A FIFTH SERIES
OF
ONE HUNDRED CASES
WITH REMARKS ON THE RESULTS OF
FIVE HUNDRED CASES OF OVARIOTOMY.

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Received October 8th—Read November 26th, 1872.

THE completion of five hundred cases of one capital operation by one operator offers a favorable opportunity for reviewing the progress of the operation, and our knowledge of the conditions which call for its performance, during the fourteen years which have passed since the first case in 1858 until the five hundredth this year. Looking back on this accumulated experience it may be possible to learn some useful lessons, to detect mistakes in the past which may be avoided hereafter, and to agree upon some plan of combined observation which may lay the foundation for a more complete history of ovariectomy, a more correct statistical account of its results, and a more accurate knowledge of the subsequent condition of patients who recover after it, than the records of surgery afford with regard to any other capital operation.

Particulars of all the cases from 1 to 400 have been given in successive papers which have been published in the forty-sixth, forty-eighth, fiftieth, fifty-second, and fifty-fourth volumes of the 'Transactions' of this Society. The fifth series of 100 cases is arranged in the following table :

Table of One Hundred Cases

No.	Medical attendant.	Date of operation.	Age.	Condition.	Adhesions.
		1871			
401	Mr. Yate, Godalming	Jan.	52	Married	Parietal
402	Mr. Aikin	Jan.	37	Married	Parietal
403	Hospital	Jan.	38	Married	Omental and mesenteric
404	Dr. Druitt	Jan.	63	Single	None
405	Dr. Webb	Jan.	58	Married	Parietal—Cyst suppurating
406	Dr. Sieveking	Feb.	50	Single	None—Burst cyst ...
407	Hospital	Feb.	25	Married	Parietal
408	Dr. Chepmall	Feb.	27	Single	Parietal
409	Dr. Webb	Feb.	21	Single	None
410	Hospital	March	32	Married	Omental
411	Mr. Weekes, Hurstpierpoint	March	25	Single	Omental
412	Hospital	March	30	Single	Parietal
413	Hospital	March	36	Single	Parietal
414	Hospital	April	43	Single	Parietal
415	Mr. Butler, Guildford	April	53	Single	Omental
416	Mr. Scrase, Lewes	April	45	Married	Parietal—Burst cyst
417	Hospital	April	38	Married	Parietal and omental
418	Hospital ..	April	52	Single	None
419	Dr. Ross	May	38	Married	Omental and intestinal—Pregnancy
420	Hospital	May	54	Married	Parietal and omental
421	Dr. Mayer, Berlin	May	29	Married	Parietal — Both ovaries.
422	Hospital	May	51	Single	Parietal and omental
423	Hospital	May	54	Single	Parietal
424	Dr. Greenhalgh	May	38	Married	None
425	Mr. Fouracre, Hornsey	June	19	Single	None
426	Hospital	June	29	Married	Omental
427	Dr. Schetelig, Hamburg	June	50	Married	Parietal & mesenteric—Both ovaries.
428	Dr. Jackson, Southsea	July	50	Single	None
429	Hospital	July	29	Married	Parietal and omental
430	Hospital	July	35	Married	None
431	Dr. Ronayne, Youghal	July	30	Single	None
432	Hospital	July	68	Married	Parietal

of Completed Ovariectomy.

Treatment of pedicle.	Weight of tumour.	Length of incision.	Results.	Subsequent history or cause of death.	No.
	lbs.	inches.			
Clamp	17	5	Recovered	Health very fair in 1872	401
Clamp and ligature	15	5	Recovered	Well and pregnant in 1872	402
Clamp and ligature	6	5	Recovered	Health very fair in 1872.	403
Ligature	20	5	Recovered	Asthma of long standing	404
Clamp	19	5	Recovered	Well and single in 1872	405
				Very well in 1872	
Clamp	21	5	Recovered	Well in 1872	406
Clamp	35	5	Recovered	Child born April, 1872	407
Clamp	16	5	Recovered	Well in 1872	408
Clamp	...	4	Recovered	Health perfect in 1872.	409
				Still single.	
Clamp	35	5	Recovered	Very well. Small hernia near cicatrix. Girl born January, 1872—labour natural	410
Clamp	13	5	Recovered	Well in 1872.	411
Clamp	23	5	Recovered	Died April, 1872, of acute rheumatism and endocarditis	412
Clamp	6	4	Died, 5th day ...	Septicæmia	413
Cautery	39	5	Recovered	Died in 1872 of bronchitis	414
Clamp	7	4	Died, 3rd day ...	Exhaustion	415
Ligature	34	6	Recovered	Very well in 1872	416
Clamp	24	5	Recovered	Health good in 1872	417
Ligature	7	4	Recovered	No return	418
Ligature	32	5	Recovered	Child born, Dec. 1871, 7 months after operation.	419
				Well in 1872	
Clamp	22	5	Died, 13th day	Pleuritic effusion	420
Clamp and ligature	19	5	Recovered	Well in 1872	421
Clamp	19	4	Recovered	Well and single in 1872	422
Clamp	42	6	Died, 5th day ...	Septic peritonitis	423
Clamp	33	6	Died, 32 hours...	Exhaustion	424
Clamp	19	6	Recovered	Health very good in 1872.	425
				Still single.	
Clamp	18	7	Died.....	Went home, but died 25 days after	426
Ligature	...	9	Died.....	Peritonitis	427
Ligature	...	5	Recovered	Well in 1872	428
Clamp	30	6	Recovered	Well in 1872	429
Clamp	17	5	Recovered	Quite well in 1872	430
Clamp	22	4	Recovered	Well in 1872	431
Clamp	25	6	Recovered	Well in 1872	432

No.	Medical attendant.	Date of operation.	Age.	Condition.	Adhesions.
433	Hospital	1871 July	50	Married	None—Both ovaries
434	Professor Winkel, Rostock	Aug.	37	Married	None
435	Dr. Bell	Aug.	42	Married	Parietal
436	Mr. Barlow	Aug.	41	Married	Omental & mesenteric
437	Dr. Boddaert, Ghent	Aug.	52	Married	Parietal and pelvic...
438	Mr. Ticehurst, Hastings	Aug.	22	Single	None
439	Hospital	Aug.	32	Single	Parietal and omental —Burst cyst
440	Hospital	Aug.	23	Single	None
441	Hospital	Oct.	41	Married	None—Both ovaries
442	Mr. Baker, Birmingham	Oct.	32	Single	None—Burst cyst ...
443	Hospital	Oct.	42	Single	None
444	Dr. Farre	Oct.	50	Married	None
445	Dr. Budd, Clifton	Nov.	30	Single	None
446	Dr. Pirrie, Belfast	Nov.	40	Married	None
447	Mr. Marriott, Leicester	Nov.	42	Married	None
448	Hospital	Nov.	27	Single	None
449	Dr. Lyon, Clifton	Nov.	29	Single	None
450	Mr. Roughton, Kettering	Nov.	42	Married	None
451	Mr. Riggall	Nov.	56	Married	Parietal—Cyst sup- purating
452	Hospital	Dec.	27	Married	None
453	Hospital	Dec.	34	Single	None
454	Hospital	Dec.	40	Married	Parietal
455	Hospital	Dec.	21	Single	None
456	Hospital	Dec.	28	Single	None
457	Sir J. Alderson	Dec. 1872	60	Married	Intestinal and me- senteric
458	Dr. Turner, Minchinhampton	Jan.	27	Married	Parietal
459	Hospital	Jan.	17	Single	Parietal and omental
460	Mr. Bell, Rochester	Jan.	60	Single	Parietal & intestinal
461	Mr. T. H. Hill	Jan.	55	Married	Parietal and pelvic...
462	Dr. Smith	Jan.	53	Married	Parietal, omental, and intestinal
463	Mr. Turner, Bermondsey	Jan.	46	Married	None—Burst cyst ...
464	Dr. Stewart, Whitby	Jan.	48	Married	Omental and pelvic
465	Hospital	Feb.	22	Married	None
466	Mr. Pollard, Torquay	Feb.	46	Married	Parietal, omental, and intestinal
467	Dr. Powne, Swindon	Feb.	57	Married	Parietal
468	Hospital	Feb.	23	Married	None—Burst cyst ...
469	Hospital	Feb.	41	Single	None
470	Hospital	Feb.	44	Single	None
471	Hospital	Feb.	48	Married	Parietal and omental
472	Hospital	Feb.	44	Married	None
473	Hospital	March	51	Single	Parietal and omental
474	Hospital	March	40	Married	Omental—Burst cyst
475	Hospital	March	32	Single	Omental

Treatment of pedicle.	Weight of tumour.	Length of incision.	Results.	Subsequent history or cause of death.	No.
Clamp and ligature	lbs. 21	inches. 5	Recovered	Died Dec. 1871 of malign- ant disease	433
Clamp	12	5	Recovered	Well in 1872	434
Clamp	...	5	Recovered	Very well in 1872	435
Ligature	15	5	Recovered	Well in 1872	436
Clamp	33	6	Recovered	Well in 1872	437
Clamp	8	4	Recovered	Well in 1872	438
Ligature	...	6	Died, 5 hours ...	Collapse	439
Clamp	13	4	Recovered	Health very good in 1872. Still single	440
Ligature	37	6	Died, 3rd day ...	Pulmonary embolism	441
Clamp	11	5	Recovered	Well in 1872	442
Clamp	23	4	Recovered	Well in 1872	443
Clamp	28	4	Died, 7th day ...	Septicæmia	444
Clamp	8	5	Recovered	Well in 1872	445
Ligature	24	5	Recovered	Well in 1872	446
Clamp	23	4	Recovered	Well in 1872	447
Clamp	8	4	Died, 5th day ...	Septicæmia	448
Ligature	18	4	Died, 5th day ...	Hyperpyrexia and peri- carditis	449
Clamp	15	5	Died, 23 hours	Exhaustion	450
Clamp	49	8	Died, 26 hours	Septicæmia	451
Clamp	35	6	Recovered	Remains well	452
Clamp	11	5	Died, 4th day ...	Septicæmia	453
Clamp	51	6	Recovered	Remains well	454
Clamp	16	5	Recovered	Remains well	455
Pin and ligature.....	10	5	Recovered	Remains well	456
Clamp	15	6	Recovered	Remains well	457
Clamp	22	6	Recovered	Remains well	458
Clamp	16	5	Recovered	Remains well	459
Clamp	33	6	Recovered	Died in March	460
Clamp	10	4	Recovered	Remains well	461
Clamp	18	5	Recovered	Remains well	462
Clamp	...	4	Recovered	Remains well	463
Clamp	41	6	Died, 3rd day ...	Exhaustion	464
Clamp	24	4	Recovered	Remains well	465
Clamp	15	4	Recovered	Remains well	466
Clamp	14	5	Recovered	Remains well	467
Clamp	36	5	Recovered	Remains well	468
Clamp	15	4	Recovered	Remains well	469
Clamp	16	4	Recovered	Remains well	470
Clamp	33	5	Recovered	Remains well	471
Clamp	28	5	Recovered	Remains well	472
Clamp	19	5	Died, 4th day ...	Peritonitis	473
Ligature	16	5	Died, 3rd day ...	Peritonitis	474
Ligature	30	5	Died, 7th day ...	Peritonitis	475

No.	Medical attendant.	Date of operation.	Age.	Condition.	Adhesions.
476	Hospital	1872 March	29	Married	Omental—Pregnancy
477	Hospital	March	50	Married	None—Burst cyst ...
478	Hospital	April	26	Single	Omental
479	Hospital	April	31	Married	Parietal and omental
480	Hospital	April	23	Single	Parietal
481	Professor Bardeleben	April	24	Single	None
482	Mr. Lys, Blandford	April	27	Married	Parietal
483	Hospital	April	48	Married	Parietal
484	Hospital	April	60	Married	Parietal and omental
485	Dr. Day	April	43	Married	None
486	Mr. Earle, Brentwood	April	48	Married	None
487	Hospital	April	57	Married	Parietal
488	Sir W. Gull, Bart.	May	53	Single	None
489	Sir W. Gull, Bart.	May	29	Single	Omental
490	Mr. Moreton, Tarvin	May	51	Married	Parietal
491	Hospital	May	42	Single	None
492	Hospital	May	53	Married	Parietal
493	Mr. Mason	June	39	Married	Parietal
494	Hospital	June	36	Married	Both ovaries.—Burst cyst
495	Dr. Hickson, Scarboro'	June	22	Single	None
496	Hospital	June	45	Married	Parietal and omental
497	Mr. Bracey, Birmingham	June	48	Married	Parietal and omental
498	Mr. Whipple, Plymouth	June	21	Single	None
499	Hospital	June	37	Married	Parietal and omental
500	Hospital	June	54	Married	Parietal and omental

Treatment of pedicle.	Weight of tumour.	Length of incision.	Results.	Subsequent history or cause of death.	No.
Ligature	lbs. 10	inches. 5	Recovered	Child (girl) born at 6th month; lived 21 hours; mother quite well.	476
Clamp and ligature	17	7	Died, 4th day ...	Pneumonia	477
Clamp	20	6	Recovered	Remains well	478
Clamp	24	4	Recovered	Died, July, 1872 — obstructed intestine	479
Clamp and ligature	25	7	Recovered	Remains well	480
Clamp and ligature	12	6	Recovered	Remains well	481
Clamp	27	5	Recovered	Remains well	482
Clamp	...	5	Recovered	Remains well	483
Clamp	26	7	Recovered	Remains well	484
Clamp	8	5	Recovered	Remains well	485
Clamp	14	4	Recovered	Remains well	486
Clamp	...	5	Recovered	Remains well	487
Clamp	22	4	Recovered	Remains well	488
Clamp	26	5	Recovered	Remains well	489
Clamp	28	4	Recovered	Remains well	490
Clamp	...	6	Recovered	Remains well	491
Clamp	...	5	Recovered	Remains well	492
Clamp	34	5	Recovered	Remains well	493
Clamp	21	4	Recovered	Remains well	494
Pin and ligature.....	18	5	Recovered	Remains well	495
Ligature	25	6	Recovered	Remains well	496
Clamp	26	5	Recovered	Remains well	497
Clamp	6	4	Recovered	Remains well	498
Clamp	16	5	Recovered	Remains well	499
Ligature	24	5	Recovered	Returned to Suffolk. Died a month after with cerebral symptoms	500

I do not propose now to make any remarks upon this series of cases alone, but to group the 500 cases together, and to consider what may be learned from a review of the whole.

Following the order of the successive columns of the table, we may first inquire how the results of ovariectomy are influenced by the social condition of the patient, so far as this can be ascertained by the fact of the operation having been performed in hospital or in private practice. It should be stated that all the cases marked "Hospital" in the first column, with the exception of ten in which the word *Hospital* is printed in italics, have been in the Samaritan Hospital, which in many respects resembles a private house, having until this year scarcely ever had more than eighteen beds, and since the beginning of this year only about twenty-four beds occupied. The ten exceptional cases were in a nursing institution in Duke Street, Portland Place, a house where the separation of patients is rather more complete than in the Samaritan Hospital, where the nursing is excellent, but where the results were not nearly so good; the ten cases showing only four recoveries to six deaths. The social condition of some of the patients has been higher than that of the women in the Samaritan Hospital; but in all other respects they may be classed more correctly among the hospital patients than among those who had had the advantage of a separate room in a house free from other patients, and the undivided attention of a nurse. Including these ten cases there have been 240 in hospital, and 260 in private practice. The mortality has been 26·66 in hospital and 24·23 in private practice, a difference of only 2·43 per cent. in favour of private patients upon the whole number. In the first 100 there was a balance of 10 per cent., and in the third 100 of 4 per cent. in favour of hospital cases. In the fourth 100 the mortality in hospital was more than double that in private practice, the proportions being 31·84 and 14·28. In this fifth series, the general mortality being lower than in any of the preceding series of 100 cases, the hospital mortality was 21·05, while the private was 16·32. On endeavouring to

ascertain the reason for this varying proportion of mortality in hospital, it has become manifest that periods of high and low mortality have corresponded with varying sanitary conditions in the hospital, or with the presence of infecting cases in some ward. After emptying the house for a month or longer, thoroughly cleansing, painting and lime-whiting the wards, a period of almost uninterrupted success has followed. Then what some call "a run of bad luck" set in, attributable, I believe, to crowding, to some neglect in purifying bedding, or to contagion or infection. Another thorough cleansing was again followed by better results, and in the six months from December, 1871, after complete repairs, till July, 1872, of 24 cases in the Samaritan Hospital only 2 died and 22 recovered. During the same period in private practice there were 21 successful cases without one death; and I have reason to fear that in some of the earlier private cases a better result might have been obtained if more attention had been paid to the sanitary condition of the house, its drains, sinks, closets, and water supply, while I and all those about the patients had been perfectly free from any infecting influence. My conviction is that the surgeon who hopes to obtain better results than have hitherto been obtained must place his patient, whether in hospital or private practice, as nearly as he can in the position of a person in a private house in a healthy situation, in a room where ventilation is sufficient and continual but not excessive, and the temperature is under proper regulation, all unnecessary furniture (such as woollen carpets and curtains) removed, all bedding and clothing being perfectly clean and free from any taint of morbid poison, and the patient having the undivided attention of one trustworthy nurse for several days after operation.

In the second column of the table the date of the operation is given, thus enabling us to examine the *influence of season* upon the result of operations, and it seems that the mortality is nearly equally distributed over the whole year. It appears probable, therefore, that if atmospheric and climatic conditions do affect the mortality, these conditions, whatever they may be, are not more prevalent in

any one month, or in any season of the year, than in others.

The influence of *age*, so far as can be learned from a study of the facts in the succeeding column, appears to be remarkable. Thus patients below the age of 20 and above that of 60 have almost all recovered. Of twelve under 20 every one recovered, and of 8 above 60, seven recovered, or of those 20 very young and very old patients, only one died. Between 20 and 25, and between 40 and 45, the mortality was about the same, namely, 17 and 16 per cent. The highest, 33 per cent., was at the age of 50 to 55.

The *conjugal condition* of the patient appears to have but little influence upon the mortality. The number of married patients was 279, of unmarried 221. In the married the mortality was 26·84; in the unmarried 23·52 per cent., showing a difference of 3·32 in favour of unmarried over married women at all ages.

Influence of adhesions.—The general conclusion at which I have arrived is that while adhesions to the abdominal walls or to the omentum have but little influence upon the mortality after ovariectomy, adhesions within the pelvis or around its brim which endanger the iliac vessels and the ureters, and attachments to the bladder or rectum, which are separated with difficulty and may lead to delay in securing bleeding vessels, are likely to considerably increase mortality. Thus, the diagnosis of adhesions within the pelvis before operation becomes of considerable importance, while the diagnosis of adhesions to the abdominal wall may be practically disregarded. Statistically, we may say that of the 500 cases, in 296 women there were either no adhesions, or they were so slight as to be of no importance. In these cases the mortality was 19·93 per cent. In 204 cases, where the adhesions were very extensive or were within the pelvis, the mortality was 33·33 per cent., or about 13 per cent. higher than in the cases where adhesions were not met with or were but slight.

The *size* of a tumour, its *solidity*, and the weight of its contents must be considered with the length of the incision

required for removal. For, when the contents of either single or multilocular cysts can be evacuated after tapping or breaking up the septa, very large tumours may be removed through a small opening; whereas a long incision may be necessary for the removal of a solid tumour of moderate size. Looking for the results of incisions of different lengths, it appears that the smallest mortality has been in cases where the incision was about five inches long. This is long enough to admit one of the operator's hands easily and remove an empty cyst or a broken-up tumour without force. Of 203 such cases the mortality was 19·7 per cent. In 140 cases of a four-inch incision the mortality was 24·28 per cent. In 17 cases, where the incision was only three inches long, the mortality was 23·53 per cent. If we compare these 360 cases where the incision did not exceed five inches, the mortality being 21·66 per cent., with the 140 cases where the incision was six inches and upwards, the mortality having been 35 per cent., it appears that the mortality has increased with the length of the incision after five inches. Incisions of six inches show a mortality of 31·25, seven inches 34·48, eight inches 35·0, nine inches, 50·0; and of three cases where the incision was ten and twenty inches, all died—not that the greater length of incision of itself adds much to the danger, but that it is an index of the size and solidity of the tumour and of the difficulty attending its separation and removal.

The *treatment of the pedicle* is far too important a question to discuss on this occasion, but it may serve as a guide to future observers if the results of different modes of treatment in 500 cases are shortly stated. In about two thirds of the cases, or 349, the pedicle has been secured by a clamp outside the abdominal wall; of these cases 280 recovered and 69 died, a mortality of 19·77 per cent. This represents the mortality of the *extra-peritoneal* method of treating the pedicle when this method is completely carried out. The strangulated portion of the pedicle is held up by the clamp outside the abdominal wall, and does not sink inwards between the divided edges of the skin. If an

attempt be made to carry out the extra-peritoneal method in any other way, either by securing part of the pedicle with a clamp, and the remainder by ligature, or by transfixing the pedicle with a pin and securing it with a ligature behind the pins which is either passed through the skin or fastened outside like a clamp, or by sewing the pedicle to the abdominal wall; there is far less complete security against sinking inwards of the strangulated dying portion of the pedicle between the lips of the wound or even into the peritoneal cavity. Such substitutes for the clamp have been tried in 49 cases, with a result of 33 recoveries and 16 deaths, a mortality of 32·65 per cent., a difference of about 13 per cent. in favour of the complete over the imperfect method of carrying out the extra-peritoneal principle. But even these imperfect attempts to practise the extra-peritoneal method have given far better results than the old method of tying the pedicle, allowing it to sink into the peritoneal cavity with the ligature, and keeping the lower part of the wound open by the ends of the ligature until it separates and comes away. Of 14 cases so treated, 8 died and 6 recovered,—a mortality of 57·14 per cent.

The *intra*-peritoneal method has been practised in 88 cases with a result of 54 recoveries and 34 deaths, or a mortality of 38·63 per cent., just double that of the *extra*-peritoneal method when carried out by the clamp. In 57 cases the tied pedicle was returned into the peritoneal cavity with the ligature securing it, the ends being cut off short, and the wound closed; 29 of these patients recovered and 28 died—a mortality of 49·12 per cent. The *écraseur* was only used in one case, and the patient recovered. The cautery alone was used in 16 cases, with a result of 14 recoveries and 2 deaths. In 14 other cases, where the cautery was used, ligatures also became necessary to one or more bleeding vessels not closed by the cautery. The results were 10 recoveries and 4 deaths; or, grouping together all the cases where the cautery was used, we have 24 recoveries and 6 deaths, a mortality of 20 per cent.—within a

fraction of the 19·82 per cent. of this mortality in the clamp cases.

Included among the 500 cases of ovariectomy are 25 cases where both ovaries were removed at the one operation. If these 25 cases were deducted from the 500 the number of cases of removal of one ovary would be 475, and the deaths 115, a mortality of 24·44 per cent.; and as 11 died of the 25 cases of double ovariectomy, the mortality has been 44 per cent., or nearly double that of the single cases. In double as in single ovariectomy the chief point of importance is the mode of dealing with the pedicles, and the results of my experience are in favour of the *extra*-peritoneal method of treating both pedicles whenever it is possible.

In four cases not included in the list of 500, ovariectomy has been performed twice on the same patient. Recovering after removal of one ovary, the patient some months or years afterwards became the subject of disease in the other ovary, and underwent a second time the operation of ovariectomy. Two recovered and two died after this second operation.

In all the previous papers published in the 'Transactions' of this Society, I have given, in addition to the table of cases of completed ovariectomy, another table of cases where the operation was commenced, but could not be completed, and of cases where an exploratory incision was made to complete a doubtful diagnosis. The following table gives the particulars of seven cases of this kind which were observed during the progress of the fifth series of 100 cases :

Cases in which Ovariectomy was commenced, but not completed.

No.	Medical attendant.	Date.	Age.	Condition.	History, &c.	Results.
1	Dr. Wane	1871 Aug.	63	Married	Ascitic fluid and contents of two cysts removed; papilliform masses, involving uterus, both ovaries, bladder, and rectum, undisturbed.	Died, 15 days after.
2	Mr. Coe, Bristol...	Nov.	42	Widow	Multilocular cyst emptied and partly removed; the remainder (adherent to the rectum, uterus, and pelvis generally) stitched to the opening in the abdominal wall, which was partly left open for drainage.	Died, 10th day.
3	Dr. Barclay, Leicester.	Nov.	43	Married	A burst cyst, and ovarian fluid free in peritoneal cavity partly removed; the lower segment of the cyst, generally adherent behind the uterus, stitched to the lower edges of the wound and drained.	Died, 3rd day.
4	Dr. Millington, Wolverhampton.	1872 Jan.	55	Married	Ascitic fluid removed; a cyst emptied. Nothing more done. Nodules of cancer covering the whole peritoneum.	Recovered from operation, but died of cancer of rectum 10 weeks after.
5	Hospital	April	27	Single	Peritoneal fluid removed; bunches of thin grape-like cysts drawn out. Part of a large cyst firmly adherent in the pelvis not separated, but secured outside by a large clamp.	Died, 11 days after.
6	Hospital	Jan.	15	Single	Renal cyst emptied and drained.	Died, 4th day.
7	Dr. Sutton, Dover.	June	42	Married	Ovarian cyst tapped and emptied, but not separated from a large fibroid uterus, to which it was universally adherent. Wound closed.	Recovered from operation.—Returned to Dover. Afterwards treated by drainage.

With the whole series of 500 cases of completed ovariectomy there have been 52 cases of exploratory incisions or of incompleting operations. Of these patients 33 recovered from the operation, or were relieved by it. In 19, the patients died at various periods from one to fifteen days afterwards. In some cases about as much was gained as by ordinary tapping. Five patients recovered completely; 3 of them, after opening the cyst, fixing a catheter or drainage tube in it, and closing the wound around it, perfect recovery following suppuration and drainage of the cyst.

The subsequent history of the patients who recovered after removal of one ovary shows that they may menstruate regularly, and may bear children of both sexes, or twins; and that after removal of both ovaries they do not become excessively fat, nor lose their feminine appearance or sexual instinct. Of the 373 women who recovered, I obtained particulars this year of the condition of all but 23; and I ascertained that 36 patients who were unmarried at the time of the operation have married since. Of these 15 have had one child, 6 two, 3 three, and 3 four children. Two have had twins. Of 259 who were married when the operation was performed, many being beyond the age of childbearing, 23 have had one or more children since; 112 women were in good health this summer, many of them saying they were stronger than they had been for several years before. A few complain of some trifling ailment, and 36 have died at various periods, from a few weeks to eight years, after recovery from the operation. In 17 of these cases the cause of death was more or less directly connected, and in 19 not at all connected with ovarian disease or the operation. These cases can only be regarded as rare exceptions to the general rule that a woman who recovers after ovariectomy is restored to perfect health, and is enabled to fulfil all the duties of wife and mother.

In a work recently published in America, Dr. Peaslee, of New York, says, "It may be shown that in the United States and Great Britain alone ovariectomy has, within the last thirty years, directly contributed more than 30,000 years

of active life to women, all of which would have been lost had ovariectomy never been performed." Applying the calculations by which he arrives at this result to my own 500 cases, taking the average age of all the patients as thirty-eight years, and the average expectation of life for a healthy woman of that age in this country as twenty-nine years, we find the probable aggregate duration of life of the 373 survivors amounts to 10,817 years. Admitting that the probable average duration of life in women who have an ovarian tumour of such a size as to raise the question of removal to be four years—a very liberal estimate—the 127 who died may have lost 508 years, and the 373 who recovered might have passed 1492 years of miserable endurance, whereas they have secured by the operation the probability of the gross amount of 10,817 years of average healthy life.