

**Report of the in-patient department for diseases of women for the year
1889 / by Charles J. Cullingworth.**

Contributors

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Tracts 1868

REPORT

OF THE

IN-PATIENT DEPARTMENT FOR DISEASES
OF WOMEN

FOR THE YEAR 1889.

By CHARLES J. CULLINGWORTH, M.D., F.R.C.P.

THE following report has been prepared on the same lines as the one for the previous year, commencing with a tabulated statement (1) of the number of patients admitted, with the results of treatment, and (2) of the diseases from which the patients suffered, classified as far as possible according to the authorized nomenclature. Then follow tables of the various operations that have been performed, and of the deaths that have occurred during the year. In the drawing up of these statistics I have again gratefully to acknowledge the kind assistance of one of my late residents, Mr. C. H. James, now of the Indian Medical Service.

For the special tables (ovariotomy, &c.), and for the detailed notes of cases appended to this report, the responsibility rests entirely with myself.

TABLE I.

General Statement of Patients in Adelaide Ward.

Number of Beds in Ward (including small Ward)	...	...	...	21
Number of Patients in Ward, Jan. 1st, 1889	...	...	...	14
„ „ „ Dec. 31st, 1889	...	...	...	10
„ „ discharged or who died during 1889:				
			Rate per cent.	
Cured	...	...	...	112
Relieved	...	...	...	74
Unrelieved or other causes	...	...	...	26
Died	...	...	...	9
Total	...	...	...	221
				100·00

Average number of days of each patient's stay in hospital—25·15.

TABLE II.—General Table of Diseases.

DISEASE.	Number of cases.	Age.						Duration of residence.						REMARKS.					
		10-20	-30	-40	-50	-60	Above 60	Under 1 wk.	1-2 weeks	2-4 weeks	1-2 months	Above 2 mos.	Cured.				Relieved.	Unrelieved.	Died.
I. DISEASES OF OVARIES.																			
A. Cyst.																			
a. Simple and multiple	13	...	4	4	1	2	2	1	...	2	8	2	10	2	...	1	12 of these cases underwent operation (see Special Table); the remaining one had signs of active syphilis, and was advised to return when this was cured.		
b. Malignant	1	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	Relieved by puncture.		
Tubo-ovarian cyst	3	...	1	1	...	1	...	1	...	...	...	2	2	...	...	1	All operated upon (see Special Table). All on right side.		
Parovarian cyst	1	...	1	...	...	...	...	...	...	1	...	...	1	...	...	...	See Special Table.		
II. DISEASES OF FALLOPIAN TUBES.																			
Hydrosalpinx	2	...	1	1	...	...	...	...	...	...	1	1	1	1	...	...	The case cured had rest in bed; in the other case the condition was discovered during an operation for a cyst of the broad ligament (see Special Table, No. I).		
Pyosalpinx	2	...	2	...	...	...	...	...	...	1	1	...	1	1	...	...	Abdominal section. The case cured had pleuro-pneumonia after operation. Both cases resulted from old gonorrhoea.		
Hæmato-salpinx	1	...	...	1	...	...	...	...	...	...	...	1	1	...	...	...	Abdominal section; also intra-peritoneal hæmorrhage.		
Salpingitis	5	...	3	2	...	...	...	1	1	2	1	...	1	2	2	...	1 case cured by operation; 2 cases relieved by rest; 1 case unrelieved only remained in 5 days, and 1 refused operation. Pelvic inflammation detected in all the cases.		

TABLE II—continued.

DISEASE.	Number of cases.	Age.					Duration of residence.					Cured.	Relieved.	Unrelieved.	Died.	REMARKS.
		10-20	30-40	40-50	50-60	Above 60	Under 1 wk.	1-2 weeks	2-4 weeks	1-2 months	Above 2 mos.					
III. DISEASES OF UTERINE LIGAMENTS AND OF THE ADJACENT PERITONEUM AND CELLULAR TISSUE.																
A. Hæmatocele.																
a. Intra-peritoneal	6	...	2	2	2	...	...	...	3	...	3	4	1	...	1	The fatal case was due to acute nephritis following abdominal section (<i>vide</i> Table). In another case in which abdominal section was performed a hæmato-salpinx was found.
b. Extra-peritoneal	2	...	...	2	...	...	1	...	1	...	...	1	...	1	...	The case unrelieved went out at her own request.
B. Inflammation.																
a. Pelvic peritonitis	11	...	2	9	...	...	...	1	2	4	4	5	5	1	...	Of these cases, 6 followed on confinement or miscarriage; 2 were due to gonorrhœa; 1 to injury; 1 was tubercular, and was transferred to medical wards, and the cause of 1 is not stated.
b. Pelvic cellulitis	7	...	3	2	1	...	...	...	2	3	2	2	5	...	...	Of these cases, 5 followed on confinement or miscarriage; 1 was supposed to be due to gonorrhœa; and in 1 the attack came on while the patient was attending a case of puerperal fever.
c. Pelvic abscess.	10	...	4	3	2	...	1	...	1	...	5	3	5	4	...	1 Of these, 6 followed confinement; 1 (the fatal case) was either malignant or tubercular, the peritoneum was studded with miliary granules; one followed the wearing of a pessary a year ago, a fæcal fistula forming above the pubes; and the cause of 1 is not known. 5 cases were relieved by operation; 2 abscesses opened into rectum, 1 into vagina, 1 above pubes, and 1 patient refused operation and went out.
c. Malignant of peritoneum	1	...	...	...	...	1	...	1	...	...	...	...	...	...	1	Abdominal section. Malignant growth secondary to papillomatous growth of ovary.

Chronic metritis .	1	...	1	...	...	...	1	...	...	1	...	...
Endocervicitis .	5	...	2	2	1	...	1	4	...	2	2	1
Fibroma .	10	...	1	5	1	2	1	1	3	2	3	1
Polypus, fibrous .	5	...	3	1	1	...	...	2	2	1	...	4
" mucous .	2	...	...	...	1	1	...	1	1	...	...	2
Carcinoma of corpus .	2	...	1	1	...	1	...	1	1	...	...	1
Carcinoma of cervix .	15	...	1	5	5	4	...	5	6	1	2	1
Retroversion .	8	...	4	1	3	...	...	1	5	2	...	4
Retroflexion .	1	...	1	...	...	...	1	...	...	...	...	1
Anteversion .	1	...	...	1	...	...	...	1	...	...	...	1
Anteflexion .	2	...	2	...	...	...	...	...	1	1	...	1
Latero-version .	1	...	1	...	...	...	...	...	1	...	...	1
Prolapse .	4	...	1	1	1	...	...	2	1	1	...	4
Papillary growth on anterior lip of cervix	1	...	...	1	...	...	...	...	1	...	...	1

passage of a septic (?) sound 5 weeks before admission; and the causes of 2 are not stated. All had hæmorrhage, and were cured by curetting and the application of strong carbolic acid.

The case unrelieved was sent in for suspected malignancy. The others were relieved or cured by curetting and applying strong carbolic acid.

All removed by operation except one.

All removed by operation.

The case unrelieved was unsuitable for operation. The fatal case was brought up to the hospital moribund.

1 fatal case was in an advanced state, patient being in a moribund condition when admitted. The 8 unrelieved cases were unsuitable for operation, and therefore did not remain in. Vaginal hysterectomy relieved 1 case, recurrence beginning first to show itself 8 months afterwards (see 'Obstet. Soc. Trans.,' vol. xxxii, 1890, p. 141); in another case the operation was attempted, but had to be abandoned on account of the extensive infiltration of the surrounding parts; in a third case vaginal hysterectomy and abdominal section for a parovarian cyst were performed on the same day, and the patient died on the 4th day from intestinal paralysis (see 'Obstet. Soc. Trans.,' vol. xxxii, 1890, p. 147).

Congenital.

Dysmenorrhœa in 1 case cured; the other case had old laceration of cervix and an ulcer on lab. maj.

Remains of old pelvic inflammation.

1 had incontinence of urine from sinus remaining after operation 12 years ago for extroversion of bladder; all were much relieved by pessaries.

Growth removed. There was bilateral laceration of cervix.

[illegible]

TABLE III.—*Operations performed during the Year.*

Abdominal section :

Cystic adenoma of ovary	9
Malignant papillomatous cyst of ovary	1
Suppurating cyst of ovary	1
Suppurating tubo-ovarian cyst	3
Cyst of broad ligament	2
Intra-peritoneal hæmatocele	1
Purulent salpingitis	4
Hæmato-salpinx with hæmatocele	2
Pelvic abscess	2
Removal of tubes and ovaries for uterine fibroids	1
Exploratory incision—	
Chronic peritonitis	1
Cancer of peritoneum	1
Retro-peritoneal tumour	1
Serous peritonitis	1
Intestinal obstruction (3 months after ovariectomy)	1 = 5
	— 31
Vaginal hysterectomy for cancer of cervix	2
Polypus uteri (fibroid)	2
Enucleation of fibroid of cervix uteri	1
Removal of cervix uteri (supra-vaginal) for hypertrophic elongation	1
" " " (infra-vaginal) for cancer	1
Vesico-vaginal fistula	1
Vesico-ute-ro-vaginal fistula	1
Transverse septum of vagina	1
Lacerated perinæum	5
Total	46

TABLE IV.—*Causes of Death in Fatal Cases.*

Cancer of body of uterus (moribund on admission)	1
Cancer of neck of uterus " "	1
Tuberculosis: pelvic abscess, with fæcal fistula	1
Intestinal paralysis after abdominal section (for ovarian cyst), followed the same day by vaginal hysterectomy (for cervical cancer)	1
Chronic peritonitis, with intestinal obstruction, 3 months after ovariectomy	1
Septicæmia, after abdominal section: (1) for suppurating tubo-ovarian cyst; (2) for chronic suppurative salpingitis, &c.	2
Exhaustion, after exploratory incision in case of cancer of peritoneum	1
Acute nephritis, following abdominal section for double encysted intra-peritoneal hæmatocele (simulating double ovarian disease)	1
	— 9

Abdominal Section, including Ovariectomy.

The cases of abdominal section have been tabulated in three series: No. I, Ovariectomy; No. II, Tubo-ovarian Cysts; and No. III embracing all the cases not included under Nos. I and II. The ovariectomies were thirteen in number. All the patients recovered from the operation, but three of them have died since: one, five months after operation, from cancer of the bowel; another, a year and a half after operation, from cancer of the body of the uterus; and the third, four months after operation, from intestinal obstruction due to chronic peritonitis (chiefly affecting the duodenum and parts around), the cause of which, notwithstanding a careful autopsy, still remains unknown. Detailed notes are appended of each of the fatal cases (1, 3, and 7), and also of three non-fatal cases (5, 8, and 10) that seemed to offer points of special interest.

The second of the special tables is devoted to three cases of suppurating tubo-ovarian cyst, all of which happened to be under treatment at the same time. Having certain main features in common, they appeared to me to deserve a table to themselves. Full notes are added of each of these very interesting cases.

The third table is necessarily a collection of operations undertaken for very various conditions, in some of the cases the operation being simply exploratory. The three cases of intra-peritoneal hæmatocele form such an extremely interesting group, and have such an important bearing on the question, recently much debated, of the diagnosis and relative frequency of extra- and intra-peritoneal effusions of blood in the pelvis, that it has been thought worth while to describe them in detail. Particulars of the cases of tubal disease are reserved for a future report.

With regard to the method of operating, it differed but slightly from that adopted in the previous year. The anti-septic precautions were the same, except that the use of the carbolic acid spray was altogether discarded. Drainage was employed in most of the cases, and flushing of the peritoneum was adopted wherever it seemed desirable. The wound was no longer dusted with iodoform, and no ill effects were observed as a result of this omission. I have latterly adopted the plan

of leaving the ends of the silkworm gut sutures sufficiently long to allow of their being tied together in a knot, thus preventing them from lying in the wound (which, when cut short, they were very apt to do), and much facilitating their removal. The patients, except in very special cases, are now placed at once in the general ward, their beds being simply surrounded with screens for the first day or two. The moral effect upon the patients of the general disuse of the isolation ward has been excellent. Teaspoonfuls of hot water have been substituted for ice during the first twenty-four hours. It is necessary, however, to insist that the water be really hot and not merely warm, otherwise the sickness resulting from the anæsthesia is liable to be increased instead of being allayed.

SPECIAL TABLE I.—*Ovariectomy.*

No.	Name.	Residence.	Age.	Civil condition.	Date of operation.	Nature, &c., of tumour.	Adhesions.	Condition and treatment of other ovary.	Glass drainage tube.	Result of operation.	Remarks.
1	A. W.	Norwood	23	S.	1888 Dec. 10	Large cyst left ovary, filled with clots of fibrin (uncoloured) and blood-stained serum; many daughter-cysts, some containing papillomatous masses	Extensive; parietal	Size of hen's egg; contents soft, pulpy, granular-looking material; removed	None	R.	During operation narrow constricting band noticed around sigmoid flexure. After operation complete obstruction. Dec. 19th, inguinal colotomy. Death occurred from cancer of bowel, &c., in May, 1889, 5 months after operation. See Abstract.
2	F. S.	Camberwell	22	M.	1889 Jan. 14	Cystic adenoma, left ovary; 32 fluid oz. dark brown fluid removed; outer end of tube expanded into cyst filled with altered blood; main body of ovary unaltered	Bands: intestinal, omental, and parietal	Size of walnut; not removed	18 hours	R.	Had been tapped Oct., 1888. Highest temp. after operation 100·8°; from third day under 100°.
3	H. C.	Sevenoaks	58	M.	Jan. 31	Cystic disease right ovary; no true pedicle; ascites, 5 pints	Numerous and firm; parietal	Not seen	18 hours	R.	Highest temp. 101·4°; usually below 100°. Death 18 months afterwards from cancer of body of uterus. See Abstract.
4	A. H.	Thorpe Green, near Chertsey	63	M.	March 7	Cystic adenoma of left ovary; weight (with fluid) 36 lbs.	Omental, parietal	Cystic, containing 13 fluid oz. serum; removed	44 hours	R.	Temp. midnight, day of operation, 100·4°; at 8 a.m. next day 99°; afterwards normal. Went out well in 3 weeks.

No.	Name.	Residence.	Age.	Civil condition.	Date of operation.	Nature, &c., of tumour.	Adhesions.	Condition and treatment of other ovary.	Glass drainage tube.	Result of operation.	Remarks.
5	S. A. W.	Worfield, near Bridgnorth	22	S. (1. para)	March 21	Small suppurating cyst of left ovary, $3\frac{1}{2}$ in. $\times$ $2\frac{1}{2}$ in. $\times$ $2\frac{1}{4}$ in.	Pelvic wall	Twice natural size, universally adherent, contained several blood-cysts; removed	18 hours	R.	Temp. never above 100° ; after 5th day normal. See Abstract.
6	J. R.	Stroud	31	M.	April 4	Small cystic adenoma of right ovary, 5 in. $\times$ $4\frac{1}{2}$ in. $\times$ $3\frac{1}{2}$ in. Patches of papilloma on inner surface	Omental	One small cyst punctured and emptied; not removed	None	R.	Pleuro-pneumonia during convalescence, followed by thrombosis of left femoral vein. Went out well May 6th.
7	E. L.	Fulham Road	45	M.	May 2	Small cystic adenoma left ovary, $4\frac{1}{2}$ in. $\times$ $3\frac{1}{2}$ in.	None	Normal	None	R.	Suppuration in suture tracks. Patient readmitted Aug. for intestinal obstruction, due to peritonitis, and died Aug. 30, 4 months after operation. See Abstract.
8	M. M.	Aberdare	22	M.	June 13	Cystic adenoma right ovary developed in broad ligament; contents, 16 fluid oz. brown fluid; old firm blood-clot 1 in. $\times$ $1\frac{1}{2}$ in. behind and to left of uterus	None	Normal, surrounded by adhesions	44 hours	R.	Hæmatoma of right broad ligament 2 weeks after operation, depressing right vag. fornix, and extending $3\frac{1}{2}$ in. above pubes. Temp. slightly raised for 10 days. See Abstract.
9	M. E. M.	Little-hampton	68	W.	July 25	Cystic adenoma left ovary; contents $7\frac{1}{2}$ pints dark viscid fluid; inner surface main cyst studded	None	Normal, atrophied	None	R.	Highest temp. 99.4° .

						with twisted pedicle; contents 1½ pints brown fluid	intestinal, omental, parietal		hours	Abstract.
11	M. J. P.	Battersea	22	S.	Oct. 10	Cyst of right broad ligament; contents 12 fluid oz. thick dark reddish-brown fluid; portion of cyst left in pedicle	—	Right ovary normal, left not seen; hydrosalpinx left, removed	24 hours	R. Protracted convalescence; abscess opened 14th day, lower angle of wound.
12	E. J.	Lambeth	57	M.	Oct. 17	Cystic adenoma left ovary, almost completely embedded in broad ligament, enucleated; pedicle represented by broad ligament	None	Normal, atrophied	None	R. Highest temp. 100°.
13	E. B.	Edmonton	23	M.	Dec. 5	Parovarian cyst right broad ligament, 3½ in. × 2½ in. Right ovary normal	—	Left ovary wrapped in and adherent to omentum; not enlarged, but reduced to a mere cyst-wall containing dark brown pultaceous material; inner surface papillomatous	None	R. Discharged well on 18th day.

CASE 1. *Large cystic tumour of left ovary, smaller tumour of right ovary; annular stricture of large intestine; obstruction of bowel; colotomy; relief for several months; death from extensive cancerous growth in pelvis, five months after operation* (from notes by E. A. Roberts).—A. W—, æt. 23, single, housemaid, admitted November 26th, 1888, transferred to Surgical wards March 9th, 1889. No serious illness previously. Mild attack of smallpox two years ago. Present illness began a fortnight before admission, with pain in abdomen and back, which increased in severity. Patient had not observed any swelling in the abdomen.

On admission, stout, broadly built, well nourished, short in stature. Abdominal wall loaded with fat. Lower part of abdomen prominent and hard. Marked dulness over an area extending from pubes upwards to $\frac{1}{2}$ inch above umbilicus in middle line, on left to iliac crest, and on right to a line 4 inches to the right of the middle line. Swelling elastic, but not fluctuating. Greatest girth of abdomen $37\frac{3}{8}$ inches (3 inches above pubes). Girth at umbilicus $35\frac{3}{8}$ inches. Distance, umbilicus to pubes, 7 inches, to ensiform cartilage 6 inches, to anterior superior spine of each ilium 8 inches. Uterus high up, slightly deflected to right, moveable; canal of normal length. Tumour does not encroach on vagina, can be felt on pressing up vault of vagina anteriorly.

December 3rd, 1888.—Pain very severe; vomiting has occurred after every meal for past three days.

5th.—Looks very ill. Abdomen extremely tender. Tongue dry and furred. Repeated enemata have had little or no result.

Abdominal section, 10th.—Abdominal wall very thick. A layer, that appeared to be peritoneum, having been divided, another layer of similar appearance came into view, dark, flaccid, and extremely thin. On dividing this carefully and enlarging the opening, finger passed into a cavity, thought at first to be the general peritoneal cavity. It was very extensive, and turned out to be a cyst of large size, adherent to the anterior abdominal wall in patches, intimately adherent to the posterior parietal peritoneum, and extending high up beneath the ribs. The contents consisted of masses of fibrinous lymph, with softer masses in colour and consistence like brain-tissue,

and a considerable quantity of blood-stained serum, in which flakes of lymph floated. There were numerous daughter-cysts, some of which contained masses of papilloma. The abdominal incision having been enlarged to 6 inches, the cyst was separated from its adhesions, and was then found to have a good pedicle, 2 inches in breadth, and to have developed in the left ovary. The pedicle was tied and divided, and the cyst removed, along with the enlarged and congested Fallopian tube. Pouch of Douglas obliterated by adhesions. Right ovary, size of hen's egg, consisted of an outer shell, filled with a soft, pulpy, granular-looking material, the cut surface of which projected but did not exude. The ovary and adjacent tube, which was thickened and hyperæmic, were removed. A tumour was now felt deeply in left iliac fossa. This was brought into view, and found to be a hard band, constricting the large intestine in its entire circumference, and deeply grooved on its outer aspect all round. Peritoneal covering of bowel above and below band normal. A hard mass could be felt inside the bowel, above the stricture, which might be fæces or growth. The strictured bowel was replaced without further interference. Peritoneal cavity was douched, and abdominal wound closed. No drainage. Duration of operation (which was performed during a dense fog, by the light of a hand-lamp) two hours and ten minutes.

Patient was fairly well next day.

On the 12th she complained of flatulence, and began to vomit. No action of the bowels having taken place, and no flatus having passed, notwithstanding the administration of ten grams of calomel followed by oil enemata, several pints of soap and water were injected through the long tube on the 18th, but without result. There was considerable distension, and though the pulse was good, the patient's features were sunken, and there was persistent vomiting.

On December 19th Mr. Robinson, the res. assistant surgeon, performed left inguinal colotomy. After this the patient improved, and, except for the inconvenience of the artificial anus, remained for many weeks in fairly good condition.

On March 9th, 1889, she was transferred to the surgical wards, where she died, in the month of May, from cancer, originating apparently in the sigmoid flexure of the colon.

The ligatured pedicle was found in the centre of an abscess, surrounded by a large mass of cancerous growth. There was secondary deposit in the liver.

CASE 3. *Large cystic adenoma of right ovary, with broad attachment to uterus, and ascites; tapped before admission; abdominal section; albuminuria during convalescence; recovery; death eighteen months afterwards from carcinoma of body of uterus* (from notes by W. H. L. Copeland).—H. C—, æt. 58, married, admitted January 28th, 1889, discharged March 6th, 1889. Catamenia commenced at 11, ceased at 50. Married at 38, sterile.

A small swelling in right side of abdomen was noticed in July, 1888, and at same time there appeared a vaginal discharge of bright blood, which continued daily until a month ago. The hæmorrhage was usually slight in amount, but sometimes was sufficient to soil two or three napkins in a day. The swelling increased in size. For the last three weeks the legs have been swollen from the knees downwards. The breathing, which had been affected from the first, became so much embarrassed that the doctor considered it advisable to tap her, and did so on January 23rd, five pints of thick, dirty-brown fluid being removed. This operation gave immediate relief, but the swelling did not appear much smaller. The patient had done the work of the house up to this time.

On admission the whole abdomen is enlarged, with marked bulging in right hypochondrium, left flank, and epigastrium. Girth at umbilicus 37 inches; distance from umbilicus to pubes $8\frac{1}{2}$ inches, from umbilicus to ensiform cartilage $7\frac{3}{4}$ inches, from umbilicus to anterior superior spine, right ilium, $8\frac{3}{4}$ inches, from umbilicus to anterior superior spine, left ilium, $9\frac{3}{4}$ inches. On left side there is distinct evidence of the presence of fluid. From side to side of the tumour the thrill is less clear. The tumour is much more tense on right side than on left; it varies in consistence in different parts. Front of abdomen dull on percussion from pubes upwards to $2\frac{1}{2}$ inches above level of umbilicus, and to a line 2 inches below costal margin on each side; above this the dullness becomes less marked. The note over the prominent epigastrium is tympanitic, and there is a finger's breadth of reso-

ance below the ribs on each side. The dulness extends $6\frac{1}{2}$ inches to left of umbilicus, and $7\frac{1}{2}$ inches to right. The left flank is dull as patient lies on the back, but becomes resonant when she lies on right side. Heart's impulse feeble, felt most distinctly half an inch above and internal to the nipple. Œdema of lower part of trunk, and of both legs from knees downwards.

Vagina elongated, posterior formix reached with difficulty. Tumour felt distinctly as a hard, unyielding mass, through anterior vaginal wall. Cervix small, high up behind tumour. Sound passes $2\frac{1}{2}$ inches, a little to left and behind the tumour. Fundus can be felt *per rectum*. Uterus moveable to a certain extent independently of tumour. Bladder depressed, fundus cup-shaped, bladder-sound passing some distance both before and behind lower segment of tumour; in front it passes an inch above top of pubes.

Temperature normal in morning, 99° to 99.6° in the evening. Pulse 84; arteries rigid. Urine, sp. gr. 1022, dark, clear, containing a faint trace of albumen.

Abdominal section (January 31st).—Five pints of straw-coloured ascitic fluid. Tumour white and glistening. Firm adhesions along upper and right anterior surfaces. No true pedicle. Broad attachment to right cornu of uterus. Uterus enlarged, and studded with small solid tumours from size of a pea to that of a walnut. Adhesions separated; incision enlarged. Aperture made by trocar previous to patient's admission patent, thick gelatinous material exuding from it. The connection between tumour and uterus being so broad, two guarded pins were passed through neck of tumour, and a strong *écraseur* wire below them, tightened by *serre-nœud*. The tumour was then cut away a little distance above the pins. As it was found to present the usual appearances of a cystic adenoma of the ovary, the neck of the tumour was transfixed by a needle armed with a double ligature, and further secured by a stout encircling ligature, pins and wire being then removed. A portion of the growth was thus left adherent to the uterus, and made to serve the purpose of a pedicle. The stump was trimmed, a loop of normal Fallopian tube being cut away in the process. No bleeding; ligatures cut short; peritoneal cavity douched and sponged. Douglas's

pouch being obliterated by adhesions, a drainage-tube $4\frac{1}{2}$ inches long was passed to the most dependent part at the left of the uterus. The omentum was drawn down, and the abdominal wound closed by silkworm gut sutures.

Operation lasted two hours, and was well borne.

Tumour, after removal of a pint and a half of gelatinous material, weighed 5 lbs.; it consisted of an immense number of small cysts, containing thick jelly-like material.

Vomited once same evening; not afterwards. Tube removed next day and stitch tied. Morphia administered subcutaneously on account of pain at 8 p.m., January 31st; 5.45 a.m., February 1st; 9.30 p.m., February 1st; and 1.15 a.m., February 3rd. Temperature at 5 p.m. on January 31st 97° , at 8 p.m. 98.6° , at midnight 99.2° . For next twelve hours it varied from 98.6° to 99° . From 4 p.m. on February 1st to 4 a.m. on the 3rd the minimum temperature was 100° , the maximum 101° , after which it did not again reach 100° until February 7th. On that day the patient was restless, complaining of pain in right thigh, and the urine was found to contain one fifth of albumen. The temperature rose to 100° , and varied between 99.6° and 101.4° up to February 10th, after which it was normal. The amount of albumen gradually diminished, until on the 11th there was only one fifteenth. Most of the stitches were removed on the 8th, the remainder on the 11th. On the 14th the patient was allowed to sit up, and on March 6th went home well.

Sequel.—On July 26th, 1890, a letter was received from Mr. J. E. Blomfield, of Sevenoaks, from which the following is an extract:—"I saw Mrs. C—in July, 1889. She was complaining of pain down the front of the right leg, and other more vague symptoms. There was some suspicion of a lump above Poupart's ligament on the right; the urine contained blood and casts, which subsided after a time, leaving some albumen. In August the uterus was enlarged to the size usual just after labour, and there was an irregular hard mass in right iliac region. In July, 1890, she died, mass having reached to umbilicus; she had suffered from attacks of diarrhoea, with blood and foul-smelling matter, and had become greatly emaciated. Abdomen opened after death; ovoid lump in lower abdomen springing from pelvis. When cut into, mus-

cular tissue $\frac{1}{4}$ inch, and then hard carcinomatous mass with puriform fluid. Os uteri healthy as examined by finger. Carcinoma of body of uterus."

CASE 5. *Small suppurating cyst of left ovary; chronic inflammation of both Fallopian tubes, pelvic peritonitis; symptoms extending over five years; abdominal section; removal of both ovaries and both tubes; uninterrupted recovery* (from notes by W. H. L. Copeland and L. Cobbett).—S. A. W—, æt. 22, single, residing near Bridgnorth, admitted February 7th, 1889; discharged April 25th, 1889.

Menstruation commenced at twelve; was delivered of a full-term child at the age of fourteen years ten months; labour natural, followed by some hæmorrhage. No subsequent pregnancy. Two years after birth of child began to suffer from pain and swelling in the right iliac region, and a yellow discharge from vagina, for which she was treated at Bridgnorth Infirmary with internal caustic applications. She was discharged better, but has never been quite well since. Two years later she had a recurrence of the symptoms, and again underwent a course of treatment in the same hospital. Five months ago caught cold during a menstrual period; an attack of shivering took place, and the menses ceased for a few days. In two months from this time she was admitted into the Bridgnorth Infirmary for the third time, and after six weeks was transferred to St. Thomas's.

On admission patient pale and depressed, not emaciated. She complains of pain in back and in right iliac region. Menstruation is scanty; the discharge pale in colour. Urine loaded with lithates; no albumen. Temperature normal, though it had been high up to the day of admission. *Per vaginam*: Uterus normal in length, fixed, and strongly flexed to the right. Extending from cervix to left pelvic wall is felt a thick, smooth, hard, elastic, and slightly moveable mass, the outer extremity of which is three quarters of an inch internal to the anterior superior spine of the left ilium, and on a level with it. Anterior surface of swelling less even and more sensitive than posterior.

On March 19th, the swelling being no less, and patient, though less anæmic, being still unable to move about, it was

decided to make an exploratory incision, operation having been hitherto deferred on account of the temperature having undergone a change for the better from the day of admission. It has only twice (on February 11th and March 1st) exceeded the normal.

Abdominal section, March 21st, 1889, 2 p.m.—An incision, 4 inches long, in median line. Cystic tumour to left of uterus adherent posteriorly. On being separated and brought into view it was seen to be a small ovarian cyst $3\frac{1}{2}$ inches long by $2\frac{1}{4}$ inches wide, with the Fallopian tube thickened and dilated adherent to it over its posterior surface. Cyst and tube were removed together after transfixion and ligature of the pedicle. Right tube dilated, its walls œdematous, its fimbriated extremity adherent to the floor of Douglas's pouch. Right ovary double the usual size, and almost universally adherent. Adhesions having been separated, ovary and tube removed in the same manner as those on the left side. Peritoneum cleansed by sponges. A 5-inch glass drainage-tube inserted. Omentum drawn down; abdominal wound closed by silk-worm gut sutures. Operation, sixty-five minutes. The ovarian cyst was filled with thin flocculent pus; in its wall were small cysts containing clear viscid fluid.

The dressings were changed on the evening of the day of operation and at ten the following morning. On each occasion the pads were stained with blood-stained serum, and $2\frac{1}{2}$ fl. dr. of similar fluid were withdrawn by pipette. At the second dressing the tube was removed and the loose stitch tied. No sickness since operation; no distension; temp. normal. On March 23rd flatus and urine were passed voluntarily. The bowels were relieved by enema on the 26th. The stitches were removed on the 29th. The temperature never exceeded 100° , and after the 24th was uniformly normal. The patient's convalescence was uninterrupted, and she went to a convalescent home on April 25th.

CASE 7. *Small cystic adenoma of left ovary; ovariectomy; suppuration about suture tracks; recovery; persistent abdominal pain afterwards; symptoms of intestinal obstruction three months after operation; abdomen reopened; no cause of obstruction discovered; death; autopsy; old peritonitis affecting small intestine* (from notes by S. G. Toller and C. J. Martin, B.Sc.).

—E. L—, æt. 45, married, lady's-maid, resident in Brompton, admitted April 29th, 1889; discharged June 5th; readmitted August 27th; died August 30th.

Had one child twenty-one years ago. Menstruation regular; never too frequent or profuse. Abdominal swelling first noticed ten years ago; not seen by a doctor until two years ago. In good health, but occasionally has pain after walking and during any exertion in the left leg, in the tumour itself, and more rarely in the right leg.

An oblong, smooth, firm, elastic, perfectly moveable tumour, 4 × 3 inches, perceptible, not on inspection but on palpation, in lower part of abdomen, immediately above pubes and to right of middle line. It is doubtful whether the tumour is solid or a tense cyst. It can be moved bodily over to left side, and even pushed up into the left flank, so that it can be grasped between the hands as it projects from the side. It is slightly tender. The uterus lies behind the tumour; canal of normal length; fundus inclined towards left. Movement of tumour influences uterus very slightly.

Abdominal section, May 2nd, 1889, 2 p.m.—Small, multilocular, cystic adenoma of left ovary, $4\frac{1}{2} \times 3\frac{1}{2}$ inches; no adhesions; removed entire, with outer portion of corresponding tube, the incision being enlarged to $5\frac{1}{2}$ inches. During the operation the intestines protruded a good deal. The opposite ovary was healthy. No drainage.

May 5th.—Temperature normal; has not exceeded 99.4° since the operation. In the evening some distension and rise of temperature (101°).

6th.—No flatus passed since yesterday. Rectal tube used, with the result that some flatus passed. There being still some distension, an enema was given, but without effect. A second was given by means of the long tube, with good result. Still the abdomen remained distended, and at 11.30 p.m. the temperature rose to 103.6° , pulse 106, respirations 34. The patient meantime had no pain, and neither looked nor felt ill. Next morning the temperature was 100° , pulse 98; abdomen less distended; flatus passed voluntarily. In the afternoon the bowels acted involuntarily and copiously without medicine or enema. On the 8th the temperature was normal. The stitches were removed on the 10th; the tracks of all the

sutures were inflamed and suppurating, this being the first case for many months in which this has occurred. On the 11th, there being redness and œdema along the whole wound, free incisions were made on each side, giving vent to a quantity of thick pus. Temperature from May 12th normal.

June 3rd.—Another little accumulation of pus beneath granulations in wound.

5th.—Left the hospital. *Per. vag.* No exudation in pelvis, uterus adherent by fundus to abdominal wall.

For a week or two after going out patient had occasional pains in the abdomen. At the beginning of August she called at St. Thomas's to report herself; she then had some discomfort in the umbilical region, but this passed off. The bowels acted regularly until Thursday, August 22nd, when she was taken seriously ill, and sent for Dr. Ridley Webster. She was suffering from symptoms of intestinal obstruction with pain and vomiting. In the afternoon of the 23rd, an hour after taking a dose of castor oil, and again in the evening after the first enema, the vomiting was fæcal. Repeated enemata were given without effect until the evening of the 26th, when the bowels acted. During the night the pain and vomiting returned, and on the 27th she was readmitted to the hospital. There was no tumour or distension. During the night and on the 28th, she vomited, several times, about a pint of dark green sour-smelling liquid. The vomiting not ceasing, and there being no action of the bowels after an olive-oil enema, and $\frac{1}{2}$ gr. ext. belladonna every four hours, it was decided to reopen the abdomen. This was done under ether at 10 a.m. on the 29th. The stump of the pedicle was found adherent to the sigmoid flexure, and to the fundus and left cornu of the uterus. These adhesions were separated, and the ligature silk, which had secured the pedicle, came away while this was being done. The raw surface left on the fundus uteri was sewn up by means of six fine silk sutures. No part of the intestine was distended, and no cause for the obstruction was discovered. There were some adhesions between the intestine and the parietal peritoneum in the neighbourhood of the abdominal incision, but these were unimportant. The peritoneal cavity was cleansed with sponges, a drainage-tube

inserted, and the abdomen closed. The pulse and temperature after operation were as follows :

				Temp.		Pulse.
Aug. 29	...	2 p.m.	...	97°	...	120
		4 p.m.	...	97	...	120
		8 p.m.	...	98·8	...	140
		Midnight	...	98·2	...	148
30	...	5 a.m.	...	101	...	158
		8 a.m.	...	103	...	—
		Noon	...	104·4	...	176
		4 p.m.	...	103	...	—
		8 p.m.	...	104·4	...	—

The patient quickly sank on the 30th, and died at 8.15 p.m.

Autopsy, August 31st.—On opening abdomen, omentum was found congested and adherent to its anterior wall, especially near the incision. Very little fluid in abdominal cavity. The small intestines were greatly distended, especially the duodenum, which nearly equalled in size the healthy large intestine. The large intestines were collapsed. The small intestine, especially at a point three or four feet above the cæcum, showed signs of old peritonitis, being intensely congested at the attachment of its mesentery, and constricted in parts. No band was found causing the constriction, but the coils were adherent to each other and acutely flexed upon themselves in three or four places. Above this point the distended intestine was congested in patches, and had lost its polish. No perforation. The affected intestinal coils lay to the right of the abdomen, which accounts for their not having been seen during the operation. The sigmoid flexure was adherent to the abdominal wall by older adhesions, which were tough and yellow. The uterus was adherent to the abdominal wall at a point opposite to the left femoral ring. The surfaces of uterus and sigmoid flexure, separated at the operation, had taken up these points of attachment.

Liver and spleen normal. Kidneys congested, otherwise normal.

Lungs showed hypostatic congestion, and were emphysematous.

Heart normal.

Bladder contained a small amount of yellow fluid, apparently pus.

CASE 8. *Cyst of right ovary developed in broad ligament; hæmatocele in left posterior quarter of pelvis; abdominal section; removal of cyst and blood-clot; formation of hæmatoma of right broad ligament on 14th day; recovery* (from notes by A. W. Musson).—M. M—, æt. 22, married, residing at Aberdare, admitted June 3rd, discharged July 13th, 1889. Menstruation regular up to marriage, three years ago. No children, three miscarriages. Last miscarriage nine months ago, at tenth week of pregnancy. Catheter required for a week. Some days later had an attack of shivering, with severe pain in hypogastric and right iliac regions, and followed by sickness and constipation. A swelling was then found in the right iliac region. It was thought to be a pelvic abscess, and was punctured with a hypodermic syringe, a small quantity of thick, glairy fluid being withdrawn. Patient was confined to bed for three months. After that was able to move about, but frequently suffered from severe abdominal pain. Menstruation occurred regularly.

On admission, a spare, healthy-looking woman. Temperature normal, pulse 70; urine clear, acid, sp. gr. 1020, no albumen or sugar. Slight fulness in right iliac region. Feeling of resistance above symphysis pubis, extending 3 inches beyond the middle line; dulness on percussion over a central area 2 inches in diameter. Bimanually a rounded, very elastic tumour in front and to right of uterus, not moveable to any considerable extent independently of uterus, but not absolutely springing from or attached to it. Behind and to left of uterus a smaller tumour, elastic, oval in shape. The larger tumour presented evidence of fluctuation, the smaller did not. Uterus normal in length, its mobility impaired.

Abdominal section, June 13th, 2 p.m.—Tumour exposed, had not the ordinary silvery white appearance of an ovarian cyst. It proved to be a cyst of the right ovary, developed in the broad ligament, the walls of which were greatly thickened. The greater part of the ovary was unaffected by disease. The tumour was without pedicle. Sixteen fluid ounces of dark brown fluid were withdrawn by tapping, and the broad ligament was then transfixed and tied as low down as possible; a small portion of the cyst was unavoidably included in the pedicle. The ovary and a portion of the round ligament were removed

with the cyst. The cyst was single, and beneath its lining membrane was a thin layer of extravasated blood. The smaller tumour, on the left side, was enucleated, and proved to be an old and firm clot, of deep brownish-red colour, surrounded with a coating of clot, lighter in colour, to which shreds of membrane adhered. The clot was egg-shaped, $1\frac{1}{2}$ inches long, 1 inch broad. The cavity in which it lay was bounded in front by the uterus; its other walls were formed by adhesions. Through an opening in its floor the finger passed downwards into Douglas's pouch, whence there welled up a quantity of blood-stained serum. The tubes and left ovary were not removed, and the adhesions were not further interfered with. A glass drainage-tube was inserted, and the abdominal wound was closed.

For the first twelve days convalescence proceeded normally, the highest temperature recorded being $100\cdot8^{\circ}$.

On June 26th there was pain in the right groin, and the patient looked ill and lost her appetite. On the 29th a large mass was felt, occupying the right side of the pelvis, and causing some bulging into the vagina, the right fornix being obliterated and the cervix pushed over to the left. The mass reached to a line $3\frac{1}{2}$ inches above the ramus of the right os pubis, and $3\frac{1}{4}$ inches to the right of and below the umbilicus. There was now no pain or tenderness. On July 13th the patient went home against advice. The swelling had become much softer and smaller.

				Temp.					Temp.
June 26	...	p.m.	...	$99\cdot4^{\circ}$	July 1	...	a.m.	...	99°
27	...	a.m.	...	$99\cdot4$			p.m.	...	$100\cdot6$
		p.m.	...	$100\cdot2$	2	...	a.m.	...	$98\cdot8$
28	...	p.m.	...	$101\cdot8$			p.m.	...	$99\cdot8$
29	...	a.m.	...	$100\cdot6$	3	...	a.m.	...	$99\cdot2$
		p.m.	...	$100\cdot8$			p.m.	...	$99\cdot4$
30	...	a.m.	...	$99\cdot4$	4	...	a.m.	...	$100\cdot4$
		p.m.	...	$99\cdot2$			p.m.	...	$100\cdot2$
					5 to 12			...	Normal.

CASE 10. *Cystic tumour of right ovary, with twisted pedicle, resulting in inflammation of the cyst-wall and surrounding parts, and extravasations of blood in the pedicle; abdominal section; removal of tumour; recovery* (from notes by C. J.

Martin, B.Sc.).—E. B—, æt. 35, residing at Peckham, admitted July 29th, discharged August 24th, 1889.

Married, eight children, last one twelve months ago. No unusual swelling noticed during last pregnancy, but after confinement remained large. Knew nothing of a tumour until examined in the out-patient room. Nine months ago had an attack of acute pain in left iliac region, spreading over lower part of abdomen; in bed three or four days; then remained well for five months. Seven weeks ago had another attack of severe pain in lower part of abdomen during an intermenstrual period, lasting four days. Since then has felt ill and unable to move about.

On admission, some bulging in the lower part of the abdomen, chiefly on left side. Swollen part soft, not tender. No œdema or enlarged veins. Dulness extending from pubes to $\frac{3}{4}$ inch below umbilicus; laterally, 3 inches to right, 5 inches to left of middle line. Resonance above outer half of Poupart's ligament on right, none on left. On palpation, an elastic, fluctuating, moveable tumour extending a little beyond the area of dulness in all directions. Uterus normal in size, body displaced to right; cervix pushed downwards and forwards.

Abdominal section, August 1st, 2 p.m.—Omentum doubled upon itself, lying in front of tumour, adherent by its whole posterior aspect to the anterior part of tumour, which it completely concealed from view. Above and below incision, omentum adherent to abdominal wall. The very firm omental adhesions having been separated and the tumour partially exposed, further and universal adhesions were found to exist over the entire surface. Several coils of intestine had to be slowly and carefully separated, besides adhesions to vermiform appendix and posterior pelvic wall. The tumour was a thin-walled, dark-coloured, single cyst of the right ovary, containing a pint and a half of brown fluid, which was evacuated by the trocar after some of the more important adhesions had been separated. The pedicle was tightly twisted on its axis, the tube and a portion of the broad ligament being twisted with the pedicle and closely adherent to it. The tube was slightly thickened and dilated, and contained a little blood-clot; its fimbriated extremity was closed, and the fimbriæ inverted. The twisted portion of broad ligament showed a

constriction, above and below which a considerable quantity of blood had become extravasated into its tissues, forming two tumours, with the larger of which some ovarian tissue was mixed up. The pedicle, when divested of its surroundings and straightened, was a mere stalk. The uterus, left ovary, and left tube were normal. A good many bands of adhesions could be felt passing from the posterior wall of the cervix to the posterior wall of the pelvis in Douglas's pouch. Several vessels required ligature during the operation, especially in the omentum. The operation lasted an hour.

Convalescence was uninterrupted, the temperature being normal for the first three days and on and after the sixth. At no time did it reach higher than 99.8° .

SPECIAL TABLE II.—Abdominal Section for Removal of Suppurating Tubo-ovarian Cysts.

No.	Name.	Residence.	Civil sta- tion.	Date of operation.	Nature, &c., of tumour.	Adhesions.	Condition and treatment of other ovary, &c.	Glass drainage tube.	Result of operation.	Remarks.
1	A. C.	Edmouton	40 M.	1889 Nov. 18	Right tube much elongated and enlarged, with thickened walls, communicating with ovarian cyst by opening large enough to admit finger; contents suppurating	Universal; pelvic	Cystic, size of orange; inner surface papillomatous; removed	44 hours	R.	Broncho-pneumonia (septic?) at time of operation, and general condition highly unsatisfactory. Temp. two days before 104.8°; evening of day of operation 101.6°; afterwards never exceeded 99.6°.
2	C. D.	Norwood	29 M.	Nov. 25	Right tube much thickened and lengthened, communicating with cyst of ovary by opening $\frac{1}{2}$ in. in diameter; contents suppurating. Left tube in a state of suppurative inflammation also	Universal; pelvic	Not seen	50 hours	D.	Septicæmic when operated upon; temp. 102.6°; very ill. Died from peritonitis 5.30 a.m., Nov. 29th, having had artificial anus made previous day for intestinal obstruction.
3	R. H.	Wands- worth	54 M.	Dec. 5	Right tube irregularly distended, communicating with cyst of ovary by an aperture large enough to admit a goose-quill. Portion of tube removed = 6 $\frac{1}{2}$ in.; contents suppurating, fetid	Universal; dense; pelvic	Cystic, 1 $\frac{1}{4}$ in. $\times$ $\frac{3}{4}$ in., removed to check growth of bleeding fibroid	26 hours	R.	Temp. before operation normal in morning; 99.8° to 100.4° in evening. Patient weak and blanched; admitted for hæmorrhage; attack of acute endocarditis during convalescence.

CASE 1. *Suppurating tubo-ovarian cyst of right side; tube greatly enlarged and thickened; thick-walled cyst of hilum of left ovary with patch of proliferating vegetations on inner surface; removal by abdominal section while patient in a condition of acute septicæmia; recovery* (from the notes of W. R. Carter). —A. C—, æt. 40, married, residing at Edmonton, admitted November 8th, 1889, on the recommendation of Dr. Green.

The catamenia commenced at sixteen, periods lasting seven days; pain during the two days preceding the flow, and the first three days after it appeared. For the past five years periods have only lasted three days. Has had no children and no miscarriages. Had typhoid fever eight years ago. Has been for many years subject to a winter cough.

Before the last five weeks had not noticed any swelling of the abdomen. At that period was seized with stabbing pain in the lower part of the abdomen. Three weeks later Dr. Green was called in, and found her suffering from general bronchitis, pains of a rheumatic character, abdominal pain, and vomiting. Her temperature was then 102° . The abdomen was too tender for careful examination, but there was an ill-defined tumour in the lower part of the abdomen, and a mass could be felt *per vaginam*, tender and elastic. During the examination the patient volunteered the statement that it gave rise to a pain such as had, for some months, been caused by each act of sexual intercourse.

On admission patient looked extremely ill. Her breathing was difficult, and she complained of pain and tightness across the abdomen. The lower part of the abdomen was enlarged, and was found to be occupied by an ill-defined, soft, elastic tumour. There was dulness on percussion over an area extending $5\frac{1}{2}$ inches upwards from the pubes, *i. e.* to a line 2 inches below the umbilicus. The dull area measured 7 inches in its greatest breadth (3 inches above pubes), *i. e.* 3 inches to right and 4 inches to left of middle line. For a distance of 2 inches above and to each side of this area of absolute dulness the dulness gradually shaded off. The uterus was pushed forwards and to the left, the fundus lying to left of middle line, $2\frac{1}{2}$ inches above Poupart's ligament. Bimanually, the abdominal tumour could be felt extending from right lateral wall of pelvis nearly across to left. Uterus fixed, but

capable of slight independent movement between the two hands. Size normal. Tumour in its vaginal aspect smooth, uniform, elastic, and tense.

There were patches of pneumonia at both bases, with general bronchitis. Tongue thickly coated.

November 12th.—Occasional vomiting; much pain in right side of abdomen and down right leg.

15th.—Upper margin of swelling can be felt at level of umbilicus.

16th.—Tumour aspirated; 18 fl. oz. of foetid pus withdrawn.

Temp.			Temp.		
Nov. 8	...	100·2° to 102·2°	Nov. 13	...	100° to 101·8°
9	...	100·4 „ 102	14	...	100·6 „ 102
10	...	100·4 „ 101·4	15	...	101·4 „ 103
11	...	101 „ 102·6	16	...	101·2 „ 104·8
12	...	100·8 „ 102·6	17	...	99·8 „ 102·2

Pulse 90 to 120; usually 100 to 112. Respirations 36 to 48.

18th. *Abdominal section.*—Tumour not adherent to anterior abdominal wall; adherent to omentum, intestine, and pelvic wall; not widely to uterus, and not at all to appendages of left side. The greatly thickened and elongated right tube wound round the tumour, which was thick-walled and vascular. A puncture was made with a small trocar, and 26 fl. oz. of foetid pus withdrawn. The opening having been clamped, an endeavour was made to ascertain the relations of the tumour. It was found to pass from right side of uterus and to be doubled backwards upon itself, the main mass being behind the uterus, bound down to pelvic wall below and behind by old and very firm adhesions. The work of separation was difficult and prolonged, and several encysted intra-peritoneal collections of pus were opened during the process. A ligature was placed around the tube and adjacent portion of broad ligament as near the uterus as possible. The omental adhesions were tied before separation. The tube, 7 inches in length and $\frac{3}{8}$ to $\frac{7}{8}$ inch in width, was then removed along with the cyst. The inner surface of the cyst was ulcerated, and the tube communicated directly with its interior by a smooth aperture, $\frac{1}{2}$ inch wide. The cyst had developed from the right ovary.

A round thick-walled cyst was discovered on the left side,

and removed along with a loop of the left tube. It proved to be a cyst 3 inches in diameter developed in the hilum of the left ovary; on its inner surface was a patch of proliferating vegetations.

The peritoneal cavity was douched with hot boracic solution, and a drainage-tube inserted. The abdominal wound was then closed. The operation lasted two hours.

In the evening the cough and breathing were very troublesome; face pale, lips livid, pulse weak. A morphia injection was administered, and two teaspoonfuls of brandy ordered to be given every hour.

19th.—General condition improved.

20th.—Passed a good night. Sick for first time at 4 a.m. and at 8 a.m. Otherwise better. Has been able to pass urine voluntarily, and has passed flatus. Very little discharge. Tube removed at 10 a.m.; stitch tied. 4 p.m., much collapsed; face livid; pulse feeble; thought to be sinking. Ether was injected subcutaneously, and, later, the chest was rubbed with Lin. Terebinth. Rallied in the evening, and passed a good night.

21st.—Slight distension of abdomen; a little serum on pad escaped from abdominal incision. 4.30 p.m., rectal tube passed, with result of passage of flatus.

22nd.—Sickness continues from time to time. 4 p.m., bowels acted for first time; motion relaxed, of healthy odour.

		Temp.		Pulse.		Resp.
Nov. 18	...	100.6° to 101.6°	...	145 to 164	...	60 to 64
19	...	98 „ 99.8	...	108 „ 128	...	36 „ 48
20	...	97.6 „ 98.4	...	118 „ 132	...	34 „ 48
21	...	97.4 „ 99.6	...	120 „ 146	...	30 „ 48
22	...	98.4 „ 99.8	...	120	...	30 „ 34

23rd.—Abdomen less distended; some œdema of right foot. Bowels relieved six times since yesterday afternoon. Temperature normal, pulse 112.

25th.—Diarrhœa continues; ordered enema of starch and opium.

27th.—No diarrhœa. Stitches removed. Patient still weak and prostrate, lying motionless on back, but interested in what is going on, and evidently better.

December 6th.—Allowed to be propped up in bed.

18th.—Allowed to be out of bed.

22nd.—Discharged well.

The next case ended fatally from peritonitis. The patient had been under my care for pelvic cellulitis twelve months previously. In the light of subsequent events I cannot but regret not having proposed an operation at that time, as there can be little doubt that the tubes were already in a state of chronic inflammation. The physical signs, however, due to the cellulitis obscured the diagnosis, while the marked improvement after a few weeks' rest confirmed me in my opinion that operative interference was not then called for.

CASE 2. *Suppurating tubo-ovarian cyst of right side; tube greatly enlarged; left tube inflamed and occluded; abdominal section; death from peritonitis; autopsy* (from notes by W. R. Carter).—C. D—, æt. 29, married, residing at Norwood, admitted November 23rd, 1889.

Had been in Adelaide Ward for six weeks during the year 1888, viz. from October 3rd to November 17th.

Catamenia commenced at nineteen; married at twenty-one; two children, one miscarriage. First child born eight years ago at seventh month; second born soon afterwards at sixth month, surviving its birth only for forty-eight hours. After the first labour, which was instrumental, there was incontinence of fæces from perinæal laceration. An operation performed at Guy's Hospital seven years ago for the repair of the laceration was followed by abscess, and proved unsuccessful. Since that time she had frequently suffered from pain in the lower part of the abdomen. Contracted syphilis from husband soon after marriage; suffered from sore throat and aphonia, and has since attended the eye department for a syphilitic affection of the eye. Since midsummer of 1889 has been separated from her husband on account of his misconduct.

Three *months* before her previous admission patient had begun to suffer from uterine hæmorrhage, and three *weeks* before had been seized with sharp pain in the back and left iliac region, accompanied with vomiting and diarrhœa. The note as to the physical signs in October, 1888, is as follows:—Perinæum represented by a narrow cicatricial band. Uterus low down, inclined to left and fixed. Hard swelling in left

fornix, which is bulged downwards. Swelling felt also high up behind, and to right of uterus less marked than on the left, and causing no depression of right fornix. Temperature on admission (October 3rd, 1888), 99.4° ; next two days, normal; October 6th, 99° ; 7th, 99.4° to 99.8° ; 8th, 99.4° to 100.4° ; 9th, 99.4° to 101° ; 10th, 100.6° ; 11th, 99.2° to 99.6° ; 12th, 98.4° to 99.2° .

On October 18th the condition had somewhat improved. A few days later a vaginal examination showed thickening in the situation of both broad ligaments, especially the left. The depression of the left fornix was lessened; there was still no depression of the right. The examination was followed during the next forty-eight hours by throbbing pain on the right side.

On November 5th the patient was so much better as to be allowed to be up, and on the 13th she left the hospital, expressing herself as feeling better than she had done for years.

Six weeks before her readmission she was seized one morning with pains of a shooting character down the right side of the stomach, which continued more or less for three weeks. About the end of that time, when a menstrual period had just closed, she one night took a hot bath before going to bed. In the night she was awaked by a drunken man banging at the street door and demanding admission. She went downstairs twice to remonstrate with him. A few hours later she awoke with shiverings; these were soon followed by profuse hæmorrhage and very acute pain down the right side of the abdomen. From this time patient has been in bed. On the fifth day she went into Wandsworth Infirmary, where she remained, however, only for six days.

On admission she was thin and pale, with a look of extreme illness and suffering. The *alæ nasi* dilated during respiration. The temperature was 102.6° , pulse 100, respirations 40. Tongue coated; sordes on teeth and lips; nausea. Urine, sp. gr. 1028, acid; no albumen, no sugar.

Heart and lungs normal.

No prominence of abdomen. Below umbilicus an irregular swelling, dull on percussion, extending from pubes upwards in middle line 3 inches, and measuring 4 inches in width.

On vaginal examination a clot was found lying in the

vagina. The uterus, normal in size, was pushed over to the left side, and was fixed. The point of the sound, passed up to fundus, impinged on the abdominal wall $1\frac{1}{2}$ inches to left of middle line and 1 inch above the spine of the left os pubis. Left fornix nearly obliterated. Behind the upper parts of the cervix was a tense, smooth, elastic swelling, which extended to the right, filling up the right side of the pelvis, and causing bulging of the right fornix. *Per rectum* the retro-uterine portion of the swelling pressed considerably on the anterior rectal wall, and felt harder and more irregular than the main swelling.

Abdominal section (November 25th).—On reaching the peritoneal cavity and pushing aside the omentum, which was widely adherent to the contents of the pelvis, a large, tense, smooth, globular swelling was seen pushing the right broad ligament forwards and outwards. The thickened Fallopian tube ran over the inner border of the anterior surface in a direction from before backwards, and a little outwards. The fimbriated end of the tube was lost in the wall of the tumour. The tumour was with great difficulty separated from its adhesions, and brought up to the surface. A narrow prolongation dipped down into Douglas's pouch, where the adhesions were very tough. During the separation a serous subperitoneal cyst, containing about an ounce of fluid, was ruptured, and, later, the tumour itself gave way, a quantity of ill-smelling, thick, yellow, blood-stained pus escaping, to the extent of about ten fluid ounces. The broad ligament was transfixed, tied, and divided, and the tumour removed. An adherent mass still remained in the deepest part of the pelvis. This was now separated and brought into view. It proved to be a coil of large intestine, with a firm, round, solid blood-clot so intimately adherent to it that it was thought unwise to remove it. An attempt to peel it away caused free oozing, which was restrained by a fine silk ligature. The blood-clot was broken up by the finger, and was found to contain a central cavity from which serum escaped.

The course of the left tube was followed with difficulty; it was eventually found thickened, with a diameter of about half an inch, closed at its fimbriated extremity, and adherent to the left wall of the pelvis just below the brim. It was ligatured and removed, and, on section, was seen to contain a few

drops of pus. The mucous membrane was but little altered except at the closed end, where there was a patch of yellow-coloured slough. The thickening was chiefly interstitial, the canal being little above the normal width.

The abdominal cavity was irrigated with hot boracic solution and sponged dry. A glass drainage-tube was inserted and the wound closed. The operation lasted two hours and ten minutes.

On examining the tumour it was found to be an inflamed ovarian cyst, with thick walls. When empty and allowed to lie on a flat surface its diameter measured 3 inches. The right Fallopian tube communicated directly with its interior by an opening half an inch in diameter, with smooth, well-defined margin. The tube itself was much thickened, its divided end measuring an inch in diameter. The portion removed measured $3\frac{3}{4}$ inches in length. The portion of the left tube removed measured $1\frac{1}{4}$ inches in length.

The patient was sick from time to time up to 5 a.m. on the 27th; the drainage-tube was removed at 6 a.m. the same day. The condition of the patient, notwithstanding the cessation of the vomiting, was unsatisfactory; there was increasing distension, and the pulse became flickering. An endeavour was made several times on the 28th to pass the rectal tube, but there was a large, rounded, hard, fixed mass pressing on the anterior wall, and completely obstructing the bowel. Next day, the condition being worse, it was decided to puncture the distended bowel. This was done without relief, and at 9 p.m. the resident assistant surgeon, Mr. Robinson, opened the abdomen in the left inguinal region, with the object of performing colotomy. The sigmoid flexure, however, was collapsed and intensely adherent; an opening was, therefore, made in what was believed to be the small intestine, with relief to the distension. The pulse became imperceptible during the operation, but improved when the opening was made. The patient, however, gradually sank, and died at 5.30 a.m. on the 29th. No fæces had passed through the intestinal wound.

			Temp.		Pulse.		Resp.
Before operation, Nov. 23	...	8.30 p.m.	...	102°	...	—	...
		Midnight	...	101.2	...	—	...

			Temp.	Pulse.	Resp.
Before operation, Nov. 24	...	8 a.m.	99.4°	...	—
		8 p.m.	102	...	—
	25	4 a.m.	99	...	—
		8 a.m.	98.4	...	—
After operation		6 p.m.	97	118	40
		8 p.m.	97	120	40
		Midnight	99.4	140	36
	26	4 a.m.	98.4	134	30
		8 a.m.	99	130	34
		Noon	99.2	136	30
		4 p.m.	99	140	24
		8 p.m.	99.8	132	24
		Midnight	99	132	24
	27	4 a.m.	98.4	130	22
		8 a.m.	98.8	„	24
		2 p.m.	98.8	„	24
		4 p.m.	98.6	„	18
		8 p.m.	98.6	140	20
		Midnight	98	„	„
	28	4 a.m.	99	„	„
		8 a.m.	99.4	„	„
		Noon	98.4	„	„
		4 p.m.	97.8	144	32
		8 p.m.	98	148	40
After second operation			...99 to 100.4		

Autopsy.—General peritonitis. The portion of intestine opened was the first part of the transverse colon displaced. The last few inches of the ileum and the cæcum had fallen into the pelvis, and were intensely hyperæmic. The large intestine was collapsed, the small distended. The peritoneal covering of the upper part of the rectum was very ragged and uneven. An old blood-clot with central cavity torn open was found in the wall of the rectum, too closely incorporated with it to have allowed of its being removed. A little grumous blood-stained fluid lay behind the uterus, which remained in its normal position. The ligatures were all secure. On laying open the intestine the inner surface was found healthy, and quite free from localised hyperæmia. There had evidently been no constriction sufficient to damage the mucous coat of the bowel.

CASE 3. *Suppurating tubo-ovarian cyst of right side; tube greatly enlarged; aperture of communication size of large*

goose-quill; abdominal section; removal of cyst, &c., also of left tube and ovary, the latter on account of hæmorrhage from fibroid disease of uterus; recovery (from notes by H. B. Osburn).—R. H—, æt. 54, married, residing at Wandsworth, admitted November 22nd, 1889.

The catamenia commenced at seventeen, preceded by pain, which ceased with commencement of flow. Married at twenty. First child at forty; labour at term, difficult; recovery normal; child stillborn. Menstruation regular up to twelve months ago; since then has had irregular hæmorrhages, lasting from three to five weeks. For the past five weeks the loss has been continuous and profuse.

Has had no previous illness.

Six weeks ago began to have a dull pain in lower abdomen; has never been aware of any abdominal swelling. For eight weeks has had swelling of the legs and feet.

On admission.—Patient a spare woman, extremely blanched. Soft systolic bruit over aortic area. Chest sounds otherwise normal.

Abdomen presents a rounded, irregular prominence in hypogastric region, extending more to left than right. A tumour, firm, smooth, and lobulated, is felt above pubes, rising on the left side to the level of the umbilicus, and in the middle line to an inch below that level, sloping downwards towards the right. In the right iliac region the mass is less firm and more moveable. Two inches above the ramus of the os pubis, a band, moveable and elastic, can be felt running transversely outwards to the lateral wall of the pelvis, in front of the tumour on the right side. Dulness on percussion over the tumour, commencing in the middle line 2 inches below the umbilicus, rising a little higher on the left, and curving downwards on the right to the centre of Poupart's ligament, where it becomes ill-defined. Uterine sound passes 4 inches. The firm tumour on the left proves to be the enlarged uterus; the softer tumour on the right is separated from the uterus by a sulcus; it lies behind the right broad ligament, which is pushed forwards and put on the stretch. The band, above described as crossing in front of it, is the upper border of the broad ligament with the Fallopian tube.

Temperature from admission to December 4th, 97·8° to

100·6°; usually normal in the morning, and 99·8° to 100·4° in the evening.

Diagnosis.—Fibroid enlargement of uterus; uterus displaced to left by an ovarian cyst situated behind the right broad ligament.

Abdominal section (December 5th).—On opening the peritoneal cavity, the right tube was seen to be greatly and irregularly distended, passing first outwards and backwards, and then dipping deeply down to the bottom of the retro-uterine pouch, where it was densely adherent. Several thin-walled subperitoneal serous cysts behind the uterus and broad ligament came into view during the separation of the tube. A quantity of thin, offensive, blood-stained pus also welled up. On bringing the adherent mass into view, it was seen to be composed of a small suppurating cyst of the right ovary and the right tube. Both had given way during the manipulations, and both contained foul blood-stained pus, similar to that which had been welling up during the operation. The parts were removed by transfixion, ligature, and division of the broad ligament. The left ovary and tube—the former spherical and cystic, the latter normal—were removed in a similar manner. Peritoneal cavity was irrigated with hot boracic solution, and a drainage-tube was inserted behind and to the right of the enlarged uterus, which filled the greater part of the pelvis. The operation lasted one hour and ten minutes.

Description of parts removed.—From the right side an ovarian cyst and the Fallopian tube, both containing offensive purulent fluid of precisely the same appearance, odour, and general character. The tube is irregularly distended, its greatest diameter (before being opened) $1\frac{1}{4}$ inches. Length of portion removed $6\frac{1}{2}$ inches; canal patent throughout; calibre normal at uterine end, widely dilated at outer end. No trace of fimbriæ; walls of tube continuous with those of the cyst, into which the tube opens by an aperture the size of a large goose-quill. Cyst irregular and thick-walled, measuring 3 inches $\times$ $3\frac{1}{2}$ inches, the wall in places measuring $\frac{1}{8}$ inch in thickness. Several loculi in the cyst, separated by incomplete septa of cartilaginous hardness. In the wall several smaller cysts, containing clear fluid.

From the left side, ovary, Fallopian tube, and portion of

broad ligament. Ovary tense and fluctuating, $1\frac{1}{4}$ inches $\times$ $\frac{3}{4}$ inch, seen, on section, to be composed of a number of small cysts with incomplete septa. Length of tube removed $2\frac{3}{4}$ inches. Fimbriæ normal; canal patent; wall contains a varicose and sacculated vein. Portion of broad ligament displaying well the organ of Rosenmüller.

December 6th.—Patient has recovered well. No vomiting. Drainage-tube removed and last stitch tied 5 p.m. (third dressing).

8th.—No distension; passed urine and flatus naturally. No pain; tongue a little dry.

13th.—Sutures all removed. Highest temperature since operation 100° .

17th.—Wound closed; two of the suture tracks suppurated slightly on the 15th, now healed. No induration. Uterus now occupies middle line. Patient is well, cheerful, and free from pain. Loud systolic murmur to left of lower part of sternum.

19th.—Temperature slightly raised during last three or four days: *e. g.* on the 15th, 99.8° to 102° ; on the 16th, 100.8° to 101.8° ; on the 17th, 100.2° to 101.4° ; on the 18th, 100.4° to 101.4° ; and on the 19th, 99° to 101° .

24th.—Temperature normal since the 20th. Much better; to sit up to-day.

31st.—Left the hospital convalescent.

SPECIAL TABLE III.—Cases of Abdominal Section other than Ovariectomies and Tubo-ovarian Cysts.

No.	Name.	Residence.	Civil condition.	Date of operation.	Object of operation.	Condition found.	Nature of operation.	Result of operation.	Remarks.
1	G. C.	Barking	32 M.	1889 Feb. 21	Exploratory; retro-uterine tumour	Two encysted intra-peritoneal hæmatoceles, each grasped by the expanded fimbriæ of a Fallopian tube	Enucleated and removed	D. 9th day	P.M.—Acute nephritis; no cause of death discovered in parts concerned in operation. See Abstract.
2	E. H.	Lambeth	35 W.	Mar. 26	Exploratory; suspected abscess in chronic peritonitis	Very considerable matting of intestine, &c.; no pus found	Simple exploration	R.	Died 5 months later, after leaving hospital.
3	N. B.	"	33 M.	June 27	Intra-peritoneal hæmatocele; right hæmato-salpinx	30 fl. oz.; dark soft clot encysted in retro-uterine pouch of peritoneum; right tube distended by clot, open at fimbriated extremity	Right tube removed; site of hæmatocele cleansed and drained	R.	See Abstract, also 'Trans. Obst. Soc. Lond.,' 1889, p. 226.
4	A. M.	Newington	39 M.	Aug. 2	Exploratory; retro-uterine tumour	Hard tumour beneath post-parietal peritoneum, fixed and connected with posterior part of uterus; thought to be burrowing fibroid	Simple exploration	R.	After the operation it transpired that there had been an occasional discharge of pus from rectum since May, 1888; abdomen, therefore, was reopened.
5	"	"	"	Aug. 30	Retro-peritoneal abscess	"	Puncture; removal of 1½ fl. oz. pus; opening enlarged; edges secured to abdominal wall;	R.	Temperature uniformly normal

					collection of fluid in lower part of abdomen, with signs of suppu- ration in abdominal wall	of inflammation (turbid serum with flakes of coagulated lymph) in peritoneal cavity; abscess in abdominal wall	2 pints turbid serum removed from peritoneal cavity; drainage	temperature normal for 2 weeks, then for 3 days from 98.6° to 100.2°; afterwards normal.		
7	E. L.	Brompton	45	M.	Aug. 29	Exploratory; intestinal obstruction 4 months after ovariotomy	Firm adhesion of pedicle to sig- moid flexure	Separated	D. 34 hrs.	At P.M. obstruction found to be due to chronic peritonitis, affecting chiefly upper part of small bowel. See Abstract. Exhaustion
8	E. W.	Buckden, Hunts	59	M.	Sept. 5	Exploratory; ascites with tumours suspected to be malignant	Malignant growth involving omen- tum, ovary, and general peri- toneum	As much of the growth as possible and ascitic fluid removed	D. 38 hrs.	
9	A. O.	Waterloo Road	28	M.	Sept. 14	Pyosalpinx (gonorrhœal)	Pyosalpinx (left); chronic pelvic peritonitis; small suppurating hæmatocele at orifice of each tube	Removal of left tube, &c.	R.	Acute pneumonia during convales- cence. Health great- ly improved by ope- ration (see 'Brit. Med. Journ.,' Dec. 27, 1890, p. 1472). See Abstract, also 'Trans. Obst. Soc. Lond.,' 1889, p. 257.
10	A. D.	Lambeth	26	M.	Sept. 17	Intra-peritoneal hæmatocele with hæmato-salpinx	7 fl. oz.; dark soft clot encysted in retro-uterine pouch of peri- toneum; right Fallopian tube distended in outer half by firm clot; ruptured varicose vein on inner surface of tube	Tube removed; site of hæmatocele cleansed and drained	R.	
11	M. M.	Oke- hampton	44	M.	Oct. 3	Removal of both tubes and both ovaries for uterine fibroids	Large uterine fibroid; tubes and ovaries normal	Ovaries and tubes removed	R.	Hæmorrhage arrest- ed by operation.

No.	Name.	Residence.	Age.	Civil condition.	Date of operation.	Object of operation.	Condition found.	Nature of operation.	Result of operation.	Remarks.
12	S. A.	Borough	45	M.	Oct. 10	Large abscess in left iliac fossa discharging <i>per rectum</i>	Large retro-peritoneal abscess	16 fl. oz. pus removed by trocar; opening enlarged; stitched to abdominal incision; irrigated and drained	R.	Feb. 18, 1890, health good; no tumour; sinus still discharging pus.
13	S. B.	London	22	M.?	Oct. 17	Pyosalpinx (gonorrhœal)	Right tube occluded, filled with pus, and adherent behind uterus. Left tube apparently normal	Right tube removed	R.	Temp. uniformly normal.
14	L. E.	Turner's Hill	34	S.	Oct. 24	Disease of right Fallopian tube	Right tube enlarged and adherent. Small cystic adenoma; right ovary prolapsed and firmly adherent	Tube and ovary removed	D. 48 hrs.	P.M.—Pus found in uterus and in left tube, which appeared normal externally.
15	A. H.	Clapham	27	M.	Nov. 28	Both tubes diseased and adherent	Left tube inflamed and adherent to abdominal wall; right inflamed and adherent behind uterus. Ovaries adherent; otherwise healthy	Tubes and ovaries removed	R.	March 1, 1890, health completely restored (see 'Brit. Med. Journ.,' Dec. 27, 1890, p. 1471).

CASE 1. *Hæmorrhage from both Fallopian tubes, forming intra-peritoneal hæmatocele on each side of the pelvis, encysted amongst old pelvic adhesions and embraced by the expanded fimbriæ of the tubes; abdominal section; removal of both tubes and blood-clots; death on ninth day from acute nephritis; autopsy* (from notes by W. H. L. Copeland).—G. C—, æt. 32, married, residing at Barking, admitted February 9th, 1889; died March 1st, 1889.

Menstruated once at age of sixteen, and not again until eighteen months later, from which time the catamenia were regular and painless. Married at twenty-two; four children, last two years seven months ago. Recovered well after each confinement. In September, 1887 (eighteen months ago), a miscarriage occurred at the second month, after which patient was ill for eight weeks, hæmorrhage taking place all the time. There have been two early miscarriages since, the last on December 1st, 1888 (twelve weeks ago). The patient left her bed in two days, but had more or less hæmorrhage until the end of the month. After it had ceased for a day or two, what appeared to be an ordinary menstrual flow occurred, lasting two or three days. On February 6th a thin, brownish-coloured discharge took place. The patient has not been well from the time of the miscarriage. During the last month she has suffered from pain in the right iliac region, across the bottom of the back, and down the right thigh. For the past fortnight there has been pain on micturition and defæcation.

On admission.—Patient is a cheerful, healthy-looking woman. There is nothing abnormal to be detected in the abdomen.

On vaginal examination uterus is found normally ante-flexed, situated slightly to the left, of normal length, and freely moveable independently of a swelling felt behind it and to the right. The swelling is smooth, firm, elastic, and immoveable, occupying right side of posterior part of pelvis, and extending an inch to the left of the middle line. The left fornix is narrow, and, high up, there can be felt an obscure swelling, tender on pressure.

Temperature varies from 98° to 99·2°.

Abdominal section (February 21st, 1889).—Incision 3 inches long, in middle line. On passing hand into pelvis the retro-uterine pouch was felt to be filled with a rounded solid tumour,

rently continuous with the right Fallopian tube, extending outwards to the right side as far as the pelvic wall. From the outer side of the swelling the tube curved forwards and inwards to the right cornu of the uterus. The mass was fixed by extremely firm adhesions to rectum and pelvic walls. On the left side a similar but much smaller mass was situated behind the left broad ligament. The uterus was free and fairly moveable. With the exception of the rectum, the intestines were not involved. It was evident there had been old pelvic peritonitis, and that amongst the matted tissues were two solid tumours, one on each side, that on the right being the larger. The masses were with extreme difficulty separated by the fingers. The larger tumour was first brought into view. It consisted of a firm blood-clot, equal in size to a hen's egg, and of a more or less globular shape, and was embraced by the expanded fimbriæ of the right tube. The tube itself was thickened, empty and undilated, and was bent backwards upon itself. The broad ligament on the same side was also much thickened. The ovary was not seen. The tube was removed with the tumour. There was now to be felt a cyst behind the outer part of the right broad ligament; during enucleation it was ruptured. The collapsed sac had all the appearance of a simple serous cyst of the broad ligament or ovary. There was a thin, friable pedicle, the cyst for the most part being shelled out without difficulty. During these manipulations something was felt to give way, and the finger passed through an opening into a cavity in the lower part of the pelvis. The adhesions in Douglas's pouch were so dense that it was feared the rectum had been torn. The assistant was therefore requested to examine the rectum from below; he found it uninjured.

The smaller mass was now dealt with. It, too, consisted of a solid blood-clot, laminated and partly decolourised. Like its fellow, it was embraced by the fimbriæ of the left tube. The ovary, white, scarred, and shrivelled, was firmly adherent to the pelvic wall, and was not removed. The tube was removed with the blood-clot.

The pelvis was now cleansed with sponges. Its floor was felt to be covered with adherent shreds. A glass drainage-tube was inserted and the abdominal incision closed.

The operation occupied two hours. After the operation the patient was much collapsed and in great pain. Next day she looked very ill, and the pulse was 156. At 4 p.m. she vomited for the first time. In the evening she asked for the chaplain, and bade her friends good-bye. Champagne was given freely. At 11 a.m. on the 23rd her colour was better; there was no distension or pain. The urine, loaded with lithates, was found to contain a trace of albumen. The drainage-tube was removed in the evening. During the night she vomited several times. The vomiting continued during the 24th, the vomited matter being of an intensely dark green colour. Nutrient suppositories were ordered, only ice to be given by the mouth. On the 26th there had been no vomiting since 12.30 p.m. on the 25th. The breath had a faint sweet odour. Nutrient enemata and suppositories were administered, and brandy and milk by the mouth. Some diarrhoea, checked by morphia suppository. On the 27th had been again sick in the night. Very restless, pulse scarcely perceptible. On the 28th patient was very weak, with hollow voice. No distension; sickness less marked; several scanty offensive motions. March 1st sickness returned. Urine scanty, smoky, highly albuminous. Patient refused nourishment and gradually sank. Death took place at 11.30 p.m.

Except on the day following the operation the temperature had been uniformly below 100°; during the last twenty-four hours it was frequently subnormal.

Autopsy.—Some hypostatic congestion of lungs. Kidneys intensely hyperæmic, blood oozing freely on section; cortical substance swollen. On removing capsule, surface presented a granular appearance in parts, suggesting interstitial change; organs generally showed evidence of acute nephritis. Bladder and ureters were normal and uninjured.

Retro-uterine pouch occupied by two feet of small intestine, which had contracted slight adhesions. On removing them the pouch was seen to be lined with a thin layer of firm, stratified blood-coagulum, one sixth to one eighth of an inch in thickness, in the midst of which were two or three small collections of serum. No fluid blood; no pus; no general peritonitis; no serous effusion; no obstruction or strangulation of bowel; no visceral injury. Left ovary shrivelled and adherent.

Right ovary not seen. Posterior aspect of right broad ligament denuded of peritoneum over a patch an inch in diameter. No sign of hæmorrhage from pedicles. Uterus normal, except that its posterior surface was ecchymosed and covered with shreds of adherent membrane. Mucous membrane of rectum deeply injected over whole circumference at a distance of five or six inches from anus.

The cause of death appears to have been acute nephritis. The parts concerned in the operation seemed as healthy as could be desired (G. Gulliver).

CASE 3. *Recurring intra-peritoneal hæmorrhage, preceded by slight hæmorrhage per vaginam lasting five weeks; no history of previous menstrual irregularity; abdominal section; thirty fluid ounces of blood encysted in peritoneal cavity; right Fallopian tube distended with firm blood-clot; free end of tube widely open, with dark soft clots protruding from it; tube removed; blood cleared out; no trace of ovum discovered; recovery* (from notes by S. G. Toller).—N. B—, æt. 33, married, residing Westminster Bridge Road, admitted June 8th; discharged August 24th, 1889.

Until two years ago patient was a professional cyclist. First menstruated at age of sixteen; flow always scanty and irregular, never painful. Married at sixteen years and three months. Four children, one miscarriage. Last child born nine years ago; recovered well, being up and about the house in a fortnight; a few days later went out and got her feet wet; attacked in consequence with severe abdominal pain, for which she was confined to bed for two weeks, and had poultices applied. Has never felt quite as strong since. During last twelve months says she has lost her appetite and not felt well. Up to present illness the monthly periods had occurred regularly.

For six weeks previously to admission had continuous uterine hæmorrhage with occasional passing of clots. Between 5 and 6 o'clock on the morning of June 3rd patient awoke with severe pain in the abdomen and a sensation of bearing down, with urgent desire to relieve both the bowels and bladder. She felt very faint and ill, and awoke her husband, who, being alarmed, called in some neighbours. Presently vomit-

ing took place, and she continued so sick and looked so pale and ill that they were afraid to move her. She remained sitting in a chair until 10 o'clock, when a little brandy was administered, and she was assisted into bed. She continued to be extremely pale and ill, and to have more or less pain in the lower part of the abdomen, with occasional vomiting up to the 7th June, when she had a similar attack to that already described, but less severe. Next day she passed a "whitish lump" *per vaginam*, and the hæmorrhage, hitherto slight, became profuse. She was accordingly brought up to the hospital and was admitted.

On admission, a stout, muscular, well-developed woman; the surface of the body markedly anæmic. Temperature normal. Heart and lungs normal. Urine free from albumen. No unusual prominence of abdomen, but over an area extending from the pubes upwards to within an inch of the umbilicus there is an ill-defined mass, resistant and tender. *Per vaginam*, very slight hæmorrhage going on; no depression of fornices. Uterus normal in direction and length, fairly moveable, but the slightest movement of it causes pain; cervix normal, except for a hard nodule in the posterior lip of the os; corpus not definable bimanually; appears to be lost in the tender mass above the pubes.

June 13th.—Temperature since the day of admission has varied from 99° to 100°. To-day some pain and slight increase of hæmorrhage.

16th.—Suddenly seized between 5 a.m. and 6 a.m. with intense pain and some distension in the lower part of the abdomen, accompanied with vomiting and alarming pallor. Temp. 99·6°; pulse thready.

17th.—Less pain and distension; vomiting less frequent. Patient extremely blanched and very weak. Temp. 100°; pulse 100.

18th.—No vomiting; a little distension and tenderness of lower part of abdomen, chiefly on right side, with bearing-down pain. Temp. 98·6° to 100°. *Per vaginam*, a semi-solid tongue-shaped mass in Douglas's pouch.

19th.—Temperature rose from 100° at midnight to 101·4° at 4 a.m., 102·4° at 9 a.m., 101° at noon, 101·4° at 8 p.m. Condition otherwise unchanged.

20th to 23rd.—Temperature varied from 99° to 100.2° , patient looking and feeling much better.

24th.—Between 5 a.m. and 6 a.m. patient had another severe and sudden attack of pain and swelling in the lower part of the abdomen, accompanied with excessive pallor and vomiting, but with no rise of temperature. The attack seemed to be brought on by emotional excitement, due to a tragedy in a neighbouring music hall, late on the previous evening, the principal victim of which was a person known to the patient. The occurrence became known in the ward during the night, the murdered man having been brought into the hospital, and much excitement prevailing both inside and outside the hospital.

25th.—Better, but still very ill. No vomiting since yesterday morning. Temp. 99.4° to 100.4° . Tenderness and resistance most marked on the left side, not on the right as heretofore. [The operation of abdominal section had been contemplated on the occasion of the previous attack, but the patient rallied so quickly that it was postponed. The occurrence of a fourth attack, however, reopened the question; the consent of herself and her husband, therefore, having been obtained, it was decided to perform the operation on the 27th.] It was evident that the patient, whose condition was almost certainly due to repeated intra-peritoneal hæmorrhages, was in constant danger of the hæmorrhage recurring.

27th.—Patient much better; pain less; anæmia less extreme. Temp. 99.4° . [The opinion was expressed that the case would prove to be one of intra-peritoneal hæmatocele, probably complicated with and originating in a hæmato-salpinx.]

Abdominal section (2 p.m.).—Abdominal wall loaded with fat. On reaching parietal peritoneum and making a small opening in it some dark fluid blood immediately welled up. The peritoneal incision was now made of equal length with the external wound. The omentum was exposed by the upper inch of the incision; the lower part opened directly into a cyst-like cavity, shut off from the upper part of the peritoneal cavity by a wall, consisting of firm blood-clot and omentum; and containing blood, partly liquid and partly in the form of soft dark clot, to the extent of 30 fl. oz. After removing some of the blood the uterus was felt, of normal size, to the left of

the middle line, and tilted with its left border forwards. The left ovary and tube were adherent to the abdominal wall, and were apparently normal. They were not disturbed. Passing upwards and outwards from the right cornu of the uterus was a tumour, 3 inches by 2 inches, covered with a thick layer of firm, dark blood-clot. The tumour proved to be the right tube, distended evenly by a dark, firm blood-clot, and with its fimbriated end wide open, the margin being everted and folded back upon the exterior surface of the tube. A soft clot was hanging from the open mouth of tube. The tumour was carefully separated from its adhesions and its pedicle of broad ligament transfixed, tied in two portions, and divided. Some free bleeding occurred from the point of transfixion, but ceased when the ligatures were tied. The uterine end of the tube was of normal size and empty. The ovary was not seen.¹ The cavity of the hæmatocele was washed out with two gallons of hot boracic solution; its walls were lined with firm clot, which hung here and there in shreds. A long glass drainage-tube was inserted, and the abdominal wound closed by sutures of silkworm gut.

The distended tube with its contents was, after removal, divided longitudinally by Mr. Shattock into two equal parts, one of which was reserved for preservation, while the other was carefully examined for any products of conception, or appreciable lesion of the inner surface of the tube. The result of the examination was entirely negative. The inner surface of the tube had lost its folds from distension, but was otherwise normal, and the contents consisted solely of firm laminated blood-clot.

The pads were changed night and morning until the morning of the 29th, when the drainage-tube was removed and the two loose stitches tied. The quantity of blood removed by pipette at the several dressings was six, five, and, on the last two occasions, four fluid drachms. There was some incontinence of urine after the operation, but on the following morning the patient passed it naturally. For the first two days there was occasional vomiting of mucus. On July

¹ The specimen was exhibited at the Obstetrical Society of London, and is described in the 'Transactions,' vol. xxxi, for 1889, p. 226. It is now in the museum of St. Thomas's Hospital.

1st the bowels acted after enema, and the patient was removed into the general ward. The only occasions on which the temperature exceeded $100\cdot4^{\circ}$ were at midnight on the 27th June ($100\cdot8^{\circ}$), at midnight the following day (101°), and at 4 a.m. on the 29th ($100\cdot8^{\circ}$).

July 4th.—Temperature in the morning normal. Patient better and stronger, pallor less marked. Some discharge of altered blood from the site of the drainage-tube. A few stitches removed.

5th.—Deep stitches removed. While straining at stool the lower angle of the wound opened, and a quantity of altered blood escaped. Temperature a.m. $98\cdot6^{\circ}$, p.m. $100\cdot8^{\circ}$.

7th.—Altered blood still escaping, together with a little pus, the latter apparently from the walls of the incision. The opening measured an inch in length and an inch in breadth at the surface; below, its diameter was a quarter of an inch.

8th.—Probe passes $4\frac{1}{2}$ inches; india-rubber drainage-tube inserted; remaining stitches removed.

13th.—Tube removed.

15th.—Very little discharge of thin altered blood without odour. Wound closing.

August 24th.—Left the hospital; wound nearly closed.

September 6th.—Small sinus; patient's condition excellent.

October 4th.—Patient reported that she had menstruated, for the first time since the operation, from September 18th to 23rd. On September 19th a figure-of-8 ligature was found on the dressings. There is still a small sinus discharging.

December 10th.—Another ligature was found to-day on the dressings. The sinus thereupon closed.

CASE 10. *Hæmorrhage into right Fallopian tube and into peritoneal cavity, forming a hæmato-salpinx and encysted intra-peritoneal hæmatocele, after menstruation had ceased for two months; abdominal section; ruptured cyst between right tube and ovary, with corpus luteum in a thickened portion of its wall; ruptured varicose vein on inner surface of tube; clot in outer end of tube; seven fluid ounces of soft clot encysted in retro-uterine pouch; removal of tube and cyst; no foetal remains discovered; prolonged suppuration; recovery* (from the notes of

E. E. Ware and A. C. Lankester).—A. D—, æt. 26, shirt-maker, residing in Lambeth, admitted August 29th, 1889; discharged November 9th, 1889.

Beganto menstruate at twelve, married at fifteen (November, 1878). Has had five children, two miscarriages. Last child fourteen months ago; weaned child at three months, then menstruated regularly until ten weeks before admission. She then missed two periods, and considered herself pregnant.

Three years ago she was admitted to Adelaide Ward suffering from hæmatocele immediately following a miscarriage. The following is an abstract of the notes of her case on that occasion:—"She was admitted on August 13th, 1886. Two weeks before admission, patient being then ten weeks pregnant, she received a severe shock from the sudden death of her youngest child. A week after this occurrence she was suddenly seized with severe pain in the lower part of the abdomen and the back, soon followed by severe hæmorrhage from the vagina. Next day, while at work, she suddenly aborted. There was no further hæmorrhage. She continued at her work for a week, when she was again suddenly seized with violent pain in the abdomen, back, and thighs. She became very faint, cold, and pale, shivered and vomited. On admission a few hours later she was pale and collapsed. Temperature on evening of admission 100° , afterwards normal, except on one occasion when it was 99° .

"On examination a soft swelling in lower abdomen, just above pubes; the swelling also felt behind uterus and in lateral fornices.

"Ten days later no pain, no swelling perceptible in lateral fornices or in abdomen. Swelling in Douglas's pouch, hard and solid. Sound passes in normal direction, but shows uterus slightly enlarged. Discharged August 24th."

After her last confinement, fourteen months ago, she kept her bed three weeks, owing to abdominal pain, from which she still suffered when she returned to her work.

Present illness commenced suddenly, when patient was walking out of doors, five weeks ago, with feeling of extreme illness and faintness, with loss of consciousness. She was laid on the ground until she recovered sufficiently to be able to sit up, when she was assisted home. There was no vomit-

ing. When she reached home she for the first time became aware, from the condition of her clothes, that a slight hæmorrhage was going on. This has been going on up to her admission. No clot, membrane, or other solid substance has been observed.

On admission the patient was pale, but otherwise in good condition. The uterus was anteflexed and empty. Above right lateral fornix and extending behind the uterus a continuous, smooth, oblong swelling, excessively tender. Uterus capable of being moved independently of the swelling. The diagnosis was right hæmato-salpinx.

No alteration having taken place after a fortnight's rest, abdominal section was proposed and acceded to. Temperature 98.4° to 99.4° .

Operation September 17th, 1889, 2 p.m. Retro-uterine space roofed in by adherent viscera (omentum, intestine, and uterus). On separating adhesions hand passed into a cavity filled with clot of the colour and consistence of currant jelly. This was removed by hand to the extent of seven fluid ounces. A small conical clot, of much firmer consistence, fell into Douglas's pouch during these manipulations. This was afterwards found to have dropped out of the expanded fimbriated end of the right Fallopian tube. The uterus was thick and large, and placed anteriorly. The right Fallopian tube was dilated and distorted, its fimbriated extremity open and continuous with what appeared like a ruptured cyst, the size of a Tangerine orange. In the wall of this cyst was a slight thickening at one spot, which the presence of a large and very well-marked corpus luteum showed to be a portion of the ovary. A portion of the tube measuring $3\frac{1}{2}$ inches in length was ligatured and removed. Its outer half was dilated and funnel-shaped, exactly fitting the conical clot already mentioned. The breadth of the tube when laid open was, at the narrower or inner end of the dilated portion $\frac{7}{8}$ inch, at the outer and wider end $2\frac{3}{8}$ inches. The length of the dilated portion was $1\frac{1}{2}$ inches. The conical clot that had dropped out of the tube was black, and firm on section, with an outer layer of firmer and browner clot. Its narrow end was uncovered with this brown layer, and was black like the inner portion, with a central canal large enough to admit a pin, as though a fine stream had

penetrated it. The undilated portion of the tube contained a thread of coagulated blood. On the inner surface of the dilated tube was a circular opening, $\frac{1}{3}$ inch in diameter, with a raised edge of mucous membrane, and lined with adherent blood-clot. On careful dissection this was found to be a small cavity beneath a raised portion of mucous membrane, into which a varicose vein had ruptured, and which in its turn had ruptured into the lumen of the tube. There was a similar but somewhat smaller and older lesion on another part of the inner wall of the tube, leading to a small cavity with blood-stained walls. No vessel could be traced in connection with this cavity. It appeared probable that this might be of similar origin with the more recent lesion, the ruptured vein having become occluded, and that it bore the same relation to the retro-uterine hæmatocele for which the patient had been in the hospital three years ago, as the more recently ruptured vein did to the present attack. The clots removed contained no trace of ovum. The left Fallopian tube passed in the direction of the left lateral wall of the pelvis, and could not be traced. The cavity of the hæmatocele was irrigated with hot boracic solution, and then sponged. A glass drainage-tube was inserted, and the wound closed and dressed. The operation lasted an hour and a half.

Next day the tube was removed.

On the 19th the temperature, normal in the morning, rose in the evening to 101.2° , and there was slight distension with pain.

On the 21st the temperature was still high, 101° to 102.2° ; pulse 100 to 110. No tension around wound, but dulness and resistance for about two inches on each side. Bowels have acted. No sickness.

September 22nd.—Blush around wound; all the superficial sutures and most of the deep ones removed. A bead of pus appeared from track of lowest suture, and on pressure pus welled up. The lower part of the wound was thereupon opened, and about eight fluid ounces of thick, flaky, and inoffensive pus escaped. An india-rubber drainage-tube introduced.

October 4th.—A free discharge of pus from the tube, slightly offensive, since the 26th September. Patient much more comfortable. Temperature, which had ranged from

99·8° to 102·4° from September 22nd to October 1st, on the 2nd varied from 99° to 101·4°; on the 3rd, 98·6° to 101°; and to-day from 98·4° to 100·6°.

11th.—After much straining the dressing was found stained with fæces. No distension or other bad symptom. Temperature, since 4th, 98° to 100·4°.

12th.—Pads changed every six hours since the occurrence of yesterday; no further fæcal stain. Pus plentiful and in-odorous.

20th.—Two or three times since last note a stain of fæces on dressings; none since 18th. Yesterday for first time appetite returned. In the evening tube was removed; discharge slight.

29th.—Wound nearly healed; permitted to get up. No hæmorrhage since operation.

November 9th.—Examination *per vaginam*. Uterus free, normal. Nothing to be felt on right side. Thickening on left; no tenderness. Discharged well.

January 28th, 1890.—Readmitted suffering from influenza—otherwise well.¹

Hæmorrhage into the Fallopian tube from rupture of a varicose vein on its inner surface being an extremely rare occurrence, the following note, referring to the case of Miss Neilson, the celebrated actress, will be read with interest. The account appears in the 'Boston Medical and Surgical Journal,' September 23rd, 1880, having been copied from a letter addressed to the editor of the London 'Times,' and signed W. E. Johnston.

Miss Neilson was attacked with severe pain in the abdomen at 3 p.m. in the Bois de Boulogne, Paris. At 3 a.m. the following day, during a most violent recurrence of the pain, she suddenly ceased to complain, went into a state of syncope, and died. Brouardel made a post-mortem examination, and found that she had ruptured a varicose vein in her left Fallopian tube, and had died from internal hæmorrhage. Two and a half quarts of blood were found in the peritoneal cavity; the ruptured vein presented an orifice of 4—5 mm. in diameter.

¹ The specimen was exhibited at the Obstetrical Society of London, and is described in the 'Transactions,' vol. xxxi, for 1889, p. 257.

HYPERTROPHIC ELONGATION OF CERVIX UTERI WITH LACERATED PERINÆUM ; SUPRA-VAGINAL AMPUTATION OF CERVIX ; REPAIR OF PERINÆUM.

(From notes by E. A. Roberts.)

G. L—, æt. 43, married, residing at Greenwich, admitted October 23rd, 1888; discharged January 9th, 1889. Seven children, no miscarriages. Perinæum lacerated at first confinement, thirteen years ago; rupture complete. Has been in a condition of increasing discomfort for the last eight years from bearing down, and irritability of bladder and rectum. Many pessaries have been tried, but none could be retained.

On admission, cervix protrudes slightly beyond the vulva. Sound passes 4 inches; constriction, marking upper boundary of cervix, $2\frac{1}{2}$ inches from os externum; length of cavity of corpus uteri $1\frac{1}{2}$ inches; fundus uteri $2\frac{3}{4}$ inches above pubes. Distance of posterior fornix from vaginal orifice $2\frac{1}{8}$ inches, of anterior fornix $1\frac{1}{2}$ inches. Bladder sound shows that bladder is drawn down by the cervix to within $\frac{1}{4}$ inch of os externum. A pouch of peritoneum has descended with posterior wall of cervix to within $\frac{3}{4}$ inch of os externum.

November 8th, 1888, supra-vaginal amputation of cervix. Portion removed $1\frac{3}{4}$ inches in length. After dissecting up the tissues in front and behind, the cervix was divided into two flaps by lateral incisions, each flap being removed separately. Small wound made accidentally in posterior pouch of peritoneum was closed by means of three catgut sutures. Lowest segment of connective tissue on each side secured by ligature before division. After removal of cervix, the mucous membrane of cervix was united to that of the vagina by two silkworm gut sutures in front and two behind. Vaginal wound on each side closed by two additional sutures. The ends of the sutures were left long. An iodoform tampon was placed in the vagina for eighteen hours. Catheter was used for two days, after which the bladder was emptied voluntarily. On fifth day a dose of house mixture was given. Patient became ill, nausea supervened, and temperature rose to $103\cdot4^{\circ}$.

Next day, bowels having acted, temperature had fallen to 100.4° . The sutures were all removed, except those in the lateral connective tissue, on the 14th day. Three days later the remaining sutures were cut away. The parts had healed.

December 3rd, 1888, operation for repair of perinæum. Thick flap dissected up from posterior vaginal wall, turned forwards into vagina, doubled upon itself, and secured by stitch as in quilting. Four deep and several superficial perinæal sutures of silkworm gut. Perfect union took place. Patient was able to pass urine voluntarily for first time on the sixth day; the bowels were relieved on the eighth day, and the sutures were all removed on the tenth day.

At time of discharge patient had complete control over bowel, with good sphincter. The distance from anterior border of perinæum to anus was $1\frac{3}{4}$ inches, and to the meatus urinarius $\frac{1}{2}$ inch. Uterus in normal position; length of canal $2\frac{1}{2}$ inches.





TABLE(S)
RUN INTO
GUTTER

