ASSOCIATION MEDICAL JOURNAL:

BEING

THE JOURNAL OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

No. CLXIII.

LONDON: SATURDAY, FEBRUARY 16, 1856.

Hospital Reports.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

OVARIOTOMY: TETANUS DURING RECOVERY :
DEATH.

By GEORGE MURRAY HUMPHRY, Esq., Surgeon to
the Hospital.

CASE. Mrs. Wyatt, aged 27 years, of Barrington, a short, spare woman, rather delicate, but apparently healthy, was the mother of three children, of whom the youngest was nearly two years old. Her labours had been natural, and her health generally good. Fourteen months ago she perceived a tumour on the left side of the abdomen, at the lower part. It increased, and she thought herself in the family way. The term of pregnancy passed away; the catamenia recurred, and the abdomen continued to enlarge. Accordingly, she consulted Mr. Metcalfe, of Melbourn, who, recognising the nature of the case, and thinking it a proper one for the operation of ovariectomy, asked me to see her. I did so in the middle of June 1855, and found the abdomen as large as, or larger than at the full period of pregnancy, measuring thirty-one inches in circumference. The enlargement was caused by a soft, fluctuating tumour, which, there could be little doubt, was ovarian. It could be moved from side to side, or rotated in such a manner as to render it probable that there were no adhesions, at least, no extensive adhesions, to any fixed part of the abdomen. Still there was a suspicious firmness about the umbilicus, the course of which it was impossible to ascertain. Around the upper circumference of the tumour was a resonant line, which we thought indicated the position of the colon. We feared this might be retained there by some adhesion of the omentum on the fore part of the tumour. The surface of the tumour could be perceived through the abdominal parietes to present three superficial grooves; the indications, we thought, of division into three or more compartments or cysts. The uterus was natural and moveable, occasionally prolapsing. I quite agreed with Mr. Metcalfe that the size and mobility of the tumour, the apparent freedom from adhesions, the rapidity of its growth, and its consisting probably of a cyst with after-growths, or of more cysts than one, and the age and present good health of the patient, rendered this a peculiarly appropriate case for the operation. It was accordingly proposed to her by him; the danger of the operation, and the probable fatality of the disease without it, being laid before her. She consulted with her friends, and made up her mind to undergo it. I paid her another visit early in July, and found the size of the abdomen had increased about an inch: this second examination confirmed the view before taken.

We waited till the catamenia had passed away, and on July 18th the operation was performed; the bowels having been freely relieved on the 17th and 18th in consequence of a dose of castor oil. She was placed in a reclining posture at the foot of the bed, the legs hanging over. A catheter was introduced, to make sure that the bladder was empty. I made an incision, about three inches long, between the umbilicus and the pubes, through the linea

alba, into the abdomen. Allowing the bleeding to cease a little, I introduced my finger, and could find no adhesions. Then enlarged the wound to about four inches. The sac bulged into the wound, and I thrust a trocar into it. As the fluid escaped through the canula, the sac presented more and more through the wound; and, presently, during a fit of sickness, the whole was ejected from the abdomen, the parietes of the abdomen collapsing behind it so as to close up the wound and cover in the bowels, rendering very slight pressure sufficient to prevent their protrusion. The fluid continued to flow through the canula; and while the cyst was being emptied, its walls were supported to prevent any dragging. The pedicle was found to be three or four inches wide; a thick tough mass, which seemed to be the hypertrophied round ligament, lying at one edge, and the enlarged Fallopian tube at the other. Moreover, there were several masses near the pedicle, which felt like the uterus. To ascertain the nature of these, we cut open the sac, and found them to be composed of round clusters of secondary cysts growing into the interior of the sac from its wall. There was only one large sac; the depressions which led us to suppose there might be more than one being caused by thickening of its wall, and by ridges projecting from it into the cavity. The pedicle was tied in three portions near to the sac (each ligature drawn as tight as I could), and cut through about a quarter of an inch from the ligatures. The end of the pedicle was allowed to remain in the wound, and secured to a roll of lint, so as to prevent its retreating into the abdomen. Some small bleeding vessels in the abdominal wall were secured. The wound was closed by means of sutures passed through the hinder part of the sheath of the rectus and linea alba, close to the peritoneum, and by others through the skin. A compress of lint was placed over the wound, and a flannel many-tailed bandage over the body. She vomited again during the latter part of the operation, and felt sick afterwards. In other respects, she was very comfortable, more so than before we began.*

July 19th. She had not suffered much pain, and slept in the night and this morning. Consequently, only two grains of opium were given—one last night, and one this morning: we having agreed that it should not be given if there was no pain. At 5 p.m., her skin was rather hot; face a little flushed, but expression good. Tongue rather dry; thirst; pulse 106. The body was tender, and she complained of some pain, not always in the same place. She passed about three-quarters of a pint of rather high-coloured water this afternoon, for the first time since the operation.

R. Calomelanos gr. i; opii gr. ss. M. Sumatur 3tis horis.

* The cyst was thick. Its interior was vascular, with numerous small creases and pits, caused probably by the sudden evacuation of the fluid. There were also several falciform bands in its interior, which had caused the furrows on the surface, and given us the impression of its being trilobular. Growing into it from the lower part, where the pedicle had been attached, were several cysts and cystic masses; also, thick tough bands and thin membranous septa, which were probably the remains of cysts that had burst. On the walls of the great cyst were also several round or oval holes, communicating with cavities extending under the lining of the cyst, and having smooth walls. These were also probably secondary cysts, which had burst through the orifices into the interior of the sac, and collapsed. They looked like ulcers in its wall.

The fluid of the large cyst was like thin coffee. It contained blood globules, abundant cholesterine scales, molecules, delicate granular cells, spherical and elongated. Also, coarsely granular cells or masses of various sizes, looking as if they were formed by the mere aggregation of molecules. The wall of the sac was in many places coated with a thin pellicle of soft brownish substance, with silvery glistening surface. This pellicle was composed, almost entirely, of cholesterine, with brownish molecular masses or cells, and molecules of light specific gravity. The smaller cysts contained a mere glutinous, transparent, pale fluid, with cholesterine scales and some delicate cells.

The divided ends of several large arteries and veins were seen in the pedicle.

July 20th. Has suffered a good deal of pain, which comes on in paroxysms, and is followed by sickness, after which she is rather easier. The abdomen distended, tympanitic, and tender. Pulse 116; smaller and softer. Tongue rather dry. Countenance more expressive of distress, and sunken. Urine passed twice; rather high-coloured. Any slight cough or movement gives pain.

R Sumat opii gr. iss. Applicand. acetum cantharidis abdomini. Ung. hyd. femori infricend.

July 21st. The opium repeated at 1, at 9, and at 1 in the afternoon. She had some sleep, was easier, and looked better this morning. Abdomen rather less tense, and less tender. Still the sickness continued, and she was a good deal annoyed with flatulence. No passage of wind or fæces by the bowels. Pulse under 100, soft. Skin comfortable. In the evening I found her distressed by the feeling of sickness, faint and low. Countenance more haggard. Pulse 80, small, not quite equal in volume, or regular. Hands cold, and feet not so warm as they should be. Gave a little brandy and water, and then injected one pint of warm water, by the tube of stomach pump, into the colon; this gave no pain, but ease at the time. There was very little pain or tenderness in the body. The acetum cantharidis was reapplied. Cold water has remained in the stomach better than anything.

The glyster did not return; nevertheless, the ease experienced during its administration continued. After that time she had neither sickness nor pain; the swelling of the body subsided, the appetite returned. The bowels acted spontaneously. Indeed, she became so well, that, having seen the wound (which looked very well) dressed, a piece of rag only being placed over it, I took my leave on Thursday, July 26th. It appears that on that day she felt a little stiffness of the jaws; but supposing it to be a slight cold, she did not mention it. This increased; and late in the evening of July 27th Mr. Metcalfe came over to me with the unwelcome tidings that tetanus had commenced. I found her a good deal altered; face thinner and more drawn, with the peculiar contraction of the forehead and eyebrows characteristic of this disease. She could only partially protrude her tongue, owing to the inability to open the mouth; and complained a good deal of stiffness and tightness about the jaws and throat. No other part was affected. The abdomen was soft. Pulse about 80. The bowels had acted once spontaneously on the 25th—the only time since the operation; we therefore gave her a pill containing croton oil—to be repeated if necessary.

July 28th. The affection was more marked. In the morning she could not protrude the tongue far, and bit it in the attempt to withdraw it. In the evening could not open the mouth to protrude it. The muscular spasm was confined, or nearly so, to the parts about the jaws and throat; though now and then, in the course of the day, other parts were affected. The bowels not having acted, we gave a clyster of warm water and salt, which returned soon after with a small quantity of fæces. The case not being one of much acuteness and pain, we thought it the best to confine our efforts to support the system by nutrient enemata, and gave no medicine. In this we were confirmed by the inability to swallow. She was a good deal annoyed by mucus accumulating in the throat, and the difficulty of getting rid of it.

On the morning of the 29th, as spasms of frequent occurrence affected the neck, trunk, and abdomen, Mr. Metcalfe added two grains of morphia, and two of extract of belladonna, to the enema then given. She was easy during the day; for the most part asleep, though frequently awoke by the spasms, which took place with varying frequency. In the evening she was evidently thinner and weaker. Skin perspiring. Pulse about 120. Mouth quite closed. She was drowsy, but quite conscious when she awoke, suffering no pain, or but little, even during the spasms. There was no difficulty of breathing, no dilatation of the pupil. The disease was still apparently not very severe, but its effect upon her was very marked. We gave four grains of extract

of belladonna and four of extract of cannabis, dissolved in chloroform, with a pint of beef-tea, by the bowel. She became weaker during the night, and died at nine the next morning.

On examination, we found the end of the pedicle (a little sloughy, of course, where the ligatures were applied) lying close behind the wound, which afforded a ready vent for any discharge. The immediately adjacent intestines were coated with a small quantity of reddish lymph. There were no other indications of peritonitis. The mesentery, drawn down to the wound, and adherent there, was healthy. The colon was generally rather distended, with points of contraction here and there, but no obstruction. The pedicle had consisted of the entire broad ligament, and was tied near to the uterus; the remaining portion was perfectly healthy, not even more vascular than usual. The uterus also was quite healthy. The right broad ligament was rather vascular, and the ovary was nearly twice its natural size, containing four small thin-walled vascular cysts, with watery fluid in their interior.

There is every reason to conclude that, but for the unfortunate occurrence of tetanus, this case would have gone on well. It is possible, though, for reasons given below, not by any means certain, that, at some subsequent period, the condition of the opposite ovary might have proved a source of anxiety.

REMARKS. Some years ago I studied the records of this subject carefully, and made an analysis of all, or nearly, the reported cases of the operation of ovariectomy, for the purpose of making up my mind as to the propriety of performing the operation, and of ascertaining whether, by a judicious selection of cases, more favourable results might not be obtained. I will briefly state the conclusions at which I then arrived.

The number of instances of the operation that I collected were 105. Of these, in 50, or less than one half, it was attended with success. In 39, or more than a third, it proved fatal. In 16 it was found impracticable, or useless. Such results are far from satisfactory. When we consider the nature of the disease, that it is not of immediate, nor even of certain, danger to life, and that the unrecorded cases are not likely to be more favourable than those I collected, we are, on the whole, compelled by these statistics to form no very favourable opinion of the past results of the operation.

The operations appeared generally to have been conducted with much caution, and every attention had been paid to the means likely to ensure success. The causes of death (peritonitis being the chief), and the mistakes in diagnosis, were likely to occur again; and it seemed to me that a diminished rate of mortality was to be expected for the future, only, or chiefly, from a more careful selection of cases, and of the kind of operation to be performed.

I found that the age from 30 to 40 was by far the most favourable; the proportion of fatal results bearing a relation to the deviation above or below that period. The number of deaths above 45, amounting to 9 out of 13, being such as to discourage the attempt to remove an ovarian tumour after the patient has passed the middle age.

The nature of the tumour was found to have a very marked influence on the result of the operation, as appears from the following table. In many of the cases it was not stated, or stated too vaguely, for the information to be made use of.

	Recovered.	Died.
Simple cysts - - - - -	16	6
Cysts with after-growths—multilocular cysts.		
Some described as cysts with solid matter;		
and two containing hair and teeth - - -	13	9
Solid tumours, called fibrous, scirrhus, or		
solid or fluid, or solid with cysts - - -	7	10

The increase of the rate of mortality, in proportion to the solidity of the tumour, was very remarkable. When we add to this the facts, which were fully proved, that solid tumours are more likely to affect both ovaries, to be

adherent,* to be associated with ascites; that they are, further, more difficult of diagnosis from tumours of other parts,† and are commonly of a slower growth, consequently less quickly fatal if left to themselves, there can, I think, be no question as to the propriety of refraining from any attempt to remove them.

Excluding the instances in which the tumour was solid, and the age of the patient above 45, the successful cases bore a proportion of somewhat more than two to one; an average which, I have no doubt, may, with cautious management, be expected in future, and which is, I think, sufficient to justify, and even to recommend the proceeding.

With regard to the kind of operation, experience fully proves, what reason would suggest, that the danger is proportionate to the length of the incision. The major operation, as it is called, involving the exposure and handling of the bowels, with greater chances of hæmorrhage, has been much more fatal than the minor, when the comparison is made between nearly similar cases. Indeed, if the small incision, that is, an incision of three or four inches, will suffice, and if, by evacuating the contents with the aid of a trocar, the cyst or cysts can be withdrawn, and the pedicle tied, there can be no reason for extending the wound.

The question of the liability of both ovaries to be the seat of disease is a very important one in estimating the value of an operation for the removal of one; and it is much to be regretted that this had not been more frequently borne in mind by those who have given the descriptions of the *post mortem* examinations. From the collation of a great many cases, I found that, though both ovaries were liable to be affected with solid growths, and with those numerous small cysts which so often form about the periphery of the gland, yet that the large cysts, the multilocular cysts, and the cysts with after-growths, were, in by far the greater number of instances, confined to one organ. If, therefore, a cure be effected, there would seem to be every probability of its being permanent. I do not remember to have read of any case in which the disease manifested itself in the other ovary after one had been removed; though it is quite possible that such cases have occurred. In several instances, the catamenia are reported to have returned regularly; the patients continuing to enjoy good health, and some have borne children. In my own patient, it has been stated, there were several small cysts in the remaining ovary; but it is by no means clear that these were of the same nature as that of the large sac removed, or that they would ever have attained to great size.

ST. GEORGE'S HOSPITAL.

TWO CASES OF PARACENTESIS OF THE BLADDER FROM THE RECTUM: WITH REMARKS.

By T. HOLMES, Esq., Surgical-Registrar to the Hospital.

I FORWARD short notes of two cases of puncture of the bladder from the rectum, which have been recently under the care of Mr. Tatum and of Messrs. H. C. Johnson and Pollock at this hospital. It will be within the recollection of many readers of this JOURNAL that a paper on the subject of this operation was presented to the Medico-Chirurgical Society some time ago by Mr. Cock, in which it was spoken of as a means frequently resorted to in the treatment of stricture. The paper gave rise to considerable discussion, in which several gentlemen connected with this hospital ventured to question the necessity of the operation, and proved their case by the striking fact that it had been performed here for the last time by Sir Everard Home. To

this it was replied, and with some force, by the supporters of the operative treatment, that in many cases, even if not necessary, the operation would be advisable, as a more rapid and effectual method of treating an impassable stricture than that of overcoming the retention by hot baths and laudanum, and the stricture by gradual instrumental dilatation. They asserted that the operation was in itself free from difficulty or danger, and that by leaving the stricture in peace for a time, relieved from the irritation of the urine behind, and the attempts at catheterisation in front, it promoted the return of the parts to their usual condition—that in which they were before the accidental irritation which produced the retention—when there would seldom be found any difficulty in passing a moderate-sized instrument.

Since that discussion, two cases have occurred here, in which the operation has been employed—those of which I forward an abstract. In the former, it will be observed that the operation was performed rather with a view of avoiding the discredit of allowing the patient to die unrelieved, than with any idea that it could preserve his life, as he was evidently sinking from old age and long standing renal disease.

The latter was one of more interest. The history is extremely obscure, but seems to point to the fact that, at any rate, no extensive organic stricture can exist, as no symptom beyond the habitual dysuria had been noticed up to the moment of total retention; and the stream of water has now attained a tolerable size, without any instrumental treatment, in about three weeks. Still, whatever the cause of the impediment may have been (and that it was not merely spasm is shown both by the progress of the case and by the fact that catheterisation was not facilitated by narcotism), the fact was certain, that the impediment existed and could not be overcome; and that instrumental interference only produced mischief. There seems no reason to doubt that if the patient had been left to the action of laudanum and the warm bath, frequently repeated, the retention of urine would have been relieved before the bladder burst; but, meanwhile he was suffering agonising pain, his condition was not free from serious danger, and the rapidity with which the symptoms had come on, and the obstinacy with which they resisted the above named remedies seemed to threaten a long continuance of that pain and danger. From this the puncture immediately relieved him, and the subsequent progress of the case has been most favourable. Should any further points of interest arise, I will communicate them to you.

CASE I. G. F., aged 65 years, admitted May 7th, 1855. This man, who was extremely aged, was admitted on account of retention of urine, which had existed since the previous afternoon. It seemed that he had been labouring under difficulty of making water for about three years; but there was reason to believe that the stream had not been of natural size for a much longer period. He had never been treated for the disease till the day of his admission, when prolonged attempts at catheterisation were made at his own residence, which were unsuccessful, and produced copious bleeding. On the catheter being introduced, the instrument was checked about five inches from the meatus by a hard grisly obstacle, which was perfectly impassable with instruments of any size whatever. Profuse bleeding always occurred whenever the instrument arrived at this point. Large and repeated doses of laudanum were given, and warm baths; but these measures produced no effect. A small quantity of water dribbled away, but the bladder seemed as full as ever, and could be felt distended up to the umbilicus. He took about half an ounce of laudanum during the afternoon, and dozed so much during the night that it was not thought prudent to give him any more. Next day, fresh attempts were made to pass the catheter; but, as this was found impossible, the bladder was punctured from the rectum. A large quantity of very alkaline, albuminous, offensive urine, was drawn off. He appeared much relieved by the puncture, and passed a quiet night. Next morning, the right side of the scrotum was found to be emphyse-

* Of the sixteen instances in which the operation was discontinued on account of extensive adhesions, the tumour is stated to have been solid in six; composed of multilocular or compound cysts in two; of simple cysts in three.

† In each of the seven cases in which the tumour was found not to be ovarian upon opening the abdomen, it is stated to have been solid. Of these five died, one recovered, and in one the tumour, a fibrous growth from the uterus, was successfully removed.