A REVIEW OF THE SURGERY OF THE PERITONEUM.

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GENTLEMEN,—I will, with your permission, restrict the subject of this address to a brief review of certain prominent circumstances in abdominal surgery, especially in so far as they concern the peritoneum.

THE RITUAL OF AN ABDOMINAL OPERATION.

Students in their examination papers still, very properly, speak with awe of the peritoneum, and insist that an abdominal operation should be done "under strict antiseptic precautions." Thanks to the mighty revolutionary work of Lister, the great principle which underlies this axiom has been vividly demonstrated and well learnt, and it is probable that, after many vicissitudes, we are approaching the time when the best practical means of realising that principle will have been arrived at.

It is no matter of surprise that progress in the perfecting of the details of a great plan of treatment should have been at times erratic and ill-controlled. Since the days of the carbolic spray enthusiasts have rushed into strange and blundering extremes in their attempts to give practical expression to the dictum of "strict antiseptic precautions." These words have been with many a kind of mystic writing upon the wall, and activity in the interpretation of the message has been little short of confusion. In this practical country we have been fortunately spared the extravagances which have brought certain Continental operating theatres into ridicule. Those who come after us will read with interest of the operating theatre built like a diving tank, of the glass table for the patient, of the exquisite ceremonial of washing on the part of the operator, of the rites attending the ostentatious cleansing of the patient, of the surgeon in his robes of white macintosh and his india-rubber fishing boots, and of the onlookers beyond the pale who are excluded, with infinite solicitude, from the sacred circle as septic outlaws.

This exhibition may be scientific, but it is no part of surgery. It is more allied to a fervent idolatrous ritual brought down to the level of a popular performance. Those who have been led into these uncomfortable extravagances are no doubt honestly assured that they are carrying out the "strictest antiseptic precautions," but in blindly effecting this end they appear to forget what is the prime purpose of the art of surgery. Can this extreme demonstration be necessary? Is it not piling Pelion on Ossa and slaying the already slain? The surgical ritualists appeal to the infallible tests of the bacteriological laboratory, and bring forth, as conclusive evidence, an array of cultivations and of inoculated tubes. Most English surgeons, on the other hand, are content to appeal to the test of the patient, and to bring forth records of results. The work in the operating theatre comes up for criticism some week or more after it is done. A surgeon may remove a limb at the hip-joint in two minutes, and the performance may appear at the time to be very wonderful and brilliant. It may, however, as well have been dull if the patient dies at the end of a few distressful days. An operator in fishing boots, nurses with their hands and arms wrapped up in special towels, and a hose playing about the floor of the theatre may form an impressive sight, but to what degree does it bear upon the interests of the patient? An operating theatre is no more suited to be an arena for legerdemain than it is intended to supply an object lesson in the art of disinfection. What is done in the theatre may be, at the time, right or wrong; it can be judged by but one solitary and exacting test—the future of the patient. If this test be insisted upon, I venture to state that the general results obtained by operative treatment in the chief hospitals in this country compare very favourably with those obtained elsewhere, in spite of the fact that the method of most English

surgeons is unassociated with the elaborate ritual now alluded to.

There is, indeed, the amplest evidence to show that these extravagant and almost grotesque preparations for an operation are unnecessary; for that evidence demonstrates that such formulæ give, in no one class of operation, a better result than do the simpler methods with which we are familiar. More than that, it is scarcely to be believed that the long-continued exposure and washing of the patient after he has been placed upon the operation table is always quite harmless. When the feverish struggle of Continental surgeons to introduce mere novelties into surgical practice is at an end we may hope once more to resume the development of surgery as a handicraft. At present the actual handling of knives and forceps is overwhelmed by the dexterous disposal of the wash-hand basin and the soap dish. In contradistinction to the vagaries of the new surgery I would point out that a simple method, such as the following, appears sufficient to secure the much-exalted antiseptic precautions, or at least to produce admirable surgical results: The operating room is clean and free from dust. It may be in a hospital or it may be simply a wholesome bedroom in a private house. There is nothing peculiar in its construction. The table is of wood. It is not bacteriologically clean, but it is handy to the surgeon and comfortable to the patient—two points worthy of some consideration. Some time before the patient enters the theatre the skin of the abdomen is shaved, is well washed with soap and water and then with ether (or an ethereal solution of corrosive sublimate), and is finally covered by a thick compress soaked in a 1 in 20 carbolic solution, which is kept in position for at least five hours before the operation. The surgeon is clean, but he does not parade his cleanness. The mackintoshes and blankets which envelop the patient are, in a domestic sense, clean. The towels which cover the body in the vicinity of the operation area are taken direct from the steriliser. The instruments are sterilised by boiling, and are placed in a tray containing 1 in 20 carbolic acid solution.

Before the operation is commenced, this solution is infinitely diluted with boiled water, so as to render it free from any irritant power. The only sponges I use are made of Gamgee tissue cut into 6-inch squares. They are allowed to soak for twenty-four hours in a 1 in 20 carbolic solution. Before the operation the carbolic acid is washed out of them by sterilised water, and each square is passed through a well-cleaned sponge roller. Very rarely indeed is a Turkey sponge needed, as for all purposes the tissue sponges are, I think, as efficient, while they are certainly safer and more easily manipulated. An 8-inch pad, on a sponge holder, placed in Douglas's pouch will save an infinity of trouble in cases attended by extravasation. Any onlookers who wish can approach the operation table, provided they touch neither patient, sponge, nor instrument.

As to whether these simple and commonplace precautions are sufficient, I may take as a test the operation of removing the vermiform appendix during the quiescent period. This operation is performed upon patients of both sexes and at all ages. It may be most simple or prove to be exceedingly difficult, may involve two hours in its performance, and involve considerable suturing. I have carried out this measure in over 150 cases with one death. I doubt if even this one case would have been saved had I adopted the skin washing and india-rubber boot ritual. In the securing of primary healing after such operations as amputation and excision of the breast, I would venture to state that the results obtained by the simple method just described are not surpassed by any accredited to the school of advanced ceremonial.

What dressings are used after operation is a matter of little or no moment. The wound is dried and well dusted with iodoform. The iodoform is kept in place by a pad of wool and a binder. The selection of a dressing for a wound was at one time a matter of infinite importance and of anxious concern. It has now become a question of not the least consequence. Many wounds require no dressing at all. They are dried, are dusted with iodoform, and are left exposed to the air under the protection of a cradle. The fact that the iodoform is swarming with micro-organisms may disturb the bacterially-minded surgeon, but it disturbs neither the wound nor the patient.

PERITONITIS AND THE TREATMENT OF THE PERITONEUM.

Very remarkable are the changes which have taken place in our estimate of peritonitis. It was but in 1887 that Spillmann and Ganzinotty described no less than twenty-six different forms of peritonitis in their well-known monograph. Now the varieties of peritonitis can be counted upon the fingers of one hand. The evidence is practically complete which demonstrates that all forms of peritonitis are septic and are due to infecting micro-organisms. The existence of a rheumatic form of peritonitis has been by no means placed beyond doubt, and it is safe to assert that its individuality is very questionable. The peritonitis ascribed to the pneumococcus has not yet emerged from the confusion of a bacteriological squabble. Idiopathic peritonitis, which was at one time regarded as a definite and common disorder has now, indeed, ceased to exist. The constitutional symptoms of peritonitis are in the main those of septicæmia, and it is from blood poisoning and not from inflammatory disturbances that the subject of peritonitis dies. He dies poisoned. When the peritonitis is developed away from what may be termed the "small intestine area" it is apt to be localised. This is illustrated by peritonitis in the iliac fossæ, in the pelvis, and in the subphrenic regions. In all these districts the surgical treatment of peritonitis has been most successful. Peritonitis in the "small intestine area" is, on the other hand, rapidly diffused, and is as rapidly attended by septicæmic symptoms. In the treatment of localised peritonitis surgery can claim to have made great advances, but in the treatment of diffused peritoneal inflammation with marked constitutional symptoms there is little progress to record. The abdomen may be opened and washed out and drained, and the distended bowel may be relieved of its putrescent contents by incision, but the results at the best are not brilliant, and it is evident that the treatment of this terrible complication must still incline towards that desirable prevention which is better than cure.

Excellent have been the results obtained in the treatment of tuberculous peritonitis of almost all grades. The examination of some 300 recorded cases treated by abdominal section shows that a prospect of cure may be expected in over 60 per cent. of the instances, and that in 33 per cent. of those who recover the cure may be expected to be complete.

Simple incision, with free evacuation of the infected effusion, is the most successful of the many measures employed. The highest percentage of cures has been attained when the abdomen has been neither flushed out nor drained, but when the exudation has been merely evacuated and the parietal wound closed. This fact is as remarkable as it is unexplained, and it is evident that the time has not yet come when general principles can govern the treatment of surgical tuberculosis.

With regard to the general management of the peritoneum in operation cases, it would be a matter of sad interest to learn how much harm has been wrought by that unfortunate term "the toilet of the peritoneum." The much-abused serous membrane has quite a remarkable capacity for defending itself, up to a certain extent, against the invasion of micro-organisms. This power is lost if the membrane be irritated, or if its fine surface be damaged. Experiments upon animals appear to have demonstrated this fact very clearly. In the course of an abdominal operation, extravasation of one sort and another must, now and then, take place into the peritoneal cavity, and very often the surgeon has to blame his roughness or his defective tamponading for the extent of the effusion. It is well to be reminded that it is better to anticipate an extravasation, by cautious plugging and other means, than to deal with it successfully afterwards. Whether the effusion be harmful or harmless, the surgeon possessed of the term the "toilet of the peritoneum" is apt to be a little indifferent as to its amount. He proceeds blindly to remove it—although it may be quite sterile—by reckless flushings and by infinite sponging, rubbing, and scouring of this most delicate and susceptible of membranes. He removes it at all costs, and the cost unfortunately falls upon the sensitive peritoneum, and peritonitis is the not infrequent result. I do not say that an extravasation should be left in the abdomen, but I would prefer to leave a few ounces of sterile cyst fluid in that cavity than damage the peritoneum beyond all hope by persisting attempts to remove every trace of it by sponging.

If the extravasation be really noxious and also extensive, it is best removed, not by scouring out the abdomen, but by flooding it with sterile water with as little handling of the intestines as is possible. In actual practice even this washing out of the serous cavity is but very rarely required. Drainage of the peritoneal cavity also is not often needed, and in the selection of vehicles for drainage, I venture to think that the very best is the gauze tampon, and the very worst the glass drainage-tube. The gauze drain, if properly introduced, is most efficient, is capable of almost infinite application, and has proved one of the most valuable of the additions made to the details of an abdominal operation. The future of not a few operations hangs, in my belief, upon the gauze tampon, and but for it there are certain procedures which would be scarcely justifiable.

MALIGNANT DISEASE OF THE PERITONEUM.

The term "cancerous peritonitis" has, in spite of its simple foolishness, not yet vanished from literature, and textbooks still speak gravely of primary cancer of the peritoneum. The most usual statement handed down from one writer to the other is to the effect that "colloid cancer is most common in the omentum." It is needless to say that primary cancer of the peritoneum does not exist, inasmuch as the membrane provides no tissue from which a true carcinoma can develop. Those who speak of cancerous peritonitis may as well discourse on "sarcomatous scarlatina."

The peritoneum is, however, liable to an evil form of sarcomatous growth, and this is most common in the omentum. The subjects of this hopeless form of malignant disease are mostly adults of about middle life, and in my experience the trouble is more common in males than in females. I have met with it, however, several times in young subjects, and have known it mistaken more than once for tuberculous peritonitis.

The subjects of this affection generally exhibit the three cardinal features of malignant disease—namely, loss of strength, loss of weight, and loss of colour. They usually at first experience a want of energy, and feel listless and depressed. After this sense of vague ill-health come some abdominal uneasiness, some colic or sickness, or flatulent dyspepsia, with a sense of weight and sinking in the abdomen. The belly is examined and a lump discovered. The tumour, when in the omentum, is one of the most characteristic of abdominal swellings. It moves about; it is always flat on the surface which faces the anterior parietes. That surface may feel hobnailed or quite smooth. The margin, which is usually distinct and thin, is commonly crenated. The lower margin is, of course, the one best felt; on very slight percussion the swelling is dull, on deeper percussion it may be resonant. The mass feels like a cake of no great thickness moulded to the curve of the abdominal wall. If pressed down it seems to float up again. While the faecal mass may present large bosses on its parietal aspect the sarcomatous cake is relatively smooth. There is nearly always some ascites with the malignant growth, and often two lumps can be felt which may be shown to be connected. The sarcomatous mass is not tender; the faecal mass, owing probably to ulceration of the bowel, usually is tender. A large malignant growth on the anterior wall of the stomach which has been much displaced downwards, and which has a free pyloric opening, may be readily mistaken for this peritoneal sarcoma. I have known the growth confused with movable kidney, with splenic swelling, and very often with a faecal tumour. The diagnosis of "a movable left kidney" in a middle-aged man is very suggestive of a peritoneal sarcoma.

There is no doubt but that this growth is pathologically identical with the still commoner retroperitoneal sarcoma. The latter always appears to start from the posterior parietes, occurs in patients of the age alluded to, and carries with it the same prognosis. I have examined many by exploratory incision, and have usually observed after the operation that diminution in the size of the growth to which various surgeons have drawn attention.

The retroperitoneal sarcoma makes itself evident in many remarkable ways. There may be a gradual decline in health at the time that the growth is noticed, or there may not. Nothing but indefinite abdominal uneasiness may precede the discovery of the lump. Very often there is distinct dis-

turbance of the colon, for it is in the tissues behind the ascending and descending colon that the growth is the most common. As it extends it pushes the colon forwards. I have known this insidious disease make itself first evident by producing an attack of subacute intestinal obstruction. The nerve apparatus of the bowel is in most cases interfered with. There are colic, disordered action, and strange pains. Above all, there is a definite deep pain referred to the kidney region or the loin or the back, which begins to stand out from among the less constant symptoms. This pain is neuralgic; it has the characters of a nerve pain, and is apt to become intense. An abiding pain in "the back of the belly" in an adult is a symptom which should always excite suspicion. Some of the subjects of retroperitoneal sarcoma whom I have seen have been treated as dyspeptics; others have been at first assumed to have renal calculus, stricture of the colon, or gall stones. The growth in its early stages is very indefinite in its outline. It becomes evident enough in time, and often leads to such œdema and even redness to the integuments as to give rise to a suspicion of deep-seated suppuration.

Before concluding this part of the subject, I might say that since in certain wards at the London Hospital we have treated all cases of ascites needing tapping by a little exploratory incision in place of the unsatisfactory and no safer puncture, not a few errors in diagnosis have been corrected.

PERITYPHLITIS.

I have no intention of entering at length into the details of this much-discussed form of peritonitis, and will only consider a few points which I venture to think may claim attention.

1. Mere terms have before now had some influence in the formation of a belief, and the introduction of the well-rounded expression "appendicular colic" has evidently given rise to the impression that such a disorder or condition actually exists.

There is, so far as I am aware, not one fraction of evidence worth considering upon which to base the existence of this malady. By colic is understood certain painful symptoms depending upon violent and disorderly contraction of the muscular wall of the intestine. It is assumed by those who have been captivated by the term "appendicular colic" that fecal particles or foreign substances enter the appendix and cause intense muscular contractions in this organ, which contractions have for their purpose the expulsion of the intruding body. In opposition to this assumption, it may be pointed out in the first place that fecal particles are remarkably well tolerated in the appendix, as an examination of healthy organs after death will amply demonstrate. In the next place the intensity of colic must depend upon the power of the irritated muscle and the supply of sensory nerves to the disturbed part. It so happens that the muscular tissue in the appendix is of the feeblest character; the so-called muscular coats indeed are mainly composed of fibrous tissue. In some appendices it might be questioned if a definite layer of muscle exists. In any case it is but a mere stratum of attenuated fibres, and it is not to be conceived that the most vicious contraction of this shred of tissue could be appreciated by the individual.

Moreover the nerve supply of the actual organ is relatively poor. It is well known that extensive ulcerations and large fecal concretions may exist in the appendix without the patient being conscious of them, and certainly without the production of symptoms which could be ascribed to colic. It is impossible to avoid the conviction that "appendicular colic" must be relegated to the vast domain of medical imagery.

2. It is needless to say that the very great majority of examples of perityphlitis depend upon trouble in the appendix, but I am convinced that now and then the peritonitis is started by mischief in the cæcum itself, the appendix being sound. I do not allude to cases of epithelioma and actinomycosis of the cæcum, nor even to tuberculous disease of that organ, but to examples of non-malignant non-parasitic ulceration of the bowel. I am quite aware that when the cæcum is found perforated at the bottom of a perityphlitic abscess the perforation has usually come from without and the appendix is the offending organ. I am also aware that

an attack of perityphlitis may be brought about by changes in the appendix of so slight a kind as to escape notice in a casual examination. In spite of these admissions I have no doubt whatever of the existence of true peritonitis due to primary ulceration of the cæcum, and in my article on this subject in Professor Albutt's forthcoming *System of Medicine* I hope the evidence I have adduced as to this point will be at least worthy of attention.

3. The etiology of perityphlitis has not been rendered more lucid by the exuberant analytical discourses which some authors have expended upon this attractive subject. One American writer, in his account of the clinical phases of this affection, tabulates no fewer than thirteen varieties. I would not venture to add to this confusion except to the extent of hazarding the suggestion that the etiology of perityphlitis is comparatively simple. A catarrh leading to ulceration would appear to be the commonest factor, and it is this condition which precedes that stricture of the appendix which is so frequently discovered. The calcareous material found in the fecal plug, fecal concretion, or enterolith of the appendix is derived from the copious catarrhal discharge, and I take it that the origin of the appendix "calculus" is exactly identical with that of the rhinolith met with in the nasal passages as an occasional result of chronic coryza.

Most patients who have had attacks of perityphlitis are advised to avoid articles of diet containing seeds, there being a popular impression to the effect that the appendix has some selective power for seeds, that it can extract them with cunning art from the fecal mass in the cæcum, and, moreover, that it is a veritable trap for these particular foreign bodies. Those who are acquainted with the size of the lumen of a normal appendix cannot be other than amused at the idea of a cherry stone or a date stone finding its way casually into this diverticulum.

Foreign bodies, seeds, and fruit stones play practically no part in the etiology of perityphlitis. It is true that in a few reported cases foreign bodies have been found in the little organ, but these have been mostly small shot, pins, fragments of nutshell, and bristles. In no case of perityphlitis with which I have had to deal have I ever found a genuine foreign body in the appendix. The appendix has, however, a remarkable power of mimicry in the production of its concretions, and its imitations of certain seeds and fruit stones is often very wonderful. The smallest concretions are usually mistaken for fig seeds and tomato pips until cut into. The concretions next in size lean to the imitation of grape stones and orange pips. The imitated grape stones are often most deceptive in both shape and colour. The largest concretions may now and then resemble date stones with some exactness, but a slight examination will usually reveal the deception. The most remarkable imitations are afforded by cherry stones and grape skins. I have met with concretions so exactly like cherry stones in every external particular that only a division of the false seed has made manifest the constructive details. Collections of tough greenish-purple mucus may readily convince the observer that he has met with a portion of a grape skin rolled up into a cylinder to fit the tube of the appendix.

4. In the matter of statistics we have as yet by no means reached finality. Dr. Porter¹ is answerable for the following figures: The collected cases are 448 in number. In 151 instances the appendix was removed during the attack, with a mortality of 19.7 per cent. In 14 examples the removal was effected during the quiescent period, with the astounding death-rate of 14 per cent.; 188 cases treated by simple incision and drainage yielded a mortality of 18.18 per cent. In 95 examples treated medically, the death-rate was 13.68 per cent. One of the most important points suggested by these statistics is the general mortality of perityphlitis. A common death-rate given by the authors is about 14 per cent. This percentage is, I think, mainly derived from hospital cases (in-patients), and is probably not inexact for this class of case. But it is to be remembered that the cases admitted into hospital wards are practically those only which are severe. The slight cases would not demand, and would probably not be granted, admission. As a result of my inquiries, which include cases of all kinds, from the extremely acute outbreak to the attack which lasts forty-eight hours or less, I am of

¹ *Amer. Journ. Med. Sc.*, 1893.

opinion that the general death-rate of perityphlitis is to be estimated at about 5 per cent.

If an abscess form, then the mortality may run up to 30 or 40 per cent. In the great majority of instances the subject of a perityphlitic abscess is, by reason of that abscess, cured of his trouble should he survive. The abscess may close and break out again, and this circumstance may be more than once repeated. A troublesome sinus may be left. The patient may succumb to the results of continued suppuration, but, so far as a definite attack of perityphlitis is concerned—as distinguished from mere abscess troubles—he is in most instances exempt. The risk of removing the appendix during the quiescent period—as first proposed by me in 1888—is in my experience less than 1 per cent., and I believe, therefore, that the danger of that operation is less than that of an ordinary attack. I believe that the majority of the attacks of perityphlitis are single, but it is scarcely possible to express in reliable figures the risk to which a patient is exposed of having other attacks after the first outbreak.

5. As regards the question of surgical treatment I have had no reason to alter the opinion expressed some years ago that in dealing with cases during an attack an operation is seldom called for before the fifth day. Terms too strong cannot be used to condemn the practice of immediate operation: by that I mean the exposing of the appendix as soon as the diagnosis has been made. There is no sound basis for this procedure in either the pathology or the clinical prospects of the affection. It is not to be disputed that a fatal attack may commence mildly, and that it is not possible to foretell the degree of an attack by its mode of onset. The course of perityphlitis is, however, not so erratic as some maintain, and careful observation of each movement of the disease is not an unreliable basis for treatment. It is true that some intense attacks end in death in forty-eight hours, but if the whole range of the disease be reviewed, it is safe to say, with precision of language, that these terrific phases of the malady are exceedingly rare on the one hand, and are not difficult to recognise on the other.

In such extreme examples an operation cannot be done too soon. The assurance that simple incision is attended by a death-rate of 18.18 per cent. is not an encouragement to operate as a matter of routine. I need not add that evidence or strong suspicion of the presence of pus indicates immediate interference, and a like course is clear should the swelling continue to increase with no abatement of the fever and other symptoms.

There are few inflammatory affections in which leeches act in a more remarkable manner than they do in perityphlitis. If five or six be applied early, as soon as the local manifestations are present, the effect is in many cases most satisfactory. In not a few instances in which operation has appeared imminent, it has been rendered unnecessary by leeching.

The bacterium coli commune—the most usual active organism in the production of perityphlitis—has peculiar pyogenic powers. Pus may, on the one hand, be produced in an incredibly short time, while, on the other hand, the inflammatory process may hold an indefinite position for many days, the swelling neither subsiding nor giving evidences of suppuration; and then when even so long a time as two weeks have elapsed the definite phenomena of abscess may come to the front. In these hesitating swellings leeches often act admirably. At least they give immediate relief, and the punctures do not compromise any future operation.

When an abscess is evident or suspected the locality of the incision must be determined by the area of dulness and of resistance. Should the wound be made so far to the inner side as to miss the collection and open the peritoneal cavity, that incision should be closed and a fresh incision made at a point where the evacuation of the pus within the enclosed area can be effected. The incision should be free; the abscess cavity is gently examined as to its position and extent, and information obtained as to the situation of diverticula. These diverticula can be cautiously opened up with the finger. No elaborate search should be made for the appendix. Such search means risk to the frail abscess wall, and to that often feeble barrier of adhesions which isolates the pus from the general peritoneal cavity. Continued trouble may follow from a retained concretion, and as such a substance is usually easily to be felt, it should be sought for and removed. Should

the diseased appendix actually present itself, it can be ligatured and taken away. The high mortality accredited to this operation depends, I cannot help thinking, upon a blind resolve to excise the vermiform process at all hazards. The operation is concerned with the evacuation of an abscess, and those cases do best in which the least is done, provided that a free evacuation of the pus has been secured. The cavity does not need to be squeezed; it does not call for irrigation nor for sponging out, and least of all for scraping. As for drainage, nothing answers better than the iodoform gauze drain properly cut and carefully introduced.

One of the strangest features in the literature of this disease is presented by the numerous methods described for opening the abscess and for removing the appendix. These are generally discussed with much apparent subtlety under the fascinating title of the "technique of the operation." We have Smith's method and Brown's method and Robinson's method, to say nothing of sundry combination or co-operative procedures such as Brown's incision in Smith's line, followed by Robinson's mode of suturing. If we can learn anything from the past history of surgery, this savours of a retrograde movement. The treatment of a diseased appendix involves no new surgical principle and calls for no laboured inventions. The treatment of the abscess is based upon those great general principles which underlie the treatment of all abscesses, and the removal of the little organ demands no departure from those accepted procedures which belong to the common lore of surgery.

CLINICAL REMARKS

ON

SOME INTERESTING PELVIC CASES.

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CASE I.—A LARGE MYOMA OF THE NECK OF THE UTERUS.
A MARRIED woman (sterile), 40 years of age, came under my care in the Chelsea Hospital for Women with a large uterine tumour reaching above the navel, and furnishing all the signs of a myoma. A portion of the tumour projected through the widely dilated mouth of the uterus into the vagina. This tumour had been growing many years, and had not caused trouble till the last few months, when several severe losses of blood gave her great alarm. After careful consideration of the case I attempted to remove this large tumour piecemeal through the vagina, hoping to avoid the more serious operation of hysterectomy. Many large pieces of the tumour were detached by means of scalpel and scissors, when it became clear that more radical measures were necessary. The patient was returned to bed in order to obtain her consent to hysterectomy. On recovering consciousness the patient began to bleed so furiously that she was returned to the theatre and the abdomen opened in the usual way. As the tumour could not be withdrawn through the incision, I split the capsule and shelled it out of its bed. The loose capsule was then surrounded with the wire of a *serre-naud*, and treated by the extraperitoneal method. Convalescence was quick and uneventful.

On examining the parts removed I found the body of the uterus, with the tubes and ovaries, natural in shape and size. The tumour was elliptical in shape, and weighed nearly 7 lbs. It had arisen in the cervical wall, and protruded into the cervical canal, dilating it in the manner represented in Fig. 1. Microscopically it presented the characters common to uterine myomata.

I subsequently examined the myomata contained in the metropolitan museums. There is a cervical myoma (Hunterian) almost as large as my specimen in the Museum of the Royal College of Surgeons, and an excellent example, shewn in section, in the Museum of St. Thomas's Hospital.

CASE II.—COMPLETE TUBAL ABORTION.

If anyone practically unacquainted with the remarkable properties of unstriped muscle were shown a foetus at term in the amnion and the uterus in which it developed an hour