FIFTY ADDITIONAL CASES OF COMPLETE OVARIOTOMY, WITH BRIEF NOTES OF SIX OTHER CASES OF ABDOMINAL SECTION.

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IN May 1877, I brought before the Royal Medical and Chirurgical Society a table of twenty-five cases of complete ovariectomy. The Council did me the honour to publish that table, together with a paper which accompanied it, in the *Transactions* (vol. ix). The table, which I now place before the profession, contains particulars of fifty more complete ovariectomies, and the two together contain all my cases up to May 1878. With the present table, I have given a brief analysis, and also some particulars of six other cases, which, together with two cases of hysterotomy already published (*Medical Times and Gazette*, April 7th, 1877, January 5th, 1878), complete my practice in abdominal surgery during the period the accompanying table covers.

Of my first twenty-five cases, I lost seven, a mortality of 28 per cent. Of the fifty cases which I now publish, I have lost four, a mortality of 8 per cent. This very satisfactory lessening of the mortality I attribute partly to increased experience, both in dealing with the complications met with at the time of operation and in the after-treatment of the patients, and partly to the method of drainage perfected by Mr. Thomas Keith, and employed in many of my cases until I commenced antiseptic ovariectomy in October 1877. The performance of the operation, strictly on the Listerian method, I commenced with Case 39 in the table; and very much of the decrease in my mortality must, without doubt, be ascribed to its use: thirty-seven cases, with only two deaths. I do not intend at present to enter in a discussion on the details of the antiseptic method in ovariectomy. It would be manifestly unfair to attribute the whole improvement in my results to its use to the exclusion of the other factors already named; and I do not think we are yet in a position to fairly and thoroughly compare the results obtained on the old plan with those which we now obtain. I think, however, we have seen quite enough of the results of antiseptic ovariectomy to make us persevere: and I for one am sanguine that, when we have had more experience in this method, we shall be able to reduce the mortality to something less even than 8 per cent.

I have already published full details of three of the fatal cases in a paper read before the Harveian Society, and afterwards published in the *Medical Times and Gazette* for June 1878. No. 72 needs a few remarks, as it appears as a case of septicæmia among the operations performed antiseptically. I am very sorry to have to record a case of septicæmia, because it shows me that my arrangements for shutting out sepsis are not yet perfect. I am, however, quite certain that they may be made so, and I am not going to credit, or rather discredit, the system with a failure, as is too much the fashion. The case was in all respects a very unfavourable one: a large fat unhealthy woman, with an enormous tumour unusually firmly adherent to the abdominal parietes. I only used one spray-producer, and I felt, while performing the operation, that the parts could not be properly and constantly covered by the spray-cloud. The adhesions were such as frequently ooze after the abdomen is closed, the patient an exceedingly likely one to get septicæmia, and I should have been much wiser had I abandoned antiseptics and put in a tube, though drainage would have been very difficult to carry out perfectly from the thickness of the abdominal wall; and, however well carried out, it will not always save us from septicæmia. The lesson to be learnt from the case is to take extra antiseptic precautions, and use another spray-producer when dealing with a tumour of unusual size.

Of the fifty cases, forty-five were performed in the Samaritan Hospital, and among these the four deaths occurred. Four were operated upon in private houses, and all recovered; one at a nursing-home also recovered.

The first death really belongs to the mortality after tapping; the patient had been tapped in one of the large hospitals, and violent inflammation and suppuration of the cyst had followed, causing such adhesions that the case was hopeless.

The second I have already published, as due to imperfect knowledge of the dangers to be avoided in using the ligature for the pedicle.

The third I have also published. Death was due to a very acute pleurisy, which must have been latent and overlooked before the operation.

Thus one death is due to tapping, and the other three to preventable causes. Surely these facts tell us how great is the future of ovariectomy, and how much we have still to do to make it perfect.

So far as my experience goes, neither age, condition, nor the season at which the operation is performed, affects the result. The life-history of the patient and the life-history of the tumour, and the sum of their results in the present health of the patient and connections of the tumour, are the only factors we have seriously to consider before advising an operation. I believe this is more than ever true now we have antiseptics to aid us.

A glance at my table will show that my incision rarely exceeds five inches, and I much prefer to extract the tumour through an opening three inches long, if possible. With the short incision, there is less exposure of intestines and peritoneum generally—a matter of some importance now we use the spray—and the wound when healed is much smaller and firmer, and the patients are far less likely to suffer from the life-long misery of ventral hernia.

In every case in this table, ligatures—cut short and returned—have been used for the pedicle; and I have nothing to add to what I have already published on the subject (*BRITISH MEDICAL JOURNAL*, January 26th, 1878), except to say that I am more and more convinced of the advantage of using fine silk, and tying in several pieces and not too tightly.

In twelve of the cases, both ovaries were removed. It is often a difficult matter to decide whether to remove the second ovary when it is found very slightly enlarged, and I think we must be guided somewhat by the age and condition of the patient; we may sometimes leave an ovary about which we are a little doubtful, if the patient be a young girl, when we should unhesitatingly remove it if she were already past the age of sexual vigour.

In thirteen cases, there were no adhesions, and two of these had burst cysts, the rupture evidently not recent in one of them, which proves that this accident is not necessarily attended by adhesions or other complications.

In fourteen cases, the adhesions were parietal and omental only, or of such a nature as to add but little to the risk.

In all the remaining twenty-three cases, the adhesions were such as may influence the result unfavourably. In cases 26, 32, 33, 34, 35, 48, 49, 50, 51, 54, 56, 60, 61, 64, 67, and 72, they were sufficiently extensive to render the operations formidable to the operator and very dangerous to the patient; 54, I think I may safely say, owes her life to the antiseptic system. I do not think recovery would have been possible without it, and yet she never had a temperature over 101.0 deg. Fahr., and that only for a few hours on the second day; never a pulse over 100 after the first twenty-four hours; and was up on the couch on the twelfth day after the operation.

I must turn now, for a short time, from the pleasure of recording increasing success in the complete ovariectomies to the less pleasant duty of recording some sad cases, in which exploratory operation only hastened the final catastrophe. I have put together six cases in which I have opened the abdominal cavity without performing a complete ovariectomy. The first was that of a poor woman with malignant disease of both ovaries, which I correctly diagnosed; but she begged so hard that I would do something, that I attempted to remove them, but was obliged eventually to close the wound, leaving portions of both tumours adherent in the pelvis and part of one adherent to the liver. She lived for a week, and I believe might have recovered the actual operation had it been performed antiseptically. The second was a case which I believed to be a ruptured ovarian cyst, and commenced as an ovariectomy. I found both ovaries healthy, and a cystic tumour growing between the layers of the great omentum and closely connected with the spleen. I removed it, and she lived a week, dying of exhaustion after almost conquering septicæmia. It was found, at the *post mortem* examination, that the splenic artery and vein were both ligatured, but the spleen seemed not to have suffered in any way. Before commencing the operation, I drew off some fluid from the peritoneum, which exactly resembled ovarian fluid in every respect. I cannot say whether this was really a splenic cyst, or merely one accidentally adherent to that organ; if the latter be the correct view, the adhesions were remarkably close.

With this case, I take leave of operations performed without antiseptics.

The third case I saw in consultation with my friend Dr. Rice of Cadogan Place, and we fully recognised its unpromising nature, and placed the risks plainly before the patient and her friends. The operation revealed malignant disease of both ovaries and a much enlarged, probably cancerous, liver. I removed one ovary, but was obliged to leave the other after freely opening and emptying some cysts in it. The quantity of fluid secreted by these cysts and the diseased peritoneum was enormous, and it poured away from the wound so that dressings were useless, and she died of exhaustion in about forty hours. Probably septicæmia played its part in the exhaustion in this case, as I

Table of the preceding Fifty Cases of Ovariectomy.

No.	Medical Attendant.	Place of Operation.	Condition.	Age.	Date of Operation.	Adhesions.	Length of Incision.	Treatment of Pedicle.	Weight of Tumour.	Result.
26	Dr. Lacy	Hospital	S.	19	1877. April	Parietal, omental, intestinal, gastric, splenic, hepatic, and vesical	8 inches	Ligatures, both ovaries	7 lbs.	Died in 72 hours; suppression of urine
27	From another hospital ..	Hospital	S.	19	April	Parietal	5 "	Ligatures	24 lbs.	Died in 9 hours; hæmorrhage
28	Dr. W. H. Day	Hospital	W.	48	April	Parietal and omental	5 "	Ligatures	24 lbs.	Recovered
29	Mr. Thornton (out-patient)	Hospital	M.	41	May	Burst cyst; no adhesions	4 "	Ligatures, both ovaries	7 lbs.	Recovered
30	Dr. Connor, Leicester ..	Hospital	M.	56	May	Parietal and pelvic	5 "	Ligatures	14 lbs.	Recovered
31	—	Hospital	M.	29	May	Parietal and omental	5 "	Ligatures	60 lbs.	Recovered
32	Dr. Wynn Williams	Hospital	M.	26	June	Parietal, omental, intestinal, uterine, and ovarian	4 "	Ligatures	10 lbs.	Recovered; now pregnant
33	Dr. Peskett, Leyton	Hospital	M.	38	June	Cysto-sarcoma of mesentery adherent to left ovary, etc.	5 "	Ligatures	25 lbs.	Recovered
34	Dr. Rice, Cadogan Place ..	Hospital	M.	33	July	Burst cysts; both adherent to all the pelvic viscera	5 "	Ligatures	11 lbs.	Recovered
35	From another hospital ..	Hospital	M.	46	July	Parietal, omental, intestinal, uterine, and vesical	6 "	Ligatures	16 lbs.	Recovered
36	Dr. Gray, Oxford	Hospital	M.	61	July	None	5 "	Ligatures, both ovaries	22 lbs.	Recovered
37	Mr. Pollard, Torquay	Hospital	M.	29	July	None	5 "	Ligatures, both ovaries	35 lbs.	Recovered
38	Messrs. Mathias and Bethell, Bridgnorth	Hospital	M.	41	July	Parietal, omental, and intestinal	4 "	Ligatures	12 lbs.	Recovered
39	From another hospital ..	Hospital	M.	33	October	None	4 "	Ligatures	21 lbs.	Recovered
40	Dr. Pickett, Notting Hill ..	Hospital	M.	37	October	Parietal and omental	3 "	Ligatures	9 lbs.	Recovered
41	Dr. Nield, Plymouth	Hospital	S.	16	October	Parietal, omental, and intestinal	4 "	Ligatures	13 lbs.	Recovered
42	Mr. Woodward, Pershore ..	Private house	M.	57	November	Parietal	5 "	Ligatures	5 lbs.	Recovered
43	Mr. Crossley, Leicester ..	Hospital	S.	25	November	Parietal and pelvic	4 "	Ligatures	20 lbs.	Recovered
44	Dr. Royston Pike, Southsea ..	Hospital	M.	40	November	Parietal, omental, and intestinal	5 "	Ligatures	5 lbs.	Recovered
45	Mr. Square, Plymouth	Hospital	S.	20	November	None	3 "	Ligatures	29 lbs.	Recovered
46	Dr. Duplex, Torrington Square ..	Hospital	S.	54	November	None	4 "	Ligatures	21 lbs.	Recovered
47	Dr. Lorimer, Farnham	Hospital	M.	20	December	Burst cyst; no adhesions	5 "	Ligatures	25 lbs.	Recovered
48	Mr. Tarzwell, Sturminster Newton	Hospital	S.	30	December	Parietal, omental, and intestinal (twisted pedicle)	5 "	Ligatures	8 lbs.	Recovered
49	Dr. Bell, Catford Bridge ..	Hospital	M.	37	December 1878.	Parietal, omental, and intestinal	5 "	Ligatures	19 lbs.	Recovered
50	Dr. Gray, Oxford	Hospital	M.	32	January	Peritoneal cysts	5 "	Enucleation and ligatures	10 lbs.	Recovered
51	Mr. Reed, Pool	Hospital	M.	38	January	Parietal, omental, and intestinal	5 "	Ligatures	15 lbs.	Died in 28 hours; acute pleurisy
52	Mr. Thornton	Hospital	M.	29	January	Parietal	4 "	Ligatures	16 lbs.	Recovered
53	Dr. Lowe, Burton	Hospital	M.	57	January	Parietal	5 "	Ligatures	24 lbs.	Recovered
54	Mr. Spencer Wells	Private house	M.	31	January	Suppurating cyst; universal adhesions	4 "	Ligatures	14 lbs.	Recovered
55	Dr. Cole, Bath	Hospital	S.	20	January	Parietal, omental, and intestinal	4 "	Ligatures	16 lbs.	Recovered
56	Dr. Iliff, Kennington Road ..	Hospital	M.	47	February	Uterine and pelvic	5 "	Ligatures, both ovaries	34 lbs.	Recovered
57	Mr. Thornton	Hospital	W.	46	February	Parietal and omental	5 "	Ligatures, both ovaries	34 lbs.	Recovered
58	Mr. Wheeler, Bexley	Hospital	S.	26	February	None	4 "	Ligatures	15 lbs.	Recovered
59	Mr. Bailey, Cavendish Place ..	Hospital	M.	54	February	Parietal	4 "	Ligatures	18 lbs.	Recovered
60	Dr. Meadows, Ipswich	Hospital	M.	29	February	Omental, intestinal, and uterine	4 "	Ligatures, both ovaries	4 lbs.	Recovered
61	Dr. Deeping, Southend	Hospital	M.	40	February	Pelvic and uterine	4 "	Ligatures, both ovaries	14 lbs.	Recovered
62	Mr. Napper, Cranleigh	Hospital	S.	42	March	Parietal and omental	5 "	Ligatures	20 lbs.	Recovered
63	Mr. Glencross, Bourne	Private house	S.	16	March	Parietal and omental	3 1/2 "	Ligatures	13 lbs.	Recovered
64	Dr. White, Nottingham	Hospital	W.	38	March	Pelvic, uterine, and intestinal	6 "	Ligatures, both ovaries	9 lbs.	Recovered
65	Mr. Bucher, Chichester	Hospital	W.	46	March	None	4 "	Ligatures, both ovaries	38 lbs.	Recovered
66	Mr. Clifton, Leicester	Hospital	S.	35	March	None	4 "	Ligatures	11 1/2 lbs.	Recovered
67	Dr. Godfrey, Freemantle	Hospital	M.	49	April	Parietal, omental, and intestinal	5 "	Ligatures, both ovaries	40 lbs.	Recovered
68	Dr. Anderson, East India Road ..	Hospital	M.	50	April	Burst colloid cyst, omental & intestinal	5 "	Ligatures	31 lbs.	Recovered
69	Mr. Meredith	Hospital	M.	28	April	None	4 "	Ligatures	10 lbs.	Recovered
70	Mr. Thornton	Private house	S.	24	April	None	3 1/2 "	Ligatures	8 lbs.	Recovered
71	Dr. Oxley	Hospital	S.	57	April	Pelvic	4 "	Ligatures	17 lbs.	Recovered
72	Mr. Spencer Wells	Hospital	W.	54	April	Parietal and omental	6 "	Ligatures	75 lbs.	Died in 79 hours: septicæmia
73	Dr. Priestley	Nursing home	M.	35	April	None	4 "	Ligatures, both ovaries	12 lbs.	Recovered
74	Mr. Spencer Wells	Hospital	S.	50	April	Omental	4 "	Ligatures	17 lbs.	Recovered
75	Mr. Gregson, Newcastle	Hospital	S.	14	May	Omental	4 "	Ligatures	21 lbs.	Recovered

believe it generally does in cases dying in thirty-six to forty-eight hours, which are often put down as deaths from exhaustion. I do not believe any method of dressing could prevent sepsis in a case where the discharge was so great.

The fourth case was that of an old woman, whom I saw in consultation with Mr. Owen Willis, near Monmouth. He had tapped her some weeks before, and the fluid had rapidly accumulated; her general condition was most unpromising, and the physical signs made the possibility of removing the tumour most unlikely. I began by tapping, and then proceeded to make a small exploratory incision, and, finding it quite impossible to remove the tumour, which I have little doubt was malig-

nant, I closed the incision. The shock of the operation was too great for her constitution, already enfeebled by habits of intemperance, and she sank in about forty-eight hours; the result fully confirming the opinion formed by Mr. Willis, who had advised against operation, and to whom my best thanks are due for the kindness and courtesy with which he assisted me when an exploratory operation was decided on.

The fifth case was that of a single woman of thirty-eight, sent to me by Dr. Newstead of Clifton. He had already formed an unfavourable opinion of the case and I entirely agreed with him, but consented to make an exploratory incision. I found a malignant mass, involving uterus and ovaries, and closed the incision after letting out fluid from

some cysts to relieve the tension, which was a source of great suffering. The patient made a rapid recovery from the operation, but died in six months.

Looking at these four cases of malignant disease, one cannot but feel that the deaths, following shortly after the operation and with but little suffering, were better for the patients than the lingering death in the last case, though this one is more satisfactory to the surgeon. In such cases, it is very hard to refuse the patient the last chance of life, though one knows that neither surgery nor the surgeon will gain anything but discredit from an exploratory operation.

The sixth case was one of hydatids of the omentum and pelvic peritoneum, removed during the seventh month of pregnancy, the patient making a good recovery; but, as I am publishing it in full as a separate case, I shall not say more about it here.

TWO CASES OF REMOVAL OF SMALL OVARIAN TUMOURS ON ACCOUNT OF UTERINE HÆMORRHAGE.

By LAWSON TAIT, F.R.C.S., Birmingham.

E. R., AGED 41, the mother of four children, consulted me in June 1873, on account of profuse menorrhagia, which had been in existence for fourteen months, was becoming rapidly more serious and had reduced her to a condition of marked anæmia. On examination, I found that the uterus was normal in size and pushed over to the left side, but that it was associated with a tumour about the size of a cocoa-nut, which was evidently cystic, and, from its attachment to the uterus, was probably ovarian. I placed her upon a treatment consisting of large doses, fifteen grains, of bromide of potassium, with ergotin, one grain, in order to check the hæmorrhage. For this purpose, I also applied astringent and caustic applications to the interior of the uterus, but all to no effect. The menorrhagia continued quite as profuse till September; and then, as it became perfectly evident that something more must be done, I resolved to remove the tumour. This I did on September 9th. I made the usual median incision, and, when the tumour was displayed, I found that it was an ovarian cyst on the right side, with no very well defined pedicle, and with a number of very large sinuses in its walls. I tapped it and removed it from the pelvis, drawing it well out, and then I applied a circular clamp as close to the uterus as I could. A small mass of secondary cysts was pulled above the clamp with great difficulty, and the clamp was fastened really round a part of the cyst. The patient did remarkably well after the operation. On the seventh day, the clamp begun to separate, and then it became evident that the part of the cyst-cavity which remained was suppurating, and it discharged large quantities of pus. On the twelfth day, the clamp came off. For about a month after the operation, the cavity discharged freely; but then the opening began to close, and the patient suffered much pain. I therefore passed a double drainage-tube through the cavity and left it there about six weeks. I then removed it, and the whole track closed in a few days, and the patient remains to this day (September 1878) permanently well. Ever since the operation, her menstruation has been perfectly regular and normal in quantity, and now she is in robust health.

The only explanation of this curious case upon which I can venture is, that the metrorrhagia must have been due to the large venous sinuses which I found in the tumour. One or more of these probably ran through the cornu of the uterus, and thus contributed a supply of blood larger than usual. That the removal of the tumour, leading to the destruction of these sinuses, cured the metrorrhagia strongly supports my hypothesis.

E. T., aged 41, single, was sent to me by Dr. Raper in April 1873, on account of extreme anæmia, the result of profuse menorrhagia. She presented an appearance as if every drop of blood had left her face. She had noticed a lump in the lower part of the abdomen for some months, and during her menstrual periods this lump was the seat of severe pain. When examined, this was found to be a tumour reaching almost up to the umbilicus, free, movable from above, soft but not fluctuating, and attached undoubtedly to the uterus. This organ was high up and somewhat behind the tumour and to the right side.

The nature of the tumour was not clear, but I placed in my notebook an alternative diagnosis of a soft pediculated uterine myoma, or an ovarian cyst with thick contents. I determined to remove the tumour.

On May 22nd, she was placed under the influence of methylene ether by Dr. Raper, and I was further assisted by Dr. James R. Chadwick, of Boston, U.S.A., and Mr. W. J. Foster. I made an incision four

inches in length and displayed a tumour of bright pearly lustre, but having a curious purple hue, such as I had not previously seen. To the touch it had a most singularly heavy and doughy feeling, and, when punctured by the trocar, nothing passed through the tube. I therefore made an incision into the cyst, and squeezed out a quantity of dark purple stuff of a putty-like consistence. I was thus able to draw the tumour out through the wound, and, finding that it had a well-marked pedicle, I secured it by a clamp, and finished the operation in the usual way. The other ovary was perfectly healthy, as was also the uterus.

The patient recovered from the operation without any trouble, and has since remained quite well, though she has never menstruated, and has suffered from the usual climacteric distress.

When I came to examine the cyst and its contents, I found that the latter consisted entirely of inspissated blood, and the source of that blood was evidently a large ulcerating surface which existed on the inner wall of the cyst. I think it very likely that the cyst originally contained the ordinary albuminous fluid found in such cavities; but that when this ulceration occurred the walls of the Graafian capillaries gave way, especially perhaps at the menstrual periods, and hæmorrhage into the cyst occurred. In the intermenstrual period, it is likely that absorption of the liquor sanguinis occurred, and thus the peculiar putty-like contents of the cyst were manufactured. This, of course, does not explain the occurrence of the uterine hæmorrhage; and upon this matter I am unable even to speculate. There can be no doubt that the tumour was directly the cause of the hæmorrhage, because it ceased absolutely upon its removal; but it is impossible to see how hæmorrhage into a cyst should involve hæmorrhage from the uterus.

These two cases afford interesting illustrations of the exceptional conditions which sometimes oblige us to remove small ovarian tumours, in opposition to what should certainly be the rule, to leave them alone till they are so large as to interfere with the patient's organic functions.

CLINICAL MEMORANDA.

NOTE ON INTERMITTENT ALBUMINURIA.

THE late volume of *Guy's Hospital Reports* contains a very valuable and interesting paper by Dr. Moxon on "Chronic Intermittent Albuminuria". Dr. Moxon specifies the existence of a *remittent* form of the disease as well, but confines his description of cases to the first variety. Probably it is not possible to draw a clear line of distinction between the two, but that they pass by intermediate forms the one into the other. Dr. Moxon has had no experience of the disease, except in young men; on the other hand, the two or three cases I have seen have been in young women, or rather in growing girls between the ages of fourteen and sixteen, and all of them suffering under anæmia, with a *bruit de diable* in the cervical veins. There is one special point connected with these cases not commented on by Dr. Moxon to which I wish to draw attention; viz., that, if such cases be kept in bed or strictly in the *recumbent* position, the albumen will disappear altogether; at any rate, this is my experience. In one case, occurring in a young relative of my own, and in whom I have made some hundreds of observations, examining the urine night and morning for many weeks together, I never once obtained albumen in that passed on first leaving bed in the morning; and it was this fact, when first noticed, that led me to order the patient to be kept in bed altogether. She was so kept for three weeks, and albumen never once appeared the whole time. Although during this period she grew fat and lost apparently her complaint, she was so evidently not improved in health that I could not continue the experiment; but the very first day that she left her bed the albumen reappeared. Several times since, for trifling ailments, as a cold, she has stayed in bed an odd day or so, and the albumen has disappeared. In another case, I have made a similar experiment, though not carried to the same extent, and with a similar result.

That the albumen can be made to appear and disappear in such a singular manner, simply according to the position of the body, proves almost indubitably the mechanical nature of the affection, or, as Sir W. Gull says, that it depends upon atony of the vessels and nerves. When the body is in the upright position, the weight of the column of blood is too much for the weakened vessels.

The case on which my observations have been chiefly founded has now been going on for nearly two years, and indeed may have been longer, as the patient had been very languid and anæmic for some months before; but it had not been considered necessary to examine the urine. However, although the albumen still continues in the evening urine, she is steadily gaining in health and strength. I feel certain, from the numerous conversations that I have held with different pro-