CASE
OF
EXTIRPATION OF AN OVARIAN
CYST,

TERMINATING FATALLY.

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IN undertaking the operation for the extirpation of an ovarian cyst, the result of which I consider it right to bring before the notice of the profession, I wish it to be understood that I did not seek the opportunity with any hasty view, either that I should, on the one hand, by a successful result, tend to establish the propriety of the operation, or on the other, by failure, be deterred from further trial; but urged by the patient herself, I thought it justifiable to comply with her request, after having made myself thoroughly acquainted with the statistical results of the operations which had already been performed. There can be no doubt, though some may estimate the risk of extensively laying open the abdomen at a much lower rate than others, that to expose the important viscera therein contained, and to subject so large a surface of a serous

membrane to even the degree of increased action necessary to its future reparation, must ever render the operation one of the greatest danger; super-added to which, it is to be remembered, that the sudden removal of the great weight to which the organs have been so long subjected, must in itself much interfere with some of the most important functions of the animal economy. I duly considered, therefore, and explained to my patient, most fully, the great hazard which she, I may say, solicited—but as she persevered in her determination, and as I had the proof of the possibility, at least, if not of the probability, of her recovery, in the successful termination of three out of four operations by Mr. Walne, and of two out of four by the minor operation by Mr. West, and one by Dr. Frederick Bird, I consented, notwithstanding my conviction of the danger, to submit her to the operation, fully convinced that any means short of the removal of the cyst would prove futile. I had, however, as yet scarcely determined whether to perform the major or the minor operation; but upon a further investigation of the subject, I came to the conclusion, that the removal of the cyst, with its contents, by the larger opening through the abdominal parietes, was safer than the withdrawal of the collapsed cyst through the small aperture, which necessarily leads to a much more protracted manipulation, and consequent liability to future inflammation.

I considered it right, therefore, in justice to my patient, to consult with Mr. Walne, who had already

been successful in three cases by the major operation, and from whom I received, in the most friendly manner, an account of the mode which he had adopted, both as to previous preparation, and the details in the stages of the operation; and, by his advice, requested my friend, Dr. Blundell, to examine my patient, that he might form an opinion as to the fitness of the case for the removal of the tumour, a precaution which Mr. Walne had taken in all his cases. Dr. Blundell kindly complied with my request, and reported that he could discover no good reason against the performance of the operation, for that after the most minute examination, he had reason to believe the cyst was free from adhesions, and that every circumstance connected with the condition of the abdominal cavity was favourable to the procedure.

CASE.

Sarah Stannard, æt. 32. A moderately muscular made woman, having dark hair and grey eyes, temperate in her habits, and in her general appearance healthy. The catamenia appeared at the age of 16, but abnormally, as to their duration, periods of recurrence, and quantity.

She married four years ago, but has never been pregnant.

Her attention was first drawn to the complaint, under which she now suffers, five years ago, from her friends accusing her of being pregnant; and the tumour at this time had acquired so large a size,

that she could not discover from which side it had commenced. She does not recollect that one side was ever more swollen than the other. Eleven months after she noticed the swelling, she was admitted into Guy's Hospital, to have the tumour extracted, which, however, was not performed, as the operation was unsuccessful in a case at that time in the hospital. She consequently went out, and a month afterwards married, but at the expiration of six months her general health became so much impaired from the rapid accumulation of fluid, that she applied to me to perform paracentesis abdominis; but a day or two before her admission into the hospital for the purpose, having taken, by the advice of a friend, a glass of gin, she passed a gallon of urine during the night, and the increased flow continued for ten days afterwards, although in diminished quantities; so that at the end of that period no vestige could be discovered of the original tumour. Many months, however, had not elapsed before her abdomen again enlarged, and continued to do so for eighteen months, when she again passed a large quantity of urine, and the swelling was a second time dispersed, but not so completely as on the former occasion. Twenty months after this last favourable event, the tumour having acquired its original bulk, paracentesis abdominis was performed, and three gallons of a straw-coloured fluid were drawn off. She recovered from this operation without a bad symptom. Seven months ago she was again tapped, an interval of thirteen months

having elapsed between the two operations. On this occasion she likewise convalesced without anything untoward having occurred ; but the fluid was of a darker colour, and thicker. It does not appear that she has ever had symptoms which would induce the belief that she had suffered from peritonitis, so as to cause any adhesions.

Present symptoms.—Her general health is good, although she suffers occasionally from flatulence, and slight symptoms of nausea : her appetite is excellent ; the bowels are regular, and she passes about three pints of urine in the twenty-four hours, of a natural colour, sp. gr. 1·020, slightly acid, and not coagulable by heat or nitric acid. Pulse 85, soft and full. She sleeps tolerably well, although, from the large size of the tumour, she is incapable of lying on either side for any great length of time.

The abdomen, to the right, is larger than at the full period of utero-gestation, and presents an oval form, and on passing the hand over it, an irregular mass, of the size of a saucer, is felt mid-way between the ensiform cartilage and umbilicus, composed probably of compound cells. Over every part of the abdomen there is dullness of sound on percussion ; and fluctuation is more than usually distinct in every region of the abdomen. The circumference of the abdomen, just above the umbilicus, measures 3 ft. 4½ in., and the length, from the ensiform cartilage to the pubis, 1 ft. 8 in.

Dr. Blundell at this time saw the patient, and after a careful examination, gave it as his opinion

that the case was a favourable one for the removal of the tumour. The operation was therefore decided upon.

Operation.—The temperature of the room having been raised to 72 degrees F., the patient was seated in a convenient chair, well supported by pillows, and an eight-tailed bandage placed behind her. An incision was made below the umbilicus, in the median line, between three and four inches in length; and the peritoneal cavity being opened to a small extent, a little ascitic fluid escaped. The finger was introduced, and passed around the opening, and a few slight adhesions broken down. An incision was now made through the integuments, commencing three inches below the ensiform cartilage, and extending to the upper part of the first incision, carefully avoiding the umbilicus; and the sub-cutaneous structures were then divided by a probe-pointed bistoury, cutting from below upwards, the finger being used as a director. The wound was also enlarged towards the pubis. Very trifling hæmorrhage ensued; and the tumour, now clearly exposed, slowly and steadily advanced, its substance being supported very carefully by Mr. Law, whilst Dr. Noyes kept the integuments in close contact with it posteriorly, in order to avoid unnecessary exposure of the intestines, or other viscera. A broad and thin pedicle, connected with the right ovary, was now fairly brought into view, and a strong needle fixed in a handle, and armed with double silk, was passed through its centre, and both ligatures

being securely tied, it was divided between the ligature and cyst, and the mass removed. Dr. Cape having examined the remaining ovary, and pronounced it healthy, the wound was closed by about fifteen interrupted sutures; and strips of adhesive plaister being applied, and the roller adjusted, she was removed to bed.

The patient bore the operation with uncommon fortitude, but there being some slight attempt to vomit during the application of the sutures, half a drachm of Battley's solution, in camphor-water, was given. Pulse before the operation, 87; after removal to bed, 96.

Half-past 4 P.M.—She was troubled with flatulence just after the operation, but about 2 o'clock fell asleep, and continued so for about half an hour. She now complains of pain in the pubic region, with a desire to micturate; in consequence of which the catheter was introduced, and ʒiii of urine drawn off. Ordered—morphiæ hydrochlor. gr. fs.

Nov. 4th, half-past 5 A.M. Thermometer 69 F.—Dozing at intervals; less flatulency; thirst rather increased; tongue clean and moist; skin perspirable; no sickness; pulse 116, soft and full; slight abdominal tenderness in the right side; countenance tranquil; urine drawn off to about ʒiv , of an orange colour. Ordered—liq. opii sedat. mxxv .

Nov. 5th, 5 A.M. Thermometer 70 F.—Complains of nausea, with great eructation; abdomen more tympanitic, but there is no pain in any part on

pressure; skin perspirable; pulse 130, smaller and less compressible; countenance more anxious; urine drawn off to ʒix . No complaint of tightness of the roller, which, however, it was thought advisable to loosen. As it was supposed peritonitis had supervened, fomentations were ordered, a warm gruel injection, and a pill of calomel and opium every three hours.

Nov. 6th, 5 A.M. Thermometer 69.—Another attack of eructation: skin hot, and not perspirable; pulse 126, weak; countenance rather more distressed; no abdominal tenderness; tongue clean and moist; no rigors. Catheter introduced, but little urine drawn off, having passed it herself twice.

4 P.M. Temperature of the room 69 F.—Has slept well nearly the whole time since the administration of an opiate at 11 A.M. Abdomen less tense; no motion yet; very little eructation; skin cool; pulse as before; has passed about ʒviiij of urine, clear, and of an orange colour.

Nov. 7th, 4 A.M.—The pulse has continued quicker, with diminution of power; nausea, but no absolute sickness; great distress of countenance, and increased thirst; some degree of *subsultus tendinum* is now present, with general tremors; skin perspirable; moans incessantly: ordered small quantities of wine-and-water.

5 P.M.—The vomiting has returned; no abdominal pain, and less tympanitis; pulse 120, soft and full. Ordered—emplast. cantharid., scrobiculo cordis, and liq. opii sedat. mxxx . A glyster given

during the day has returned without fæculent matter.

Nov. 8th, 8 A.M.—Had constant sickness the early part of the morning, but has now less; the skin is perspirable; pulse 120, weak; urine passes freely, bowels slightly open. Ordered soda-water and brandy, and glysters of strong beef-tea.

7 P.M.—The wound was dressed this morning; its edges were well in apposition, and there was no irritation about the sutures. She is now suffering from general abdominal tenderness, increased on pressure, especially in the pubic region, and there is a desire to micturate; abdomen tympanitic; constant nausea; pulse 140, and small. Ordered fomentations, and a pill with calomel and opium.

Nov. 9th.—There is no amelioration; she gradually sunk during the day, and death took place at 5 A.M., on the 10th.

Description of the Tumour.—The cyst was of an oval form, and at its superior part, anteriorly, was a collection of compound cells. This was the mass felt before the operation. The weight of the cyst was 32 lbs.

Post-mortem examination, 30 hours after death :—

Abdomen.—On opening this cavity, the small intestines were seen highly distended, and wanting in their usual shining character, from the effusion of a thin layer of albuminous fluid. There were two long bands connecting the small intestines with the abdominal parietes on the right side: these appeared of old standing, probably some years. The intes-

tines were slightly glued together by lymph of an organizable kind, and in the interspaces formed by these adhesions there was a small quantity of puriform fluid. In the right iliac fossa, the adhesion of different parts had formed a kind of cyst, which enclosed about an ounce of sanguineous fluid, probably the effusion from the divided vessels of the peduncle. In close proximity, there was a coagulum of blood about the size of a crown piece, enclosed between two layers of membrane.

The uterus was large, tumid, and of a dark colour; anteriorly, at its superior part, there was a soft fungoid tubercle, of the size of a walnut. This was examined under the microscope, by Mr. Reynolds, and pronounced to be highly malignant. A small piece of omentum, adherent to the peduncle, was enclosed in the ligature.

There was a small quantity of fluid in the abdominal cavity, which appeared of rather an organizable kind. The peritoneum covering the stomach was not inflamed.

Remarks.—From the history of this case, as well as from the *post-mortem* examination, it appears manifest that this patient died from that insidious form of peritonitis which so frequently follows lithotomy, or any serious operation which interferes with the functions of the important viscera of the abdomen.

The mere incision into the peritoneum is not, in my opinion, to be considered as the exciting cause of inflammation, so much as the return of the pedicle, with its tightly-bound ligatures, into the cavity

of the abdomen, which must necessarily act as a foreign body.

The incision through the peritoneum I regard as the less dangerous, from the change this membrane must have undergone in function, if not in structure, from the long-continued pressure and weight of the ovarian tumour. It may be supposed, that in this case the implication of the small portion of the omentum, within the ligature, may have led to the peritonitis. But the proof that this was not the cause, was the absence of inflammation in the continuous omentum, as well as from the fact, that the most extensive inflammation proceeded from the broad ligament to the uterus, which was almost in a sloughing state. Besides which, the untoward symptoms did not supervene until forty hours after the operation—a very unusual circumstance when inflammation arises from constricted omentum, as sickness and vomiting commence almost immediately.

An interesting complication connected with this case was the existence of a fungoid growth in the uterus, as this involves the question which has been mooted by several of the most eminent pathologists of the present day, whether these compound cysts are, or not, malignant; and if they be, as believed by Dr. Bright, Dr. Hodgkin, and Mr. T. King, time must elapse before any correct deductions can be drawn from the cases in which it has been supposed that the operation has proved successful.

There can be no doubt but that malignant growths in other viscera frequently co-exist with ovarian

cysts, and also that sometimes the small ovarian cysts themselves assume the cerebriform appearance. Another circumstance, which must always render the ultimate success of the operation doubtful, is the probable presence of a similar disease in the other ovary. On these two points I have attempted to obtain some statistical information from the records of *post-mortem* examinations at Guy's Hospital for several years past.

Of fifty cases examined, I find that eight had malignant disease in some other part of the body, and that in thirteen, both ovaries were affected, and that the left ovary was more frequently diseased than the right. It has generally been supposed that women who have never been tapped are the most favourable cases for the extirpation of the ovarium. Without denying for one instant that the constitution in such persons is in a much more favourable state for establishing a reparative process, than in those who have been tapped, still I think it becomes a very important question, whether they ought ever to be submitted to an operation so pregnant with danger, until they can no longer sustain the inconvenience arising from the weight and pressure of the accumulated fluid. The question however is different, when a patient has once submitted to the operation of paracentesis abdominis, for it will be found that a large majority of females die within four years after the operation, and that that period is passed in intervals of uneasiness and misery, from the necessity of repeated tapping.