SIXTEEN CASES OF COMPLETE AND OF SUPRA-VAGINAL HYSTERECTOMY FOR CANCER.

By JAMES BRAITHWAITE, M.D. LOND.,
Obstetric Physician to the Leeds General Infirmary.

IN an interesting paper published in the *BRITISH MEDICAL JOURNAL* of January 10th, 1891, by Dr. Thomas Keith, he says, "I have often wondered why vaginal hysterectomy is so seldom performed in this country;" and he then observes that he thinks perhaps "it has fallen through between the surgeon and the gynaecologist." To this I may reply that the operation has not fallen through in the North of England at any rate, for it has been done by Professor Japp Sinclair, of Manchester, over forty times; by Professor Wallace, of Liverpool, about thirty times; by myself twelve times; and by Dr. Keeling, of Sheffield, several times. In London the operation has been done a considerable number of times by Dr. John Williams, Dr. William Duncan, and others.

The real reason the operation has not been done oftener is given by Dr. Keith himself, "unfortunately the number who are alarmed in the curable stage is few." Possibly one reason why the Continental surgeons have been able to do this operation so much more frequently than we have here had the opportunity, arises from the Germans being naturally more nervously alive to their ailments and as to the possible import of symptoms. This leads them to seek advice early. Here we usually see the cases too late. It would be, however, unfortunate if this operation were taken up too freely, for the cases suitable are so comparatively rare that it would get into disrepute. It has its place, and if in its place it has its value and shows good results.

Table of Twelve Cases of Complete Removal of Uterus per Vaginum.

No.	Age, etc.	Form of Disease.	Date.	Results.
1	E.S., 38, multipara	Round-celled sarcoma of body of uterus	Nov. 14, 1885	Recovered. Examined 6 months after and well; wrote 13 months after to say well; and ascertained to be well in April, 1890.
2	E.L., 50, unmarried	Epithelioma of body of uterus	Mch. 19, 1887	Recovered. Disease already penetrated uterus. Died 6 months afterwards.
3	E.A.P., 33, 1-para	Cauliflower excrescence	July, 1887	Recovered. Examined September 25, 1891. No return.
4	M.A.H., 58, multipara	Squamous epithelioma of portio rather advanced	Aug. 29, 1887	Recovered. Died 2 years after, and no recurrence.
5	A.E.W., 40, multipara	Epithelioma of cervical canal	Nov., 1887	Recovered. Jagged opening in uterus from penetration by disease. Died a few months after.
6	E.M., 28, 11-para	Squamous carcinoma of portio extending deeply	Mch. 31, 1888	Recovered. Disease rapidly returned.
7	J.W., 43, 5-para	Cylindroma of cervical canal	Mch. 15, 1890	Died from suppurative peritonitis; operation difficult and prolonged.
8	E.S., 38, 13-para	Large cauliflower excrescence	Mch. 21, 1890	Recovered. Remains well (examined September, 1891).
9	J.M., 3-para	Squamous epithelioma of portio	Nov. 1, 1890	Recovered. Remains well (September, 1891).
10	J.A., 39, 8-para	Squamous epithelioma large and advanced	Apr. 11, 1891	Recovered. Died 10 weeks after from return of disease blocking uterus.
11	M.A.C., 52, 8-para	Squamous disease invading vaginal wall	May 11, 1891	Recovered. Examined September, 1891, and signs of disease returning.
12	M.E.P., 38, multipara	Squamous epithelioma rather advanced	July 11, 1891	Recovered. Disease just beginning to return (October 8th, 1891).

Of the sixteen cases referred to in this paper, twelve were complete removals and four supravaginal only, that is, the cervix up to and a little above the os internum was removed. All the operations were done at the Leeds Infirmary. The following table gives a summary of the twelve cases of complete removal. The first was done six years ago, and was the first operation of this kind done in the Leeds Infirmary and I believe in Yorkshire. I examined the patient six months after the operation and there was no return of the disease, and she wrote from Stockton-on-Tees thirteen months after-

wards to say that she continued well and was removing to Middlesbrough. With some difficulty, and by the help of the brother of one of the Infirmary nurses who came from that town, I was able to trace her eighteen months since, and she still continued, so far as she could tell, quite well. Presumably she is still so.

Thus out of the twelve cases only one died owing to the operation, and this death was from acute septic peritonitis. The operation was difficult and prolonged owing to the size of the uterus. In two of the cases the disease was found at the time of operation to have already penetrated the uterus (Cases II and V), and these, of course, died. In both there were jagged apertures, with yellowish, sloughy-looking edges.

Of the remaining nine cases, the disease returned in four, namely, Cases VI, X, XI, XII, and in all the return was so rapid that there can be little doubt it had already, at the time of operation, spread into the surrounding cellular tissue, and in one the vagina was involved, and was cut away all round the cervix.

In the remaining five cases there has been no return; in Case I, after four years and five months, and presumably after six years; in Case III, after four years and two months; in Case IV, after two years, when she died from gradual exhaustion. She was 60 and looked like 70, and very thin and feeble. There was no disease discoverable by vaginal examination, nor by abdominal palpation, and the parietes were so thin and flaccid that deep palpation was easy. If there had been any return in the deep parts of the pelvis or lumbar glands, it would have been easily felt. In Cases VIII and IX there had been no return after eighteen months and eleven months respectively. Both were examined, as were all the other cases except the first, during the last week of September and the first of October. Excluding, therefore, the fatal case and the two in which, at the time of operation, the disease was found to have penetrated the tissues of the uterus by visible openings, there remain nine from which we may judge of the utility or uselessness of the complete operation. Of these nine, five remained without return after periods varying from eleven months to four years and five months (and presumably six years). Five lives, therefore, seem to have been saved for one lost by the operation. By very careful selection of cases better comparative results could be obtained, but with a smaller number of cases. The temptation is to do the operation in doubtful cases, to give the patient the chance of success. Several times I have attempted the operation, and found it could not be carried out, owing to the advanced stage of the disease. As no fatality has resulted in these cases, I have not noticed them.

In the operation itself the most important question is how to treat the broad ligaments, whether by ligatures or pressure forceps. It is well to have both at hand. When ligatures are used there is the temptation to trim off the small bunch of tissue on the uterine side of the knot rather too closely, and as the part itself tends to shrink, the ligature is liable to come off by very slight traction. I have several times seen this occur. If pressure forceps are properly made and the nipping edges grooved deeply diagonally they cannot come off, so that they are more secure than ligatures; and, moreover, the operation is shortened. The disadvantage of pressure forceps is that it is less easy to make the ends of the stumps of the broad ligaments extraperitoneal, but even this can usually be effected by a little management, provided the blades are at the proper angle with the handles. In three of my cases pressure forceps only were used, in two partly pressure forceps and partly ligatures, and in seven ligatures only. The blades of these pressure forceps are so constructed as to make pressure equal, although the parts compressed are thick at the proximal end and thin at the distal. (They are made by Messrs. Reynolds and Branson, Leeds.)

Only three modes of bringing the uterus out are possible and the best of these is undoubtedly that of retroverting the fundus out of the posterior wound, and then drawing the whole organ outside, cervix upwards. The attachments can then be clamped or tied by sight. This was done in five cases. In one the fundus was brought down out of the anterior wound. Neither in this nor in any of the five cases named was the cervix pushed upwards towards or into the peritoneal cavity. This seems a very improper plan, and it is never necessary.

In the remaining six cases the uterus was brought down cervix first in a zigzag fashion, the attachments being tied in portions, first on one side then the other. In one of these the broad ligaments were so short and inelastic, that in addition the uterus was bisected. The best rule is to retrovert the fundus out of the posterior wound, and bring the whole outside if possible; failing this, to try whether it can more easily be brought down out of the anterior wound, and, if the attachments are short or inelastic, to bring it down cervix first.

I have always brought together the anterior and posterior walls of the vagina at the summit; if possible, passing the ligatures through the stumps of the broad ligaments, so as to fix them in the wound. One strong catgut ligature is passed from behind forwards, and then reinserted and passed through the parts in the opposite direction; the two ends are then tied together. This does not prevent a little drainage, if necessary. Several times a drainage tube was left in, but, as nothing came away, this plan in the later cases was discontinued.

In addition to these cases there have been done four supravaginal hysterectomies. The results were not so good as those from the complete operation. One died within twelve hours from shock and hæmorrhage, but she was very anæmic from hæmorrhage before the operation. In two the disease returned at intervals of respectively seven months and two months. The remaining case is still free from disease. The operation was done on November 6th, 1886, and she was examined at the infirmary on September 24th last, that is, nearly five years afterwards. The operation was very radical, for not only was the cervix removed just above the os internum, but a conical piece of the interior was also gouged out higher up and the mucous membrane of the remaining part firmly scraped with a Volkmann spoon. This, therefore, with the five permanent cures by the complete operation, making six lives saved out of the total—sixteen.

Although undoubtedly this supravaginal operation has its place, it should be a very limited one. I think it ought to be confined to early cases of squamous epithelioma. It is not only less safe as a means of eradicating the disease, but it takes longer to perform, and is quite as difficult as is complete extirpation. I think, moreover, there is greater danger of secondary hæmorrhage. It is, however, decidedly preferable to complete extirpation in the cases named, and especially if it is not necessary to remove the cervix so high as the os internum. Both posteriorly and anteriorly, a funnel-shaped excision of the mucous membrane should be made. In 1876 I removed the cervix only in this way, and the patient remained well for twelve years. She then came amongst the infirmary out-patients with cancer of the interior of the uterus. I have not included this case with the others because it was not a proper case of supravaginal amputation.

The concluding sentence of Dr. Keith's paper is this: "Operated on at an early stage uterine disease will show results not much inferior to operations for cancer in other parts of the body." Three years ago I published my theory of malignancy. This has not yet been accepted by the profession, but it will be some day. According to this theory cancer of the uterus ought to show better results than the same disease in any other organ of the body removable by operation, and, as a matter of fact, it actually does. Proliferation is liable to occur in nearly all the tissues of the body, but it is only malignant when the proliferating cells are able to separate from each other, and are of the size and shape and hardness to penetrate the tissues through which they emigrate. The uterine tissue is such a dense and closely woven fibrous network that it is probably penetrable with greater difficulty by what may be called travelling cells than any other organ of the body. The chance, therefore, of a permanent cure of cancer of the uterus by early removal is not, as said by Dr. Keith, "not much inferior to," but it is actually superior to that given by removal of the disease in any other organ of the body.

DR. GAGER, of Paris, has bequeathed to the Association des Médecins of the Seine Department £800, and £1,400 to the Bureau de Bienfaisance of the 19th arrondissement, the interest of which is to be utilised to facilitate the aged and infirm of the district to enter the hospitals and asylums.

CANCER OF THE RECTUM REMOVED BY PARTIAL RESECTION OF THE SACRUM.

By JOHN C. DAVIE, M.D.,
Victoria, British Columbia.

A HIGHLY intelligent gentleman, aged 50, was examined at the Royal Jubilee Hospital, Victoria, British Columbia, on July 8th, 1891, under ether anæsthesia, and found to be suffering from scirrhus of the rectum. The lower edge of the growth could be reached by the forefinger without much effort, and by dint of using a good deal of force, the tip of the index finger could be made to touch its upper limit; the major portion of the growth was situated in the posterior portion of the bowel; it however almost encircled the gut, a space the width of the examining finger remaining alone undiseased in the centre of the rectum anteriorly. The growth was immovable. As soon as the patient was informed of the nature of his malady, he expressed a desire to have the growth removed, if there was any possibility of effecting this. The method described by Kraske as modified by Levy—the latter having worked out his modification on the cadaver, but never having performed it on a living subject—appeared to be the only feasible manner of operating. On July 18th he was again anæsthetised with the intention of operating by this method, but an examination of the rectum before commencing revealed such an increase of the growth since the previous examination, its upper limit being beyond reach, that I decided to leave matters alone and lay the increased risk of any radical operation more fully before the patient. Our patient decided, without hesitation, that he would face all danger for the prospect of ridding himself of his enemy, and empowered me to do anything I chose in his case. Upon consultation it was decided to perform inguinal colotomy, both as a palliative procedure and also with a view, should the radical operation be performed later, of "side tracking" his rectum, and so do away with the danger of soiling the peritoneal cavity should it be opened, also to allow us to carry out the operation on antiseptic principles. Left inguinal colotomy was consequently performed on July 30th. The usual incision was made, and after opening the peritoneal cavity the parietal peritoneum was sewn to the skin all round, a loop of the colon was pulled up into the wound, a long harelip pin was then passed through the skin and peritoneum on one side, then through the mesocolon, and on through the peritoneum and skin on the opposite side after Kelsey's method, the object being to form so sharp a spur that no atom of faecal matter should pass into the bowel below; a few stitches were applied on each side attaching the intestine to the edges of the incision, uniting the visceral and parietal peritoneum. The harelip pin was removed twenty-four hours later, on the fifth day the gut was opened, the protruding edges cut away, and the stitches removed.

The day following, the patient was walking about the hospital corridors; he rapidly improved, lost all his pain, and slept without opiates. The bowel between the colotomy wound and anus was washed out daily with boracic acid solution, no faecal matter whatever passed into it, the spur formed by the pin in doing the colotomy proving entirely effectual. Having obtained so great a measure of relief from the colotomy, I was much inclined to advise the patient to have nothing further attempted; but, as he knew the exact nature of his disease and its inevitable termination, he urged me to attempt the radical operation. The plan I intended to adopt, as before stated, was Levy's modification of Kraske's operation, as described in Sajous's *Annual of the Universal Medical Sciences*, but, before I completed my operation, its details had to be materially modified to meet the requirements of the case. On July 31st the following operation was performed: The patient, under ether anæsthesia, was placed in Sim's position, lying on the right side with the knees well drawn up; a transverse incision, $4\frac{1}{2}$ inches long, was made across the body of the last sacral vertebra, $\frac{3}{4}$ -inch above the cornua coccygia, extending down to the bone; from the two ends of this incision, and at right angles to it, incisions were made downwards, each 4 inches long, through the entire thickness of the gluteus maximus; the soft parts were reflected off the surface of the sacro-sciatic ligaments; both the ligaments were