A SERIES OF TWENTY-FIVE COMPLETED OVARIOTOMIES.

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NOTWITHSTANDING all that has been written concerning ovariectomy, there is yet more to be learnt about the subject. Between April, 1877, when I became assistant-surgeon to the Samaritan Hospital, and October, 1889, I witnessed no less than 1,050 abdominal sections. I assisted in person at over half those operations, after clinical examination of nearly every patient, in Dr. Bantock's wards. Yet, spite of that experience, which cannot be reckoned as limited, I should be sorry to speak too positively on any of the contested points relating to ovariectomy and allied procedures.

Practice of the operation, a searching investigation into every detail of nursing and after-treatment, and a close study of the records and statistical tables of experienced operators, are the chief agents in effecting progress. The cause of death in fatal cases must, whenever possible, be faithfully recorded. Every operator tends to put his trust in a system; he must find out how the system fails in every bad case, and must admit, if necessary, that the system may have been the cause of death. He must avoid a natural tendency to argue, on mere logical grounds, that his colleagues' fatal cases are due to his colleagues' respective systems, and that his own are to be explained by purely accidental circumstances for which his system and himself are in no way to blame. On the other hand, the less experienced operator must not take for granted that the success of a senior is due, as that senior may honestly believe and maintain, to his system. The senior's brilliant results must depend, to a great extent, on his skill and experience, rather than on preference for the spray, or discarding of antiseptics, or treatment of peritonitis by opium or by purgatives. A few years ago, in the course of a discussion on the claims of eminent rivals, at the Royal Medical and Chirurgical Society, Mr. Savory observed that there was only one thing common to both claimants. Their last cases were more successful than their first. This showed that success depended on the man rather than on his system.

In my own practice I have taken what has been sent to me; some of the cases were easy, some difficult, I made no selection. To give full details of every case would be an impossibility. Yet since ovariectomy depends, perhaps, more upon matters of detail and care in after-treatment than any other operation, I have thought it advisable to append to the table a series of notes on matters of interest respecting each case. I regret that one important and indeed essential factor, the efficacy of the nurse, cannot be estimated in statistical records.

The expression "a simple ovariectomy," is a relative term. Thus Case 5 was "simple" as regards manipulation, but the previous tapping was, in itself, a complication. Case 9 was "simple," in the same respect, but it involved clinical and pathological features not to be overlooked. Case 11 was a good example of the impossibility of making sure about the simplicity or difficulty of an operation beforehand. The presence of part of a cyst in the pelvis displacing the uterus forwards often indicates pelvic adhesions or absence of the pedicle. It turned out that there were no adhesions, and that the pedicle was of fair length and easy to secure. Other cases, such as 20, may be absolutely simple, excepting that some unusual complication may compel the operator to depart from simplicity in one particular detail.

Cases 1 to 13 were performed under spray with strict Listerian precautions. In the remainder, carbolic acid was not used, the instruments were kept in trays containing hot water, and the operation carried out on Dr. Bantock's principles. The peritoneum was flushed with warm water in two cases where abdominal structures had been subjected to much handling or solid matter diffused over the peritoneal cavity. In Cases 14, 15, 16, 17, 18, 19, 20, 21 and 25 no alcohol, nutrient enemata, nor opium were administered. The routine employment of these therapeutic agents is inadvisable. Alcohol is useful in some cases of extreme exhaustion; opium is occasionally of value, as in Case 22, where spontaneous diarrhoea set in during the first week and threatened to weaken the patient; opium likewise aids in the retention of nutrient enemata. The value of these enemata is much disputed by specialists. They are certainly required in cases where the patient is old or weak, or exhausted by a long operation. It is

equally certain that careless management of enemata on the part of the nurse may cause grave complications. The necessary precautions are well known but not always followed out.

CASE I.—A typical case of dermoid cyst; it formed a small tumour, often very painful when it rolled about, or during an attack of coughing. The right ovary was reduced to a shell, lined internally with integument, and stuffed with hair and grease; the pedicle was twisted and atrophied, reduced to a fibrous cord like a large nerve.¹

CASE II.—This case gave me some anxiety, as she was exposed to draught on the morning before operation, and a slight attack of bronchitis developed during convalescence from the operation. She was a healthy spare old woman. Pedicle short, very near the large intestine.

CASE III.—The operation was troublesome owing to the extreme softness of the very multilocular tumour, which had to be broken down freely. The pedicle was broad and short, close to the sigmoid flexure.

CASE IV.—The large dermoid tumour contained soft masses mixed with fine spicules of bone, and looking very malignant,² but Dr. Hott informs me that the patient was free from any symptom of recurrence in July, 1889.

CASE V.—The patient was a cachectic, overworked needlewoman. She passed scanty concentrated urine for many months before operation.³ She was tapped in August, 1883. On admission, December 20th, 1883, she looked very ill, and passed but little urine. I tapped her again, removing thirty-one pints of ovarian fluid. Her health then rapidly improved, the secretion of urine increased, and nine days later I operated. Convalescence was rapid. Here I may note that, as a rule, tapping is to be avoided, but in this case it proved beneficial. The uterus bore three small spherical interstitial fibro-miomata.

CASE VI.—This patient had suffered from two severe attacks of abdominal pain after the appearance of the tumour. She had been prudently kept at rest by her medical attendant during these attacks, and hence was very probably saved from adhesive peritonitis.

CASE VII.—The pedicle was short and broad. In securing the vessels in the outer part (a precaution absolutely necessary under the circumstances) a vein was wounded. I therefore passed a ligature lower down and tied the vessels. The pedicle was then transfixed in its middle portion and tied.

CASE VIII.—The patient had been tapped four times in four years. For a year before operation she suffered from rheumatic gout, which caused great spinal deformity. The adhesions to the parietes and brim of the pelvis gave me much trouble. She was a very ill-nourished sickly-looking woman, yet convalescence was uninterrupted.

CASE IX.—The tumour was completely separated from its normal pelvic connections; its supply of blood was maintained by omental and mesenteric adhesions. The outer end of the Fallopian tube lay on the uppermost part of the tumour.⁴ The patient first noticed the tumour during pregnancy a year before operation. No trace of any appendages lay on the corresponding (left) side of the uterus. As the pelvis is left almost untouched during operation, cases of this kind usually make a rapid recovery, with no disagreeable pelvic symptoms.

CASE X.—The patient had three violent attacks of vomiting and abdominal pain within a few weeks of the operation. The cyst wall was inflamed, the peritoneum deeply injected, and the pedicle very long and twisted twice. This explained the acute symptoms. There were no adhesions.

CASE XI.—The cyst bulged freely into Douglas's pouch, displacing the uterus forwards, but there were no pelvic adhesions. Edema of left leg for two days during the third week; the left foot had swollen four years previously. More will be said on this subject in relation to Case XXV.

CASE XII.—In this case the patient was 63 years old. The menopause occurred thirteen years before the appearance of the tumour. For about six months before operation metrorrhagia took place at intervals of from two to four weeks. The pedicle was very broad. The opposite (right) ovary was atrophied. Metrorrhagia, rather free, came on eighteen hours after the opera-

¹ Preserved, Museum Royal College of Surgeons, No. 4,552a. See also *Trans. Obst. Soc.*, vol. xxiv, 1882, p. 133.

² See *Tumours of the Ovary*, p. 89.

³ I have given evidence as to the damage caused to the kidneys by ovarian tumours in *Tumours of the Ovary*, p. 152.

⁴ Preserved, Museum Royal College of Surgeons, Path. Sec., No. 4,554.

Table of Ovariectomies.

No.	Place.	Date of Operation.	Medical Attendant.	Age.	Condition and Number of Children.	Length of Incision.	Adhesions.	Ovary Removed.*	Weight of Tumour and Amount of Fluid Contents.	Highest Temperature.	Immediate Result.	Subsequent History.
1	Nursing Home	April, 1882	—	32	M., 5	4 ins.	None	L. and R.	—	101.2° E. I	Recovered	Well in 1889.
2	Samaritan Hospital	Jan., 1883	—	59	M., 1	3 ins.	"	R.	1 lb. 9 ozs. 16 pints	100.6° E. I	"	Well in Sept., 1884.
3	Nursing Home	July, 1883	Mr. Carr Roberts	32	S.	"	"	L.	6 lbs. 11 ozs. 11 pints	100.6° E. II	"	Well in 1888.
4	Samaritan Hospital	Oct., 1883	Dr. Ilott, Bromley	17	S.	About 3 ins.	"	R.	3 lbs. 3 ozs. 16 pints	101.6° E. I	"	Well in 1889.
5	"	Dec., 1883	—	48	S.	3½ ins.	Parietal, at old tapping puncture	L. and R.	2 lbs. 10 ozs. 13 pints	100.0° E. II	"	"
6	"	March, 1884	Mr. M. J. Anderson	46	M., 6	"	None	L.	2 lbs. 11 ozs. 7 pints	100.6° E. I	"	Well in 1886.
7	"	Oct., 1885	—	23	S.	About 3 ins.	"	L.	3 lbs. 18 pints	99.8° E. I	"	Married 1888, well in May, 1889.
8	"	Jan., 1886	Dr. Kisch	47	S.	5 ins.	Unilateral parietal, strong omental and pelvic. Papillomatous cyst	L.	11 ozs. 14 pints	100.0° E. II	"	Well one year later.
9	"	May, 1886	Mr. Stott, Colney Hatch	29	M., 7	About 3 ins.	Intimate parietal omental and mesenteric. No true pedicle	L.	—	99.2° M. III	"	Quite well following summer.
10	Nursing Home	June, 1886	Dr. W. S. A. Griffith	53	W., 4	2½ ins.	None	R.	1 lb. 12 ozs. 8 pints	100.0° E. I	"	Well in Jan., 1887.
11	"	July, 1886	Dr. S. Barker, Brighton	46	S.	3 ins.	Parietal	L.	14 pints	100.6° E. II	"	Well in summer 1888.
12	Samaritan Hospital	Oct., 1886	Dr. Jardine, Richmond	63	W., 0	2½ ins.	None	L.	1 lb. 2 ozs. 22 pints	99.4° E. II	"	Well in June, 1887.
13	Nursing Home	March, 1887	Mr. Thomas, Swaffham	49	M., 5	3 ins.	"	L.	2 lbs. 4 ozs. 20 pints	102.2° E. II	"	Well in Aug., 1888.
14	Samaritan Hospital	Sept. 30, 1887	—	42	S.	1½ in.	Strong parietal	L.	15 ozs. 22 pints	100.0° E. II	"	—
15	"	Oct. 1, 1887	—	30	M., 1	2 ins.	None	L.	3½ oz. 7 pints	98.8° E. I	"	Child born Dec., 1888.
16	Nursing Home	Oct. 20, 1887	—	24	S.	1½ in.	None, broad ligament cyst	L.	16 pints	100.4° E. II	"	—
17	Samaritan Hospital	Dec. 7, 1887	Dr. Rowe, Margate	59	S.	2 ins.	Parietal, pelvic, and omental	R. and L. fused into one cyst	5 ozs. 4½ pints	100.4° E. I	"	Well in spring of 1888.
18	"	Feb. 23, 1888	Dr. Day, Mr. P. Aldrich	33	M., 5	2½ ins.	Parietal and omental	L.	15 ozs. 17½ pints	99.2° E. I	"	—
19	"	July 20, 1888	Mr. Butlin	22	S.	3 ins.	None	R. and L.	R., 2 lbs. 9 ozs. 14 pints	100.4° E. I	"	Well in summer 1889.
20	"	Jan. 25, 1888	Dr. Day	26	M., 3	Nearly 6 ins.	Omental	R.	L., 1½ ozs. 2 lbs. 11 ozs. 6 pints of greasy matter	101.2° E. I	"	—
21	"	March 30, 1889	Dr. Rutherfordord	52	M., 8	5 ins.	None	R.	3 lbs. (solid sarcoma)	101.0° M. IV	"	Well in Nov., 1889.
22	"	May 4, 1889	Dr. Waugh, Toddington	32	W., 1	6 ins.	Parietal, omental, appendices epiploicæ	R. and L.	16 lbs. 4 ozs. solid tumour of right ovarian ligament	103.0° E. I	"	Well in Nov., 1889.
23	"	June 6, 1888	Sir Spencer Wells	50	M., 0	3 ins.	None	R.	12 ozs. 3 pints	101.2° E. I	"	Well in Nov., 1889.
24	"	July 22, 1888	Mr. Beckett, Ely; Sir Spencer Wells	33	M., 1	6 ins.	Omental, parietal, very close in each flank	R.	6 lbs. 2 ozs. about 12 pints	105.4° 3 hrs. before death	Died, 12th day	Died of suppurative peritonitis.
25	"	Oct. 15, 1888	Mr. Simpson, Worthing	36	M., 1	3 ins.	None	R.	14 ozs. 13 pints	100.4° E. II	Recovered	—
Incomplete Ovariectomy.												
1	Samaritan Hospital	Dec. 16, 1884	Mr. Lammiman, Tunbridge Wells	47	M., 0	5 ins.	Universal	?	—	102.0° E. II	Recovered	Lived for seven months after operation.

* The letter placed first in this column, when R. and L. come together, indicates the side on which the larger tumour developed.

tion, and continued for three days; during that period the temperature never exceeded 99.4° F.

CASE XIII.—The tumour was sessile. It burrowed between the folds of the broad ligament, and touched the left side of the uterus. Its capsule was in close relation to the large intestine. I enucleated the lower part of the tumour, and transfixed the tissues of the broad ligament close to the uterus. The ligature slipped, and I was compelled to apply another ligature, which included a portion of the cornu of the uterus. The edges of the capsule, after the tumour was cut away, were sewn up. On the night of the eleventh day the patient was seized with dyspnoea and violent palpitations. Dr. J. F. Goodhart, who kindly auscultated the patient, reported "a grating first sound, no thrill on palpation. Haemic systolic murmur at apex diffused over præcordial area from nipple to sternum and upwards to level of third

left rib, inaudible posteriorly and in axilla." The patient had made no previous mention of any cardiac complication, although she had suffered from severe attacks of palpitation for twenty-seven years. The legs were oedematous before operation, the urine free from albumen. There was no bad symptom during anaesthesia, and convalescence was rapid.

CASE XIV.—The pedicle was twisted and obstructed, the cyst being nourished chiefly through an intimate parietal adhesion. Legs oedematous before operation, with large varicose veins, some of which became plugged on the ninth day, but no trouble ensued.

CASE XV.—The pedicle was rather short, otherwise the case was extremely simple.

CASE XVI.—A large thin-walled broad-ligament or "parovarian" cyst. The capsule was closely related at its base to a coil of

intestine. She had been tapped three years before at a general hospital.

CASE XVII.—The adhesions, which solely nourished the tumour, gave much trouble. The uterus was twisted, so that its right cornu was displaced backwards, and the tube, twisted and atrophied, formed a pedicle to the tumour. A white ligamentous band ran from the left side of the uterus to the tumour, representing the left tube, ovarian ligament, and broad ligament atrophied. This case was an instance of the fusion of two cystic ovaries, with subsequent twisting of one pedicle and atrophy of the other.

CASE XVIII.—There had been an attack of inflammation of the cyst in June 1887; the cyst wall was dull and adherent to the parietes and omentum.

CASE XIX.—After removing the right tumour, which formed a very multilocular cyst, I examined the left ovary, which lay at the bottom of Douglas's pouch. It was about two inches in long diameter and converted into a single cyst. After removal, I found that it was stuffed with hair and sebaceous matter. The pedicle was not twisted, otherwise this case strongly resembled No. 1. The patient has grown very stout since the removal of the ovaries.

CASE XX.—A long incision had to be made in this case, as a large flat bony plate lay behind the anterior part of the cyst-wall with its long axis transverse. The cyst was also full of greasy fluid which I feared to spill into the peritoneal cavity.

CASE XXI.—The tumour, before operation, felt like a pedunculated subperitoneal uterine fibroid. It was oval and very heavy for its size.

CASE XXII.—A full account of this remarkable case of solid tumour of the ovarian ligament appeared in the *JOURNAL*, June 8th, 1889, p. 1287.

CASE XXIII.—This case is instructive as illustrating the danger of delay in performing ovariectomy. The patient declined operation six months earlier. I found a considerable amount of ascitic fluid in the abdominal cavity. A mass of papillomatous outgrowths perforated the cyst wall, filling up the aperture which they made. Had the patient waited two or three months longer, the operation would have been very difficult and dangerous.

CASE XXIV.—The patient had three attacks of peritonitis with inflammation of the cyst wall, in the winter and spring of 1889. Mr. Beckett, of Ely, wrote: "Her pulse before she left home, July 18th, 1889, was about 120, and her temperature became nearly normal at the time of her leaving. Before that it was 102°, with great tenderness over the region of the left ovary." There was some difficulty in flushing the peritoneum thoroughly, and the process caused considerable shock. The drainage tube was removed on the fourth day, as under a drachm of almost clear, scentless fluid collected in six hours. The temperature never fell below 100°, nor the pulse below 108, throughout. There were symptoms of obstruction of the small intestine on the sixth and seventh day; a swelling, resonant on percussion, forming in the lower part of the abdomen, whilst there was no evidence of distended colon. By the aid of white mixture and castor oil a pale motion was passed on the seventh day, with temporary improvement. Delirium and suppression of urine set in forty-eight hours before death. A pool of pus was found lying on the surface of the intestines about the level of the track of the drainage tube. I believe that some clot, or semi-solid cyst contents were left behind and decomposed. The process of flushing requires great care, for the water must be neither too hot nor too cold, and when adhesions are universal and involve structures high in the abdomen, the water must be allowed to flow freely in that direction. This case was in broken health at the time of operation, and perhaps the presence of a small amount of morbid material in the peritoneal cavity was sufficient to turn the scale against her. In this respect it resembled Case 23, in a paper by Dr. Bantock, published in the *JOURNAL*, vol. i, 1879, p. 767. "Liver became adherent to raw parietes, shutting in a small quantity of bloody serum; drainage of pelvis perfect." In that case the cyst had suppurated; in mine it had repeatedly become inflamed; its wall was dull, and strongly adherent to the parietes and omentum.

CASE XXV.—This case presented no difficulties at the operation. Unfortunately the patient put her foot to the ground when she was placed on the sofa for the first time, a fortnight after the operation. The left calf became swollen through plugging of a vein, and a swelling appeared in Scarpa's triangle, which did not subside for over a week. This complication, far more frequent than many records might lead us to suppose, is generally observed

in "simple" cases, where the patient often eludes the vigilance of the nurse or where the nurse herself is careless, or inexperienced.

In the case of incomplete ovariectomy, the patient had been under the care of Mr. Lammiman, of Tunbridge Wells, for about a year. A cyst developed and then ruptured, so that on examination under chloroform no trace of any tumour could be felt. A few months later, after an attack of pleurisy, a cyst could again be detected; it descended into Douglas's pouch, and the patient showed signs of malignant disease. The tumour was multilocular, and filled with sarcomatous material. It adhered intimately to the intestines and parietal peritoneum. I cleared the loculi, which had been opened, of their solid contents, packed them with iodoform wool, and stitched the opening in the main cyst wall to the margins of the lower part of the abdominal wound.

Next day the patient appeared to be sinking. I introduced a drainage tube into the tumour, and washed out the cavity every two or three hours for several days. At length the patient recovered for a time, and enjoyed relative comfort for a few months. She died on June 14th, 1885, seven months after the operation. This is an instructive case, showing that after an incomplete ovariectomy, where malignant disease is discovered, the patient may, with care, be saved from death as a result of the operation.

TALIPES EQUINO-VARUS IN THE ADULT: TWO SUCCESSFUL CASES OF DOUBLE OPERATION BY EXCISION OF A PORTION OF THE TARSUS: DAVIES-COLLEY'S OPERATION: SEQUEL.

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It was well pointed out by Mr. Edward Lund, in his address as President of the Surgical Section of the meeting of the British Medical Association at Manchester, that operations which appear successful at the time do not necessarily give ultimate good results. "The after-history of surgical cases" alone determines their real success. In the *JOURNAL* for October 27th, 1888, a report of two cases of double tarsectomy appears under the above heading. I now after a further lapse of time, add a few words by way of sequel, and give illustrations of one of the cases.

The operations were somewhat modified from Mr. Davies-Colley's description as given in Erichsen's *Surgery*, 8th edition. I commenced by dividing the tendo Achillis, and in the later operations I made an incision on each side of the foot, and found with this it was much easier to remove the divided bones of the tarsus than with only one incision. The feet were put up at a right angle at once, and there is very firm union of the divided tendo Achillis, in each case.

Fig. 1.—Talipes Equino-varus.

The second of my cases, J. F., aged 41, was operated upon in the month of April, 1887, for his left foot, and in November for his right. The distortion of his feet was extreme, as shown in Fig. 1, which is from casts preserved in the Doncaster Infirmary. He was able to put only the outside of the toes to the ground. Boots had been modified for him until the bootmaker