generally as expeditious as it is beautiful, satisfactory, and complete. Staining was not used; the writer preferring for himself to study the living and moving hæmatozoon in its natural aspect. It may be added here that the writer, since making the observations above referred to, has demonstrated the parasite in three cases to several gentlemen interested in the subject. In two cases not previously examined the time between bringing the microscope to a focus and finding the first parasite was taken by means of a watch and was seen to be 100 seconds in one case and 105 seconds in the second; while in a third case microscopic diagnosis was made under two minutes. Any one who has been shown what to look for in the blood and how to look for it must feel a greater and greater confidence with every case in finding the parasite; and the writer is inclined strongly to endorse from his own experience the opinion of Dr. Manson and others that it is to be seen in the finger blood in the large majority of cases.

With respect to the causation of the disease, it may be stated that the regiment in which the cases occurred numbers some 800 persons, and is stationed in lines of huts about a mile from the marshy origin of a large tank. On first thoughts the marsh would be declared at once to be the origin of the malaria; but there are reasons to traverse this view. For instance, the disease showed a tendency to infect certain portions of the lines more than others, though all parts are equally exposed to the marsh air. Thus out of 70 recruits who lived together in a stone-built house close to the rest of the lines, not one was attacked, though 100 of the remaining 730 men suffered. Again, in two houses all the inmates suffered, namely, father, mother, and children, and all had the same parasite, namely, the summer-autumn variety. Such facts as these seem to point to a very local origin of the disease, such as would easily be explicable on Manson's mosquito hypothesis. The results of the writer's investigation of the behaviour of the crescents in the stomach of the mosquito have already been given by Dr. Manson before the July meeting of the British Medical Association, and he has had the good fortune of being able to observe that the evolution of the crescents does not only go on within the mosquito, but goes on to a much greater extent than in finger blood. It should be added here that his observations on malarial fevers in Secunderabad strongly suggest the truth of the same theory, on the ground that the poison appears to have a much more localised and particular origin than would be possible on the supposition of a miasm generally diffused in the air.

THE EARLY DIAGNOSIS OF MALIGNANT DISEASE OF THE UTERUS AND THE TREATMENT BY PARTIAL OR TOTAL EXCISION.¹

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EARLY DIAGNOSIS.

How is an early diagnosis to be made? Clearly by neglecting no menstrual departure from the normal, however trivial it may at first sight appear, but at once to encourage the patient to accurately describe symptoms, and above all to insist in the most determined manner on a local examination. Here it will be apparent that I, as a consultant, appeal for help to the great body of those who are now listening to my remarks, to my professional brethren engaged in general practice. I, in common with those situated as I am, too seldom have an opportunity of diagnosing early, because the majority of the patients come to us too late, when the disease has already advanced nearly, or quite, beyond the limits of surgical aid. Let me then appeal to all engaged in family practice who listen to me here, and to that larger body who may read my words when reproduced in the medical journals, to sternly cast aside that too great modesty, or that tendency to treat as trivial small symptoms, and to at once take alarm about, and carefully investigate, every case in which there is brought to their notice an abnormality in menstruation, or a vaginal

discharge of any kind, however trifling. A very grave responsibility lies at the doors of the medical profession for the small progress made in the early diagnosis of uterine cancer and its successful treatment. How constantly is the consultant told: "I mentioned it to my doctor weeks or months ago, but he said, 'Oh! it is nothing; I will send you a little medicine or a little injection,' and never even suggested any internal examination, so I did not like to trouble him again till the pain became so bad or the discharge so troublesome, and then he examined me and said I must have special advice at once." Invaluable weeks or months gone, and then the verdict of the consultant, "It is not a case for operation," which really means "You have come too late," but cannot be so candidly expressed, because he must guard the reputation of his professional brother. I admit that the false modesty of the patient, especially in some classes of society, makes the position a difficult one, especially for the young family doctor, but let me implore you all to awake to what is at stake, and to be firm in your demand for an examination, and if you have any doubt after such an examination, to urge that the patient should at once seek the advice of someone who has larger opportunities than yourself for forming a sound opinion. I will go one step further and ask you, if there should be any to whom such a temptation comes, never to go on treating a case in which there is a shadow of doubt, either because you doubt or because you want practice; if the case is susceptible of treatment at all, it is only surgical treatment which can avail, and that of so severe a kind that it requires the knowledge of the specialist if ever any disease did or does require special knowledge and special skill in operative treatment.

The whole history of malignant disease in whatsoever part of the body situated teaches us this, if it teaches anything, that to have any chance of cure the operation must be of the most radical and far-reaching kind that the tissues and organs concerned will admit.

How is the diagnosis to be made in the early stages? What is cancer? I will answer the last question first. It is a growth of epithelial cells with malignant properties, that is, the new growth has the power of invading and destroying the tissues in its neighbourhood, and of reproducing itself in distant parts. Its tendency is not only to invade and grow into other tissues, but also itself to break down and die. Hence we have increase and decrease going on at the same time. In its early stage increase is the marked feature, then the two side by side, and later decrease is the prominent feature—cancerous ulceration. I do not enter upon the more recent views as to the exact pathology of cancer; they are still to me somewhat nebulous, and I prefer to leave the discussion of them to the younger men who have specially worked at this difficult but fascinating research.

Does my description of the nature of the disease help us to diagnose early? I think it does, for we have enlargement and hardness at first, red and angry little nodules of new tissue to sight, bleeding easily, and hard to touch. A little later we find some of them breaking down and bleeding without touch, and little pits, excavations forming with grey or yellow surfaces and adherent discharges, and shreds of dead tissue. Later still the new growth seems at first sight to have ceased, and only deepening excavations and ragged holes are apparent, but if we dry them with absorbent cotton we shall see that new epithelial growth is still going on, forming ridges and nodules among the prevailing decay. In the common cauliflower excrescence the new growth is for a time so greatly in excess of the decay that we get a large mass often filling and distending the vagina. Such masses are, however, easy enough to recognise, and are outside our present need, which is an early diagnosis.

If the appearances I have described are not sufficiently marked to make a diagnosis at once possible, a little watching, aided by the application of something which will heal an ordinary abrasion or ulceration, solutions of sulphate of copper, nitrate of silver, or chloride of zinc will generally settle the point, and if this fails a little piece may be snipped off and submitted to microscopical examination. I think the latter proceeding should be avoided if possible, and when it is necessary, the procedure should be quickly followed by an operation of a radical kind, because thus to snip out a bit of a malignant growth is in truth to perform a partial operation,

¹ Read in the Section of Obstetrics and Gynæcology at the Annual Meeting of the British Medical Association held in London, July-August, 1895.

and thus to run the risk of rapid spread to distant parts through the opened veins and lymphatics. Clinical observation, if sufficiently close and painstaking, will generally give a distinct diagnosis in good time for successful interference. Then we must not forget the characteristic sacral pain so commonly present, the frequently offensive discharge and the cachexia which is often only too apparent quite early. If the disease be hidden from view in the cervical canal or in the interior of the uterus, then dilatation and examination by touch may be conclusive, or it may be necessary to remove a portion for microscopical examination. The forms of malignant disease are adenoma (frequently but by no means always malignant and most hopeful for early excision); sarcoma (rare but very malignant); and carcinoma in its papillary, glandular, and scirrhous varieties, most common, and most malignant.

The adenomata have a definite gland-like structure. The carcinomata begin as it were to form glandular epithelial structures, but never reach any definite gland formation. The sarcomata are of the connective tissue type and grow from the cells of this tissue, rapid, soft, fleshy growth with tendency to hæmorrhage, and later breaking down and ulceration, as in carcinoma.

The sarcomata of the alveolar type are however very difficult to distinguish microscopically from the epithelial tumours, the cells lining the alveoli are exactly like the cells lining the imperfect acini in glandular carcinoma. The growths which we most often find palpable in the vagina, and visible to examination by the speculum, are the cauliflower or papillary epithelioma, the sarcomatous growth which often very closely resembles it, the adenoma and the glandular form of carcinoma which is a projection from the cervical tissue. The symptoms are hæmorrhage, pain, especially pain at lower part of back, discharge, and loss of flesh (cachexia). Sometimes even quite early in the growth the bladder is irritable.

Cancer in the cervical portion of the uterus is usually of the glandular type, and it is very common. The disease is much less common in the body. The epithelial form may occur in either the vaginal portion, the cervix, or the body, but is not very common in the latter. The soft (encephaloid) or hard (scirrhous) forms of the disease may be found either in the body or the cervix, and if these old names are worth preserving at all the particular form of the disease can only be recognised in these situations after its removal. I am inclined myself to preserve the term scirrhous, as useful for describing the form seen chiefly in elderly people when the whole roof of the vagina is obviously involved and the mass grows down towards the vulva dense and hard with no ulceration and no discharge, but binding all the tissues in one dense mass. My own impression is that it is better to classify thus: adenoma, sarcoma, carcinoma, and divide the latter into epithelial and glandular. The former including the epitheliomata and the latter the encephaloid and scirrhous. Then in describing a case we should add of the vaginal portion, thus adenoma of the vaginal portion, or epithelioma of the lining membrane of the body, or glandular cancer of the cervix and so on. But I must not linger over this very imperfect sketch of the various forms of the disease, but pass to the question of what treatment is most suitable for each variety.

EARLY TREATMENT.

Adenoma, if removed freely, may not recur; but probably it is wise, in view of its frequent malignancy, to amputate the vaginal portion of the cervix entirely when dealing with this form of disease.

Epithelial cancer of the vaginal portion is usually superficial in its early growth, and I think that there can be no doubt that the proper operation for it is complete excision of the cervix. When it has spread beyond the reach of this operation, such spread is nearly always into the vaginal wall, and not towards the uterine body, and to remove the latter is useless. This operation of supravaginal amputation of the cervix is not a difficult one, and if performed with reasonable care should not be a dangerous one. I have not had a death from it, and others have a like record in a considerable number of cases, and it is followed in many cases, as I can testify from my own practice, by a most satisfactory period of healthy life. I am afraid that most cases ultimately get recurrence, but

several of my own cases have lived for periods varying from three to eight years in perfect health. Hence the reappearance of the disease may, as Sir J. Williams suggested in his Harveian Lectures, be a fresh outbreak of cancer in a patient prone to the disease, not a recurrence from mischief left at the time of operation. If I am told that cases of complete extirpation do not have recurrence at all, I again point out that the conditions of growth are different in the vaginal portion and in the body.

I think this operation should also be employed for the removal of the sarcomatous growths which are occasionally met with projecting into the vagina from one or other lip of the cervix.

It may sometimes be advisable to perform this operation for the removal of those large epithelial (cauliflower) masses which are met with, causing the patient great pain, and much discomfort from entirely blocking the pelvis, and from the offensive discharges and hæmorrhages to which they give rise; but it is well to explain to the relatives that the operation is not undertaken with the idea of procuring any prolonged immunity from the disease, but merely to relieve the poor patient from her miseries for a time.

METHOD OF OPERATING.

Have the patient well doused with some antiseptic solution several times a day for some days before the operation, and the vulva and pubes well washed with the same, and both proceedings repeated immediately before the anæsthetic is given, as soon as she is asleep inject the uterine cavity with pure tincture of iodine, place her in the lithotomy position with Clover's crutch, seize the cervix with a good strong vulsellum, divide the mucous membrane all round just at the junction of the cervix and vaginal vault, taking care not to cut so deeply as to divide the vessels on each side, which should then be seized between the finger and thumb and secured by transfixion with No. 2 carbolised Chinese twist; the cervix is then firmly drawn down and cut away under these ligatures, the incision beginning well above the level where the mucous membrane was divided, and being carried upwards as the cervical canal is approached so that a V-shaped block is taken out, the point of the V being upwards at the internal os. If necessary, the vaginal mucous membrane can after division be pressed well back from the cervix in front and behind so as to allow a higher section. The divided surface is then carefully examined, and if it appear healthy the operation is completed by the ligature of any bleeding points with fine carbolised silk, these ligatures should be passed under the mouths of any bleeding vessels by a fine needle, a point or two of this same fine silk may then be used to draw the edges of the vaginal and uterine mucous membranes together and the vagina lightly packed with iodoform gauze. If after the first section the division appear to have been made through diseased tissue, further slices must be taken off, and in this way the whole mucous membrane of the uterus may be removed, but this always leads to the danger of opening into the peritoneum, a danger which is not however so great as might be expected if protrusion of intestine or omentum is at once prevented by a suture, or by a plug of iodoform gauze. The iodoform plug may be left in the vagina for several days or even a week in most cases, but should be removed and the vagina doused if there is any rise of temperature, or any offensive odour from the discharge soaking through the plug. Should there in this operation be any difficulty in securing the uterine arteries by ligatures, a long, narrow-bladed pair of Wells pressure forceps may be supplied on each side, and left *in situ* for some forty-eight hours or longer surrounded by the gauze plug; at the end of this time, if they are carefully removed, there is little if any risk of secondary hæmorrhage. Some operators prefer to use scissors for these operations. I prefer the knife, as I think you can regulate the exact depth and extent of your cutting better with it.

The patient should after recovery be carefully examined every three months, so that the earliest signs of any recurrence may be observed, and the diseased tissue at once removed when practicable.

In speaking of this partial operation I have not thought it necessary even to refer to the old question as to whether any operation should be performed at all for uterine cancer, I

take' it that that is settled, and that no one in the present day would take the responsibility of raising his voice against operation when performed sufficiently early. The only points we have to discuss are the limitations of operative interference, and the best operative procedures for suitable cases.

I have given my voice in favour of supravaginal amputation when the disease is of the vaginal portion, but if we are to accept Williams's view that reappearance after two years' interval is not recurrence, but a fresh outbreak of cancer in an organ specially subject to the disease in a patient also specially prone to it, then I must admit that there is a powerful argument in favour of total extirpation in all cases which are suitable for operation at all. We cannot have new growth, a new outburst in an organ which has been entirely removed; we do most unquestionably frequently have it in the stump, in the most disappointing way, after long periods of perfect health. I recently heard of the death of one of my own cases nearly eight years after successful amputation of the cervix, this recurrence or fresh outbreak, of the disease having run a remarkably rapid course, so that all thought of further surgical interference was out of the question when it was first discovered.

Comparisons of the results obtained by two different operations in the hands of the same operator, are always especially valuable, and Lewers's recent paper in the *Lancet* seems to me clearly to demonstrate that in his hands, at any rate, complete excision is a far more fatal operation than supravaginal amputation, a result quite in agreement with my own personal experience, so that we have to balance this very decided practical fact against the theoretical suggestion of Williams, and I must confess that I remain in favour of supravaginal amputation of the cervix in proper cases, and I believe that I shall find Williams in agreement with me, and therefore in practice not prepared to accept the logical deduction to be drawn from his own suggestion.

Two methods are recognised for complete removal of the uterus, the combined abdominal and vaginal of Freund, and the vaginal of Récamier, Sauta, and Blundell. I do not propose to dwell upon the former, as I think it is clearly proved to be a far more dangerous operation than the simple vaginal extirpation, and should only be considered in cases in which the vagina is so small, or the uterus so large, that the vaginal method is excluded. Such a case I had four years ago, a recurrent sarcoma after partial vaginal removal, a large tumour filling the pelvis and extending up into the abdomen, quite impossible to remove through the vagina, and a sufficiently formidable operation by the combined method. The patient made an excellent recovery, and is still in perfect health.

Vaginal Extirpation (kolpo-hysterectomy).—The position of the patient, the preparation, and the early steps of the operation are the same as in that previously described, but as soon as the vaginal mucous membrane has been divided all round, the peritoneum is opened by the careful introduction of the points of a pair of Lister's sinus forceps, pushed up first close behind the cervix, and then close in front, into the posterior and anterior pouches respectively, taking care in their introduction to keep them well in the plane of the uterine body, so that they enter the peritoneum close to its reflexion from the body; this is especially important in front or the bladder may be damaged. After penetration and as they are withdrawn the blades are widely separated, and thus a sufficiently large opening is made for the introduction of the finger and instruments, either scissors or probe-pointed bistoury, with which the uterus is freed from its peritoneal and other attachments in front and behind, leaving a bridge of tissue on each side where the broad ligaments are attached with their important contained vessels. When this stage of the operation is reached the practice of different operators varies considerably, and special cases may render some departure from one's favourite method desirable; some apply pressure forceps or temporary clamps up each side of the cervix so as to include the whole of the sides of the uterus up to and including the Fallopian tubes, then cut the uterus away, and afterwards secure the broad ligaments and uterine arteries by transfixion, others invert the uterus, bringing the fundus down into the vagina either through the anterior or posterior opening, and then transfix and tie the broad ligaments before farther separating the uterus. Three all-important

points have to be borne in mind at this stage of the operation: First, the broad ligaments, or, rather, the vessels in them, must be secured thoroughly, so as to avoid any risk of after-hæmorrhage; secondly, this securing process must be so performed as to avoid any immediate or subsequent interference with the ureters; and, thirdly, so as to leave as little strangulated tissue outside the ligatures as possible. The space between the side of the cervix and the passage of the ureter through the broad ligament to the bladder is only about half an inch, if forceps are applied there is very little room left outside them to tie safely away from the ureters, and if the relations of parts are still farther confused by the inversion of the fundus there is great risk of inclosing the ureter in one of the ligatures or tying so closely to it that the drag upon it obstructs it or leads to subsequent sloughing and fistula. I am in the habit therefore of dividing the broad ligaments bit by bit and tying the bleeding points as they appear with very fine No. 1 Chinese twist introduced by transfixion under the mouth of the vessel, the bleeding from the cut uterine ends of the vessels being stopped by the temporary application of pressure forceps. This method prolongs the operation considerably, but in my opinion renders it so much more safe against the two dangers I have referred to, hæmorrhage and injury to the ureters, that I have no hesitation in recommending it. It possesses too, another advantage in that there are no great lumps of tissue included in the ligatures to die and cause blood poisoning, or secondary hæmorrhage during their separation. The assistant draws the uterus well over to the opposite side of the vagina and firmly down with the vulsellum, and the operator separates the uterus by successive snips with a pair of scissors curved on the flat, and applied as closely as possible to the uterine body, then when a vessel is cut it is immediately seized by pressure forceps transfixed and tied at once. After removal of the freed uterus I pack the vagina lightly with iodoform gauze, and never employ any sutures to the edges of the peritoneal opening. If the gauze is not pushed up too far into the vagina the edges of the peritoneal wound will, in the majority of cases, fall together, and there is not more opening left than is advisable for the escape of any discharge from the peritoneum during the first few hours, and the gauze plug makes an excellent capillary drain. I should have mentioned that as soon as an opening has been made into the pouch of Douglas, a carbolised sponge should be pushed into the peritoneum large enough to fill the pouch and keep the intestines and omentum well out of the way, it is well to have a long silk or thread attached to this sponge to facilitate its withdrawal without disturbance of parts, when the operation is completed, its withdrawal has the advantage of thoroughly clearing away any little clots or any discharge from the raw surfaces.

The iodoform gauze may be, as in the partial operation, left in the vagina so long as it keeps sweet and the patient's condition is satisfactory; but should be at once removed, and thorough antiseptic douching resorted to on the appearance of any putrefactive odour or rise of temperature.

I need not describe the combined operation, for it must be carried out in different ways according to the nature of the case which makes its performance desirable. In the large sarcoma already named I worked in the abdomen just as I do in the vagina, tying everything that bled by transfixion as I cut, and stopping back bleeding from the cut surfaces of the tumour with temporary pressure forceps.

Now, I have briefly referred to diagnosis, to the various forms of disease which may call for operation, and to the methods of operating; it remains to say a few words on the cases suitable for operation. I do not myself think that any case should be operated on at all in which the mobility of the uterus is impaired, because we may be quite sure that the disease has already infiltrated beyond the reach of complete removal—that is, it should be possible to draw the cervix well down to the vulval opening. I do not think that any case should be operated upon by supravaginal amputation of the cervix in which any portion of the vaginal wall is involved in the disease either by ulceration or infiltration, because in such cases again it is impossible to cut beyond the disease and through the healthy tissue. I do not think an attempt should be made at vaginal extirpation in any case in which

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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