Removal of a dropsical ovarium / by George Southam.

With the authors respects

REMOVAL

OF A

DROPSICAL OVARIUM.

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REMOVAL

OF A

DROPSICAL OVARIUM.

In the early part of last March, Mrs. H——, aged 37, of dark complexion, healthy appearance, and nervous temperament, was admitted under my care at the Dispensary, said to be suffering from dropsy. She stated that she had been the mother of six children, and formerly enjoyed good health. Two years and a half ago, when five months advanced in pregnancy, she felt something suddenly give way in the left iliac region, whilst lifting a washing mug, which caused her to faint, and afterwards to vomit about a table spoonful of blood. She experienced no other inconvenience, excepting occasionally some shooting pains in the part after exertion, until within six weeks of her confinement, when the pain became so frequent that she was prevented attending to her ordinary household duties. After an exceedingly protracted labour, in which she was attended by a midwife, inflammation of the bowels and side followed, which required repeated leeching and blistering. Two months afterwards she felt a small tumor, above and to the left side of the pubis, but thought it was only "wind in the bowels." Shortly afterwards the abdomen began to increase in size, accompanied with pains, at first slight, but latterly very severe, and at times so acute as to confine her to her bed. By remedial means the abdominal enlargement has been frequently reduced, but never with any relief to the pains. When I first saw her she had the appearance of being six months advanced in pregnancy; she complained of pains in the abdomen, especially on the right side, which were increased when in the recumbent position, and prevented her altogether from lying on the left side. She had also a feeling of bearing down and frequent desire to pass urine, which often caused great pain; her bowels were constipated: catamenia regular, and general health apparently but little affected. On examining the abdomen, I felt a circumscribed tumor above the pubis, inclining rather to the left side: it was about the size of the fœtal head at full term, and was very moveable under the integuments, but when drawn upwards caused pain in the left side.

There was distinct fluctuation, evidently from ascitic fluid, and percussion yielded a dull sound over the tumor. On examination per vaginam I found the os uteri perfectly healthy, and the uterus itself natural in size: the walls of the vagina were beginning to protrude externally: the tumor could not be felt, and apparently had no connection with the uterus. Being satisfied that the disease was ovarian, I informed the patient of the inefficacy of medicine in the cure of it, and that the only chance of its removal consisted in an operation, the dangers of which were fully explained to her. She appeared extremely desirous to be relieved of the tumor, which made life a burden to her, and resolved, at whatever risk, to submit to the operation.

Accordingly, I requested my friends

Drs. Radford and Clay to visit her, who after a careful examination concurred with me as to the nature of the case, and the propriety of operating. Some delay took place in consequence of my colleagues at the Dispensary not sanctioning this measure. At length all obstacles were removed by the female placing herself under my care as a private patient.

Having fixed Friday, the 20th of Oct. for the operation, I directed her to avoid any violent exertion, also to abstain from stimulating food and drink for a few days. The oxgall disagreeing with her, the bowels were cleared out the preceding day with castor oil, which having acted freely, on the following morning an enema was considered unnecessary. I marked the abdomen in two places with nitrate of silver, and the temperature of the room was raised to 70°. About half-past twelve the patient was placed on a table in the recumbent posture, and in the presence of Drs. Radford and Clay, Messrs. Vaudrey, Slack, Carew, J. J. Southam, and Dorrington, surgeons, I commenced by making an incision through the skin from the right of the umbilicus, along the mesial line, to within three inches of the symphysis pubis, and after carefully dissecting through the different muscular layers, exposed the peritoneum. I punctured it half way between the umbilicus and pubis, on which a quantity of straw-coloured ascitic fluid began to escape. When upwards of four quarts had flowed, I made the opening large enough to admit my finger. Finding there were no obstacles likely to impede the further progress of the operation, I enlarged the wound above and below, with a probe-pointed bistoury, to the extent of nine inches, using my fingers as a director. The tumor was now fully exposed, and the omentum being firmly adherent to it at the upper part, was carefully dissected away. Mr. Slack prevented the intestines from escaping, which were very much distended with flatus, and extremely vascular. Dr. Clay raised the tumor, whilst I passed my fingers behind the left broad ligament, to the whole extent of which it was attached.

As the patient at this stage became very sick, some difficulty was experienced in keeping the intestines from protruding round the pedicle. Instead, therefore, of using the ligature needle, I carefully made an opening with a scalpel through the centre of the ligament, at the same time protecting the viscera behind the tumor with my fingers previously introduced. Two ligatures were passed through the wound; the one near the uterus was easily tied, but the other broke, though it consisted of the strongest dentist's silk. The diseased mass was now removed by dividing the pedicle about an inch from the ligatures; the only hæmorrhage which followed came from the tumor, which being quickly removed, very little blood escaped into the abdominal cavity. The external integuments were immediately brought together, and after waiting a few minutes, during which the ascitic fluid was allowed to escape, the pedicle and omentum were examined, but there was not the least hæmorrhage.

The ligatures were tied on a knot and placed at the lower extremity of the wound, the edges of which were retained in juxtaposition by seven uninterrupted sutures and adhesive straps. Two long pads were placed on each side of the incision, and the whole secured by a broad bandage. During the whole operation, which the patient bore with great fortitude, not more than three ounces of blood were lost; and, with the exception of the delay occasioned by removing the ascitic fluid, which amounted to about fourteen pounds, it did not occupy many minutes. After being placed in bed, she was sick several times, complained of pain in the loins and left side; pulse 90, soft.

I ordered her gr. j. of Morphine in an ounce of Camphor Mixture, and to have nothing but toast-water, and that only in small quantities when thirsty.

Three hours after the operation.—Pulse 90, small; temperature of room 74°; not vomited since the draught; slept half an hour; surface of the body cold and moist; parted with flatus several times.

Half-past 6 P.M.—Pulse 95, soft and feeble; surface of the body comfortably warm and moist; temperature of room 73°; slept frequently for ten minutes or a quarter of an hour at once; no vomiting; pains in the loins and left side very severe.

* Dr. Clay examined the opposite ovary, and found it healthy.

Half-past 10 P.M.—Visited with Dr. Clay and Mr. Carew. Pulse 106, feeble and small; cough rather troublesome; parted with a considerable quantity of flatus; vomited once since last visit; not slept; passed about a pint of pale straw-coloured urine without the use of the catheter.

Rep. Haust. Morph. gr. ⅔ds.

Half-past 12.—Pulse 110, small; complains of pain in the region of the stomach; vomited the draught; afterwards slept upwards of an hour, but has been sick twice since awaking; temperature of room 71°; ordered to keep it at 70°.

Habeat Morph. Acet. gr. j. in formâ pilulæ.

21st, 7 A.M.—Slept two hours after the pill; vomited several times within the last three hours; tongue white and moist; pulse 110, fuller; pain continues in the epigastrium and left side; abdomen distended, and rather tender on pressure; thirst and heat of skin increased; respiration free; no shivering; passed another pint of urine; flatulency continues.

Bled to 12 oz, which caused her to feel faint. To abstain from all kinds of fluids. When thirsty to rinse the mouth with water.

Half-past 11 A.M.—Pulse 120, soft; has still pain in the epigastrium and left side, but less severe than before bleeding; abdomen very much distended; passed urine and flatus, but had no motion; vomiting continues.

Habeat Enema Commune. Stat. Rep. Pilul. Morph. gr. ½.

3 P.M.—No fæcal matter returned with the injection, but it caused her to part with a considerable quantity of flatus, which has given her great relief, having been free from pain ever since; vomited immediately after the administration of the enema, but not since taking the pill; pulse 120, soft; surface of the body comfortably warm and moist; thirst troublesome; slept at short intervals.

To have a little ice occasionally.

10 P.M.—Vomited several times since last report; she thinks the ice increases it; free from pain; pulse 120, soft and small; abdomen much distended, but not painful on pressure. Examined the wound, but found no protrusion of the bowels; indeed it had almost healed: but the ligatures were missing, having evidently been drawn into the abdomen by the distension and frequent vomiting.

To repeat the injection, and to have a rectum-tube passed when the flatulence is troublesome.

Rep. Pil. Morph. gr. j.

22d, 3 A.M.—Vomited the pill, and continues sick; no motion with the enema, but it has relieved the abdominal distension.

Rep. Pilul. To take the effervescing magnesia occasionally.

7 A.M.—Pulse 120, small and feeble; sickness continues, but not so frequent since she began with the effervescing draughts; passed urine freely; tympanitis continues; had no motion; still troubled with flatulency; countenance anxious; feels very faint at times.

To have a turpentine enema. Rep. Pil. Morph. gr. ½. To take the effervescing magnesia every half hour, with ten drops of Sp. Am. Aromat. To have brandy and arrow-root in small quantities when fainting comes on.

1 P.M.—The injection not producing any effect, the nurse repeated it; what returned with the last was very offensive, but contained no fæcal matter; pulse 125, feeble; not vomited since last visit; slept at intervals.

Repeat the turpentine enemata.

Half-past 6 P.M.—A small quantity of fæcal matter came away with the last injection; not been sick since this morning; hungry.

To take a little panada.

Half-past 10 P.M.—Very low; countenance anxious, and eyes much sunk; pulse 140, thready; tongue beginning to assume a morbid redness at the edges, white and dry in the centre; had no evacuation; the abdomen still tympanitic; surface of the body comfortably warm and moist; no shivering; continues to pass urine without assistance; complains still of flatulence; wound healthy; removed four of the sutures.

℞ Ext. Col. Co. gr. v.; Hydr. Chlorid. gr. iij.; Mucilag. G. Acacia q. s. fiat pilul. ij.; St. Sumend. et rep. 3ta hor. si opus sit. Soda water ad libitum.

23d, 7 A.M.—Passed a comfortable night, having slept soundly for several hours; only been sick once, which was after the second dose of pills; free from

pain in the abdomen, which continues tympanitic; still troubled with flatulence, and complains of a burning heat and rising in the throat, as if she had been drinking turpentine. Tongue white, moist, and less red at the edges; pulse 130, soft and feeble; skin moist and warm; no shivering; passed urine freely; had an injection half an hour since, which has brought away a small quantity of fæces; thinks her bowels will be moved shortly; if not in the course of an hour to have an enema of gruel containing 5 gt. Ol. Croton.

Continue the soda water.

11 A.M.—Still no evacuation.

Repr. Pil. Col. c. Cal.

3 P.M.—Vomited an hour after taking the pills; the heartburn very distressing; tongue dry; pulse very feeble, 130. Thinks she could take some castor oil in brandy and soda water.

Ordered half an ounce; if it remains, to be repeated every two hours until the bowels are acted upon.

10 P.M.—Had the bowels moved in an hour after taking the first dose of oil, and have been freely moved twice since; tongue cleaner and moist; pulse feeble, soft, 130; abdomen free from pain: she appears very restless, which, she says, is owing to the burning heat in her throat: no shivering; skin moist; been sick since last visit after taking some linseed tea, which she thought she could like. Taken a little beef-tea, which stayed.

Ordered soda-water and milk.

24th, 7 A.M.—Passed a restless night; been sick, which she attributes to the milk; complains still of the burning heat in the throat and stomach; tongue white and moist; has an extremely unpleasant taste in the mouth; no shivering; pulse 118, feeble and soft; countenance anxious; passed urine freely; and had one motion since three o'clock: complains of pain in the lower part of the abdomen, which shoots up towards the chest: feels sick, but has not vomited lately; the abdomen distended, especially at the lower part, but appears to be from flatus in the bowels; the wound has healed, except to the side and immediately below the umbilicus; removed the remaining sutures.

Omit the milk. Add a tea-spoonful of brandy to each dose of soda-water; rectum tube to be introduced, and afterwards to have an enema, consisting of four ounces of beef-tea.

11 A.M.—The beef-tea injection remained two hours, when she had a motion. The burning heat continues very distressing; vomited once since last visit, and still feels sick; at times pain in the abdomen. The pads were removed, a bandage placed over the plaisters, and a poultice of scalded bran ordered to be kept constantly applied.

To have iced jelly; continue the soda-water ad libitum.

Half-past 9 P.M.—Not been sick since this morning, and appears in every respect better: pulse 112. The jelly has relieved the burning heat in the throat.

25th, 7 A.M.—Passed a comfortable night, slept since ten o'clock without interruption; pulse soft, 112, still feeble; tongue moist, white, loaded at the base. The burning heat almost gone. Skin warm and moist; no coldness, or shivering; temperature 70°; urine rather thick, and after standing a short time deposited a sediment like brick-dust; less thirst; very anxious to be allowed a little tea, which was ordered; bowels moved once slightly.

To have some beef-tea and toast.

9 P.M.—Continues to improve; bowels moved freely once during the day; pulse 106, soft; not used the poultices to-day, having been free from pain in the abdomen; the temperature of room to be reduced to 65°.

26th, 12 A.M.—Was rather thirsty in the night, increased in consequence of being without soda-water; in other respects passed a good night, and slept soundly for several hours; had no pain since last visit; tongue cleaning, countenance improved; pulse 104, soft; passed urine freely; had a motion in the night, more consistent and healthy in appearance; not the least sickness; skin comfortably moist and warm; altogether very much improved; slight cough, which sometimes causes pain in the chest.

Half-past 8 P.M.—Has had some pain in the lower part of the abdomen, but the bran poultices have relieved it; both iliac regions are rather tender on pressure; not the least sickness; pulse soft, 110; says she feels herself much better. Having had no alvine evacuation to-day, she was ordered a common injection, and, if the pain returns, to

foment the abdomen, and apply poultices afterwards.

27th, half-past 7 A.M.—The fomentation and injection removed the pain from the lower part of the abdomen; passed a good night; bowels moved slightly in the night, the fæces rather scybalous; tongue much cleaner; pulse soft, 106; passed urine freely; cough better; skin moist and warm; temperature 65; wound proceeding favourably.

Ordered—Ol. Ricini ʒss. in brandy and water. To have some weak mutton broth for dinner.

Half-past 8 P.M.—Not so well; complains of pricking pain in the left iliac region, which prevents her taking a deep inspiration; can bear pressure on the abdomen, which appears to relieve the pain, evidently owing to flatulence; pulse soft; tongue continues clean; temperature of room 65°.

Fomentation with camomile flowers and poppyheads. To have the rectum tube passed. Pil. Morph. Acet. gr. ¼. st. sumend.

28th, 8 A.M.—Passed a comfortable night, having received immediate relief from the remedies prescribed; pulse 120, soft; hungry; able to lay on either side; parted with a deal of flatus during the night; countenance cheerful.

Diet to consist of veal broth, tea, jelly, and soda-water if thirsty.

29th, 10 A.M.—The flatulent pains returned suddenly in the night, which were relieved by the remedies ordered; much flatus passed after the introduction of the tube; pulse 125, soft, weak; tongue clean, but rather redder than natural, and papillæ at the end elevated; free from pain, but feels low; rather thirsty; passed urine freely in the night. Took some castor oil early this morning, which has not yet operated.

Ordered a common enema immediately. To continue the same diet.

30th, 10 A.M.—Appears much better; perspires freely; passed a good night; bowels moved three times yesterday; the evacuations rather scybalous; tongue clean and moist—still morbidly red; pulse 116. To have a light sago pudding for dinner in addition to veal broth.

31st, 10 A.M.—Passed a comfortable night; pulse 100. Took a dose of castor oil this morning, which has not yet operated.

8 P.M.—Complaining of pain in right side, increased on pressure; pulse 108, full; bowels been moved three times.

Appl. Hirudines viij. part. affect.
Repr. Pil. Morph.

November 1st.—Pulse soft—morning 100, evening 110; feels rather low, but in other respects improved. Leeches relieved the pain and tenderness. Wound healthy, almost healed; bowels moved once; tongue clean, and more natural in colour.

2d.—Continues to improve. Pulse 100 in the morning, 110 in the evening, soft; tongue clean, and assuming its natural colour; bowels regular. Diet to-day consisted of sago pudding, veal broth, an egg, and dry toast.

4th.—Able to sit up; tongue clean, and perfectly natural in colour; can lie in any position, and says she feels comparatively well, suffering now only from debility; pulse 88 in the morning, 90 in the evening.

6th.—Wound not quite healed below the umbilicus; touched it with nitrate of silver. Sat up yesterday upwards of an hour. Took a mutton chop and half a glass of sherry wine for dinner, which agreed. Pulse 88.

9th.—Has gained strength considerably; able to walk about the room; wound quite healed.

12th.—Continues to proceed favourably.

Description of the Tumor.

The form of the tumor is nearly round, and rather flat, measuring about eight inches in diameter. It weighs four pounds, twelve ounces; and the ascitic fluid which accompanied it, fourteen pounds. The tumor is composed of solid matter and several cysts, which vary in size, giving it a lobulated appearance externally. The solid portion is most prevalent in the vicinity of the pedicle, which has a broad base. The natural structure of the ovary is entirely destroyed, the tumor affording an excellent specimen of cystic sarcoma.

REMARKS.—This case is interesting from several circumstances. It affords additional testimony in favour of a free incision into the abdominal parietes for the extraction of diseased ovaria. By the establishment of this practice, together with several valuable remarks on the operation, Dr. Clay has laid

the profession under great obligations.*

The mobility of the tumor, and the large quantity of ascitic fluid which surrounded it, rendered it probable that it was comparatively free from adhesions, and attached by a long narrow pedicle; conditions which are essential for the success of the *minor operation.* This plan of Mr. Jeaffreson's consists in making a small incision, of one and a half or two inches in length, into the abdomen, through which the ovarian sac is punctured with a trocar, and when emptied of its contents drawn through the opening, its pedicle tied and separated†.

Had such an operation been adopted in my case, great difficulties would have occurred. After the evacuation of the ascitic fluid, cyst after cyst would have required puncturing, the adhesions could not have been removed with any degree of facility, the solid part of the tumor would have presented insurmountable obstacles to its extraction, whilst considerable difficulty must have been experienced in securing the pedicle (even if it could have been drawn through the opening), owing to its thick, broad, and highly vascular condition.

On this subject Mr. Aston Key says, that the minor operation, "at first view, appears to be the safest and easier operation, requiring a smaller incision of the parietes of the abdomen, and exposing, in a much less degree, the viscera to the existing causes of inflammation. These advantages, however, are more than counterbalanced by the difficulty of manipulation which the operator experiences in getting a large collapsed mass through a small parietal incision, and in reaching the peduncle of the cyst so as to secure it by ligature. The larger incision does not probably expose the patient to a greater chance of inflammation than a smaller one; and it has the incalculable advantage of giving free access to the tumor, and facilitating its extraction from the abdominal cavity without violence. I look on the absence of all undue forcible manipulation as the main recommendation which this operation possesses‡."

The major operation does not consist in a direct incision from ensiform cartilage to pubis, as Dr. Bird appears to have inferred, but in making an opening proportionate to the size of the solid parts of the tumor; and, when the disease is extensive, and wholly or in part fluid, reducing it by paracentesis either previously to, or during the operation.

An exploratory incision midway between the umbilicus and pubis is very necessary at the commencement of the operation, as in this position we are less likely to encounter adhesions, which are more frequent near to the umbilicus. When the tumor is of great magnitude, adhesions to the abdominal parietes are generally found above as well as in the vicinity of the umbilicus, except when it is overlapped by the omentum itself adhering.

With respect to the treatment of the case, it will be seen from the report that, for the first four days, the issue was very doubtful; and had it not been for the timely application of the lancet, and the free administration of morphine, in all probability peritonitis would have ensued, which the vascular condition of the peritoneum at the time of the operation evidently indicated. Flatulency and nausea proved most troublesome symptoms.

The rapidity with which the peritoneum healed deserves notice: in thirty-six hours after the operation it appeared firmly united through the whole length of the incision.

Not the least important feature in the case, which is worthy the attention of operators, consists in the retraction of the ends of the ligatures into the abdomen. In one of Mr. Walne's cases I find a similar accident occurred, which was also not attended with any unfavourable result, the ends of the ligatures reappearing at the lower extremity of the wound, before it had entirely healed. (Med. Gaz. p. 437, vol. i. 1842.) The reader will no doubt be equally surprised to hear, as I was to find, that they had disappeared; for at least five inches of the cord were left external to the wound; besides the precaution being adopted of tying them on a knot, and placing a broad strap of adhesive plaster over them to retain them in their situation. This accident was evidently owing to the tympanitic distension of the abdomen, and the motion of the parts from constant vomiting, whilst the adhesive powers

* Medical Times, 1842-3.
† Trans. Prov. Association, Vol. 5.
‡ Guy's Hospital Reports, Oct. 1843.

of the plaster were destroyed by the oozing of ascitic fluid through the wound immediately after the operation.

This circumstance is an additional proof that the peritoneum is not so susceptible of inflammation from irritation as many have supposed.

Whether the ligatures will become encysted, or, what is more probable, they will ultimately be discharged by means of abscscess, it is at resent difficult to prognosticate. If any peculiarities occur in the after progress of the case, I shall feel it my duty to impart them to the profession.

REMARKS

ON THE

OBJECTIONS TO THE OPERATION.

With respect to some objections urged against the operation, as I believe that they are more imaginary than real, it may be well to offer a few remarks upon them.

It has been alleged, that] although ovarian tumors ultimately prove fatal, yet, by the interposition of remedial means, the patient's life may be prolonged for several years in tolerable comfort, whilst there is a great probability of death immediately following extirpation. It is no doubt true that individuals have lived many years in comparative ease with this disease, but I am inclined to think they bear a very small proportion to those who, from an early period, are in a constant state of suffering, which often causes death in a very few years, and not unfrequently in twelve or eighteen months.*

Dr. Bright has given the history of seven cases, which show that the disease if left to itself destroys life in about three years from the time it is first detected; an average by no means overstated, when we consider the premature deaths it occasions by impeding parturition. References to eighteen such cases, comprehending thirty-eight lives, are given by Dr. Merriman in the 10th volume of the Medico-Chirurg. Transactions, from which it appears nine women died; three recovered imperfectly, six perfectly. Of the children, sixteen were still born; four were alive; so that the lives actually preserved amounted to only twelve, the deaths to twenty-six.*

It is very doubtful whether most of the remedies proposed to retard the progress of the complaint have not rather accelerated its fatal termination; and from the following table, it will be seen that paracentesis, which is generally considered the most effectual palliative, not only affords a very temporary relief, but is by no means unattended with danger.

* Vide Bright's Records of Ovarian Tumors, Guy's Hospital Reports, 1838. Dr. Seymour relates the particulars of a case where the disease appears to have run its course in six months.—Illustrations of Diseases of the Ovaria, 1830, p. 67, 68.

* Synopsis of Difficult Parturition, 4th edition, p. 62.

Table of twenty cases of Ovarian Disease in which Paracentesis was performed.

Those marked (1) occurred in the practice of Dr. Bright. The five marked (2) are recorded by Dr. Barlow, in the 4th volume of the Provincial Medical Transactions. The others were under my own care.

Initials of Patients.	Age.	Married.	Single.	Duration of life after first operation for Paracentesis.	Number of times tapped.	Cause of death.
——[1]	44	1	—	24 hours	1	Inflammation.
A. B.[1]	—	—	—	48 ,,	1	——
— H.[1]	—	—	—	Several days, 10 ?	1	——
E. S.[2]	36	1		Few days, 7 ?	1	——
M. H.[2]	40	—	—	1 month	1	Ulceration of sac, and escape of contents into the abdomen.
——[1]	45?	—	—	1 ,,	1	Exhaustion from extensive schirrous disease.
— B.[1]	—	—	—	1 ,,	1	Exhaustion.
——[1]		1		2 ,,	2	
E. W.	26	1		4 ,,	3	Exhaustion.
S. P.[2]	35	1		7 ,,	1	
M. M.[1]	53	1		7 ,,	5	Inflammation.
C. E.[2]	40			8 ,,	6	Exhaustion.
— O.	54	1		8 ,,	1	——
S. B.	20		1	9 ,,	4	Inflammation.
E. S.[2]	22		1	15 ,,	6	
A. M.[1]	34	1		18 ,,	2	Inflammation.
— T.	33	1		4 years	7	Exhaustion from pressure of tumor.
E. W.[1]	27			4 years 9 months	14	Inflammation after tapping
E. B.	32		1	7 years	4	—— ——
M. N.[1]	35	1		8½ years	11	—— ——

From Dr. Ashwell's summary of Obstetric Cases admitted into Guy's Hospital, it appears that of eleven cases of hydrops ovarii, seven were tapped; three of which were unsuccessful. He does not state how often they were individually tapped. Reports, 1837-8.

Thus, fourteen died within nine months after the first operation, four of whom survived it only a few days. Of the remaining six, two died in eighteen months, and four lived for periods varying from four to nearly nine years.

It further appears that paracentesis does not prolong life on an average for more than eighteen months and nineteen days; and that one in five dies from the effects of the first operation. Another fact to be gathered from the table is, that the peritoneum being more prone to inflammatory action in some persons than in others, repeated tappings, instead of proving barriers to extirpation, show that (other circumstances being favourable) there is much less risk of inflammation following the operation.

The disease, it is said, frequently assumes a malignant character, consequently no lasting benefit will result from the operation. Indeed, Dr. Bright states, "it is truly a malignant disease; and though it usually assumes one, and that a milder modification, in preference to the rest, is not unfrequently found degenerating into the worst and most destructive forms of the fungous and cerebriform cancer; and it undergoes those changes by such insensible degrees, that it is impossible to draw the line, and deny a malignant character to one, while we grant it to the others."

Some of his cases certainly prove that the ovary may be affected with malignant disease, in common with the other organs of the body; but if the term malignant is to be limited to cancer, medullary sarcoma, and fungus hæmatodes, they afford no more proof that the true dropsical ovarium ever partakes of any of those affections, than that the presence of tubercles in the ovaries shows the disease to be of a scrofulous nature, as some have supposed. The mamma is the most frequent seat of schirrus; yet encysted tumors may be developed in its structure, and remain for several years, or

even for life, without degenerating into any of the forms of that disease.

The analogy between dropsical cysts and the local origin of carcinoma, which Dr. Hodgkin* first discovered to consist in the presence of a serous membrane having a cystiform arrangement, affords no proof of their identity, since the recent researches of Schwann, Müller, and others, show that not only are all abnormal growths formed from cysts or cells, but that the different structures of the body have a similar origin. We cannot, therefore, adopt what appears to be the revival of an old theory, which referred the formation of schirrus to the previous existenc of vesicles having the nature of hydatids†, but must look for its nutriment in a perversion of the nutritive and secreting functions of the body.

The only foundation for attributing malignancy to the encysted ovarian disease, appears to consist in the presence of the solid masses sometimes forming part of the tumor, or growing from the internal surface of the cysts, which on a superficial inspection not unfrequently resemble the semitransparent and fibrous structure of schirrus, or the cerebriform and fungoid appearance of medullary sarcoma; but any further they do not appear to assimilate.

The peculiar appearance of the countenance, the sharp lancinating pains, and other general conditions of the patient which denote the existence of schirrus, seldom occur in persons suffering from the true ovarian disease. The ulcerated surfaces of the tumor present no hard, ragged, and everted edges; the indications of hæmorrhage having previously existed are wanting. The fluid part bears a large proportion to the rest of the structure, and instead of assuming the character of an offensive ichorous discharge, when of a purulent nature, it has the appearance of ordinary pus. Cysts have been frequently found after death connected with the ovary, which had not been detected during life, and there are several authenticated cases of extremely large tumors, with equal and smooth surfaces, having existed for many years without affecting the healthy functions of the body, which generally suffer more or less where there is any tendency to malignant action.

The disorganization, therefore, occasionally met with in ovarian tumors must be referred to causes having a local origin, probably to inflammatory action, produced from pressure and other irritating circumstances. It is well known that encysted tumors, when seized with inflammation, cannot, from their low degree of vitality, long resist its influence.

As in diseased states of the system inflammation frequently takes on some specific action, it is not unlikely that, when it attacks morbid growths, effects may be produced, which, though not exactly presenting the appearances of healthy inflammatory action, are analogous to its suppurative and ulcerative stages, or to that peculiar alteration of the tissues called *ramollissement*.

Having carefully examined several specimens of dropsical ovaria, I am inclined to agree with Drs. Hunter and Burns*, that they never present a truly schirrous character; on the contrary, that they generally consist of simple cysts, or partake of what is called cystic sarcoma†, for the development of which the peculiar structure of the ovary appears highly favourable.

The far greater size which the disease attains, compared with similar affections in other parts of the body, depends on a variety of circumstances; the most obvious of which are, the position of the ovaries in the abdomen being free from all pressure or restraint likely to limit their development; the abundant supply of blood which the parts periodically receive, and the natural disposition of the generative organs to obey a stimulus which requires an increased supply of nutritive matter, and gives rise to a proportionally rapid growth‡.

I lately examined the body of a female who had died from what was thought to be a dropsical ovarium. The tumor, however, originated in the fallopian tube, and was formed of two cysts: one contained upwards of three gallons of fluid, the other about two. On the internal surface of each cyst, in the most depending situations, there were several patches of solid matter, apparently of recent formation; none

* Med. Chir. Transactions, Vol. 15.
† Barron on Tuberculous Diseases.

* System of Midwifery, p. 136.
† The firm or sarcomatous part of a diseased ovary was regarded by Mr. Abernethy as an excellent specimen of the structure of this disease.
‡ Hodgkin, Med. Chir. Transactions, Vol. 15.

of them were larger than a crown-piece, and in a few instances they had coalesced. The ovaries and other organs of the body were perfectly sound. This case resembles several described by Dr. Baillie and others as hydrops tubalis. They evidently consist of adventitious cysts, and do not differ from similar ones sometimes found in the ovaries, which have been erroneously supposed to be merely enlarged Graafian vesicles*.

Since the disease rarely leads to a speedily fatal termination, we have seldom opportunities of examining its earliest conditions; but from the history of protracted cases, it would appear that one or two cysts frequently exist for several years before the solid matter is developed, and that the progress of the complaint is often influenced by the quantity and rapidity with which the latter has been secreted.

The proportion which the solid mass bears to the whole tumor forms an important feature in recommending extirpation. *Solidity alone* must be regarded with caution in determining upon the propriety of the operation, as it generally indicates malignancy, or uterine disease. The presence of fluid being one of the essentials of the true ovarian disease, extirpation ought never to be attempted where it is not detected.

In arguing for the non-malignancy of the ovarian disease, I do not deny that encysted tumors may occasionally occur in connection with some of the varieties of scirrhus. They are sometimes combined in the testicle, but more frequently they occur in parts at a distance from each other. Not many days since, I saw a man suffering from cancer of the lip, who had a tumor near the nose presenting all the characters of cystic sarcoma, which had existed many years before the other disease appeared. I have notes of a similar case where the cancer was removed, and though the patient lived upwards of three years, the sarcomatous tumor never assumed a malignant appearance.

The simultaneous occurrence of these diseases, then, cannot be regarded as necessary conditions of each other, but merely as indications in the system of a tendency to develop morbid growths.

With respect to the malignant affections of the ovaries, it has been customary to class many diseases with them which have not the least analogy.

"It is impossible to conceive," says Dr. Seymour, "any signification more vague than the sense in which the term schirrus is used, when applied to diseases of the ovarium. If taken in the comprehensive meaning in which many authors have employed it, it represents equally the degeneration of the ovarium by age, and the enlargement of the ovarium by the deposition of any solid structure; and is often applied to that form of ovarian disease in which a portion of the tumor is solid, and a portion made up of cysts filled with secretions of various consistence."

Malignant disease of the ovary may generally be easily recognised by the mammæ or other organs being more or less implicated, and by the general cachectic condition of the constitution. The tumor is developed with much greater rapidity than the ordinary ovarian disease, presents an uneven surface, and consists principally of solid matter.

Much has been said respecting the proneness of both ovaries to be diseased. I have carefully examined the records of 29 cases of true dropsical ovaria, and found that there were but two in which the opposite ovary presented a *decidedly* abnormal character*. Where, however, the disease was malignant, both were affected in three cases out of four. As an objection, then, to extirpation, the complication is scarcely worthy of notice, seldom occurring where the operation would be considered justifiable.

I may here advert to an affection occasionally attacking the testicle, identical in structure to encysted disease of the ovary, and usually, but erroneously, designated hydatid testicle. This disease, like that of the ovary, is unaccompanied by any constitutional taint, being entirely local; and experience proves that it has several times been removed without the patients suffering any relapse.

Though several successful cases of extirpation have recently been published, many surgeons still regard the operation as too dangerous to be admitted into the routine of practice. To

* Cruveilhier, Anatomie Pathologique, cinq livraison.

* Removal of one ovary does not prevent the female becoming pregnant, for Dr. Chrysmar states that his patient, who was alive eight years after the operation, had in the interval given birth to a living child.

exhibit the amount of danger, Dr. Forbes has favoured us with the statistics of the operation, which are here chiefly noticed on account of their inaccuracy. He gives two tables, the first of which he says "displays those cases in which the diseased ovarium was actually extirpated," from which it appears that of 19 cases, 6 were fatal. This statement is given in the October number of his Review, and might be expected to contain the actual state of experience to within a few weeks of its publication. But what is the result? Mr. Walne's second successful case is omitted, although it was announced in the MEDICAL GAZETTE nearly three months previous to the publication of Dr. Forbes's tables; whilst among the fatal cases he has included one of uterine tubercle recorded by Dr. Clay*. With these corrections, the statistics previous to October last would be five fatal cases out of 19, or nearly 1 in 4 of those actually extirpated; an average which suffers no diminution from the four cases since recorded, one only of which (Mr. A. Key's) was fatal. Those, then, who test the propriety of an operation by statistics, must sanction this one. Few surgeons hesitate to perform amputation of the thigh, though Mr. Phillips, who has paid great attention to this branch of surgical practice, states that nearly two out of five die†. In the Parisian hospitals, the operation for hernia proves fatal in four cases out of seven‡, and in London the result is scarcely more favourable§. If a correct system of reporting was honestly carried out in the London and provincial hospitals, I believe lithotomy would not be found so successful as is generally stated—not to mention that it sometimes requires repetition‖.

With regard to the statistics of the operation, much reliance cannot be placed on them, until the cases are more numerous, and surgeons better agreed as to the nature of those warranting extirpation. Mr. Walne appears to select those only where the symptoms indicate few or no adhesions. Dr. Clay says, that "neither extent of adhesions, size of tumor, ascitic deposit, worn-down constitution, nor peritoneal inflammation, should prevent extirpation being performed." Having witnessed the operations on which this statement is founded, I can bear testimony to the amount of adhesions that may be overcome without occasioning any drawback to the patient's recovery. It must, however, be recollected, that the individuals were advanced in life, when inflammation is less likely to ensue, and that the adhesions, though extensive, were limited to the abdominal parietes, or to a few band-like attachments to the viscera. From the particulars of the fatal cases recorded by Dr. Chrysmar and Mr. Lizars, it appears doubtful whether the operation ought to be proceeded with when the diseased mass is found adhering to the viscera to any extent. I say found, because, before an exploratory incision has been made, we possess no means, except from the presence of ascitic fluid, which does not always exist, and mobility of the tumor, of ascertaining whether the connections of the disease will admit of its removal. Dr. Bright states, that when parietal adhesions are present, a slight crepitus, or the crackling feel of new leather, may be distinguished by making the parietes move gently over the tumor. This, I believe, depends on a small quantity of fluid between the adhesions, for when ascitic fluid has been absent I have not been able to detect it, though very extensive adhesions have been afterwards found.

The operation is perfectly justifiable when the patient's sufferings are such as to make life a burden to her; when the symptoms of structural lesion of any important organs are absent; and when the constitution is suffering merely from functional derangement consequent upon pressure of the tumor on the neighbouring parts. On the contrary, it ought not to be attempted when the well-known characteristics of malignant action are present; when the tumor is solid, uneven, and has been of rapid growth; when the glands

* In describing the disease, Dr. Clay remarks that it "presented very different appearances to encysted ovarian tumors; it was of a bright pink colour, hard as a piece of boiled liver, and composed of numerous small lobes with acute edges, similar to the lobes of the liver." * * * "There was but a small portion of the neck of the uterus and the os uteri that was not amalgamated with the substance of the tumor."—*Cases of Peritoneal Section*, p. 17.

† MEDICAL GAZETTE, Vol. i. 1840-1.

‡ Gaz. Méd. de Paris, and Edin. Med. Journ. Oct. 1843.

§ Of 18 cases operated on in Guy's Hospital, 9 were fatatal.—See Mr. Poland's Report.

‖ Mr. B. Cooper has operated three times on the same subject. Sir A. Cooper twice, if not a third time. Mr. Martineau and Mr. Rigby have both operated twice.—*Guy's Hospital Reports*, 1843.

in the vicinity are enlarged, and hard knots can be felt in different parts of the abdomen, or when there is distinct evidence of other organs being similarly implicated. Still less should it be undertaken until the surgeon, by varied and repeated examinations, is convinced of the existence of the disease. Nor must the rules which direct us as to the propriety of operating in other diseases, respecting the condition of the sexual organs, and the fitness of the patient's constitution to undergo so severe an operation, be overlooked. Considering that extirpation of the ovary is still in its infancy, there is every probability that as our experience increases it will, under proper restrictions, prove as successful as lithotomy. The surgeon will be thus enabled to restore to health individuals who must otherwise have dragged on a miserable existence for a considerable period. A glorious monument will be raised to the healing art through the improvement of surgical knowledge; and that boldness ~~of surgical~~ energy, which the timid were but too ready prematurely to condemn, will be ultimately sanctioned by an enlightened and applauding profession.

5, Crescent, Salford,
Nov. 16, 1843.