, in the first place, to recall the principal varieties of cancer of the uterus and their usual seats, and in doing so to point out how utterly unscientific is the common and so-called pathological classification in common use. The terms "mushroom," "cauliflower," "conical ulcer," and "nodular" represent merely clinical characters, and indeed are of value in this respect, but as representing pathological varieties they are valueless and their use utterly discreditably.

Cancer of the cervix is so much more common than that of the body of the uterus, and has so little tendency to spread from it to the body, except in late stages, that the separation of these two sites is justified. Cancer of the cervix occurs in two distinct varieties, squamous-celled epithelioma arising from the vaginal surface, and columnar-celled arising from

the cervical glands, and perhaps from the epithelium lining the cervical canal. Squamous-celled cancer is a disease of the cervix, having a tendency to form outgrowths into the vagina rather than to invade deeply the substance of the cervix, and to spread along the surface of the vagina rather than to invade the surrounding connective tissue.

Columnar-celled cancer, on the contrary, begins in the substance of the cervix, and remains for a long time covered by the healthy vaginal surface, and is concealed by it; it spreads extensively into the whole substance and into the surrounding connective tissue, and from this to the tissue of the broad ligaments, and beneath the surface of the vagina, and in consequence it is much more difficult to recognise in an early stage, both as to its presence and its extent; and this is the more unfortunate as it is the more common form and the more malignant.

Cancer of the body is probably always of the columnar-celled glandular type, having a tendency to the formation of papillary growths both into the cavity and into the wall of the uterus, and spreading into the broad ligaments and occasionally along the Fallopian tubes. Cancer of the body is, therefore, much more difficult to diagnose in the earlier stages than either of the preceding varieties of the cervix; it is, fortunately, much less common, and it, at least in its early stages, appears to be less malignant.

Sarcoma of the cervix is very rare; sarcoma of the body is less so, and is usually of the round-celled type, with a marked tendency to mucoid degeneration of the cells, and it not rarely forms polypoid masses, which, if arising from the fundus, may lead to inversion of the whole organ, by the same mechanism as that which obtains in the same cases of uterine fibroids.

Epithelioma of the cervix is occasionally recognised in a very early stage; it has then appearances very similar to those of the common innocent erosion, forming a well-defined, livid, slightly raised, not necessarily indurated, patch, on one lip, more commonly the posterior. As it progresses its tendency is to spread along the surface and involve the whole lip; and, though the enlargement of the affected lip is considerable so that it may entirely conceal the other, does not necessarily deeply invade the cervix.

The further progress of the disease varies in different cases, in some the tendency is to spread along the surface of the contiguous parts, ulceration takes place on the surface, and in time more deeply. In another form the growth is more distinctly localised to the cervix, it forms a protruding mass, flat on the surface, and from its little tendency to spread in the substance of the cervix, it assumes a somewhat pedunculated character, and is then described as the "mushroom" variety.

The glandular form originating in the substance of the cervix is totally different; it begins as a minute nodule somewhere in the substance of the cervix, and spreads through it in all directions, and from it to the surrounding connective tissue. This form, even when considerably advanced, is so frequently covered by a surface of healthy tissue, that unless it has begun close to the external orifice its existence may easily be overlooked, and its extent certainly not suspected, until the operation of extirpation is commenced and found to be impracticable.

Carcinoma of the body appears to begin as papillary outgrowths into the cavity, or into the substance of the uterine wall, and to arise in the glands; it has to be distinguished from simple hyperplasia of the mucous membrane and glands, a so-called endometritis, the main symptom of which is bleeding, and the characteristic structure hyperplasia of the glands.

The symptoms of cancer of the uterus do not materially differ with the difference in kind or the site of the disease. They are of the greatest importance, and when present, a careful examination should never be omitted. I differ entirely from those who say there is nothing characteristic about them; each of them has features which are distinctive, but they are sometimes closely simulated in other diseases. The essential early symptoms are hæmorrhage, pain, and a thin watery, often offensive discharge.

Hæmorrhage.—The hæmorrhage due to cancer is essentially not a menorrhagia; it has no connection with menstruation except in the rare cases of cancer of the body, and by no

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means constantly then. If a woman suffering from cancer of the cervix has menorrhagia, there is usually some other cause for it in addition to the cancer. We are all well aware how difficult it is to get our patients to distinguish between menstrual and non-menstrual hæmorrhages, unless there is actual flooding, they call all by the same name, and even during pregnancy, and still more many years after the climacteric, women say they are regular or that their periods have returned; and it is not only in cases of suspected cancer, but it should be our invariable rule under all circumstances to cross-examine our patients before we accept their statement that a hæmorrhagic flow is menstrual. How many mistakes in the diagnosis of pregnancy might be avoided by this precaution?

The first symptom of cancer is often a hæmorrhage occurring without any assignable cause, and though frequently slight at first, it is not infrequently considerable in quantity; and this symptom occurring in a woman neither pregnant nor recently confined or miscarried, and still more particularly if she has passed the climacteric, should at once raise our suspicions and lead us to investigate it fully.

Pain.—The characteristic feature of the pain of cancer which should attract our attention and distinguish it from pelvic pain due to inflammation and other causes, is the fact that it is not only not relieved when the patient lies down, but it usually becomes worse, or at least less bearable. It is also referred more frequently to the region of the trochanters than is pain due to other causes.

The Discharge.—This is not rarely the first symptom; it is not purulent, except in rare cases of cancer of the body in old women, or viscid like the white of eggs, but is watery and often fetid and profuse.

The occurrence of these three symptoms together or separately should lead us to insist on a thorough examination. They may occur at any age after 25, the youngest of my own patients was, I believe, 23.

Before proceeding to the consideration of the physical examination, let me refer again to the symptom of hæmorrhage occurring about the age of the climacteric—45 to 48 or later—and after the climacteric has been well established. It is commonly held that irregular hæmorrhages occurring in a woman at a time when it may be supposed that the climacteric change is about to occur are sufficiently explained by assigning the climacteric as the cause, and their occurrence as being therefore physiological; this I believe to be a mistake, and it frequently leads the physician to pass over serious symptoms as of little importance, and to the patient serious consequences. Physiologically the natural process should pass without any serious symptoms, and it may be laid down as an axiom that the climacteric is not a sufficient explanation of the occurrence of serious symptoms, whether pelvic or cerebral or of other kinds, and it is imperative that the cause of such symptoms should be investigated with the same care as if the supposed climacteric were not near. There is no more serious symptom than uterine hæmorrhage after the climacteric has been passed, and though it does not invariably mean cancer, yet if there is bleeding, not mere staining, it generally does, and no time should be lost before determining the matter.

Now there is one common cause of hæmorrhage throughout adult life, particularly met with amongst the hard-working classes, which from the fact that all the common causes of uterine hæmorrhage cease soon after the climacteric to produce hæmorrhage assumes in advanced life a position of great importance—namely, the true ulceration of the vagina and cervix which is often present in neglected cases of extreme uterine prolapse, and as the result of ill-fitting pessaries in these and other cases. The diagnosis of these is quite easy, and the ulceration heals rapidly if the prolapsed parts are properly supported and kept clean. In a doubtful case the microscope in the hands of any practised observer will at once enable the distinction to be made. A small fragment should be cut off with a scalpel at the edge of the ulcer, and placed at once in alcohol or Müller's fluid. This can be done with so little pain that an anæsthetic is not necessary.

There is also a form of disease of the mucous membrane of the body of the uterus, described as an endometritis, not malignant, which gives rise to a blood-stained mucous discharge, which is much more difficult to distinguish from early

malignant disease of the body. But the discharge is not offensive, and there is no pain in the non-malignant disease.

The great feature which distinguishes a malignant ulcer or nodule from a simple erosion, or the nodular enlargement of the cervix the result of chronic cervicitis, is the ease with which the malignant disease bleeds when touched. The absence or presence of bleeding when a suspicious cervix is examined gently with the finger is of the highest importance; if in such a case an ulcer, erosion, or nodule can be rather roughly touched or scratched by the finger, or the mucous membrane of the cervical canal by the sound or other instrument, without any or only with the slightest trace of hæmorrhage, there is the strongest probability that the disease is not malignant; while, on the contrary, if in spite of the greatest care and gentleness bleeding out of all proportion to the injury done occurs, the disease is almost certainly malignant.

In all doubtful cases of disease of the cervix a piece of the suspected part should be cut out, taking care to include the margin of the healthy and affected part, and be carefully preserved and submitted to microscopical examination. I do not profess to speak as an expert in histology, but I have endeavoured to make use of the great opportunities we have at St. Bartholomew's, and I am sure that a correct diagnosis can be made by these means in a very large majority of cases of disease of the cervix.

The diagnosis of early disease of the body is infinitely more difficult, when we have reason from the symptoms to suspect malignant disease we can only get at the diseased part with difficulty by dilating the uterus, and the means that we use for this purpose may, in spite of care and skill, so alter or even destroy the diseased surface that we obtain little or no decisive evidence, and we then endeavour to scrape off a fragment (we cannot remove it with a knife) and submit it to microscopic examination. Now such a fragment may not even be taken from the diseased part, or if it is it will be very superficial and will often be quite insufficient for any histologist, however competent, to be able to form a correct opinion.

It therefore happens that we are at times confronted with the grave responsibility of having to advise a patient to undergo or, what is of not less importance, not to undergo, hysterectomy, when we and any competent practitioner we take into consultation are unable to decide with certainty whether she is or is not suffering from cancer of the body. It is not to be wondered at then that even the most careful surgeon will occasionally remove a uterus which is found afterwards not to be cancerous, or will delay so long that the disease, which might have been safely removed with a considerable probability of a long immunity from recurrence, and even some probability of cure, is allowed to advance so far that removal is impracticable.

Out of 61 cases of cancer of the uterus under my care at St. Bartholomew's Hospital during the year 1894 there was only one of cancer of the body, this was an advanced case of papillary gland cancer invading the whole body, and which was as large as a large potato. The patient made an excellent recovery after the hysterectomy; 60 were cancer of the cervix, 16 having the characters of squamous epithelioma, and 37 intracervical gland cancer, 7 were so advanced that it was not practicable to ascertain their origin. Out of these 60 cases only 4 were in a sufficiently early stage to admit of complete removal.

Half of the cases (30) were between the ages of 40 and 49, 15 were between 30 and 39, 14 were between 50 and 59, and 2 were over 60.

In the *Occidental Medical Times* Dr. Woods, Medical Inspector of the U.S. Navy, makes a statement regarding the result of the Japanese Dr. Goto's treatment of leprosy. Anxious to try everything possible for the cure of leprosy, the Hawaiian Government handed over to him the lepers of Molokai. Dr. Goto's secret remedies were imported in tons from Japan, and consisted of medicated baths and pills regarding which Dr. Goto refuses to give any information. Among the 200 lepers placed under his care after nine months, no cure was observed, and such improvement as was exhibited would have followed ordinary or sulphur bathing, with tonics, special dieting, and careful attention to hygiene.