C A S E
OF THE
REMOVAL OF A DISEASED OVARIUM,
TERMINATING FATALLY ON THE SEVENTH DAY
AFTER THE OPERATION.

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AFTER the numerous successful cases of the removal of diseased ovaria by operation, which have lately appeared in the Medical Journals, it is not a very grateful task to record one, the issue of which has been fatal. But in the present state of our knowledge and experience of this operation it is an undoubted duty, from which I do not shrink, and I shall therefore give the details with strict fidelity, nearly *verbatim* from the notes which I made of the symptoms and treatment of the case during its progress.

I first saw the patient with Dr. Houseman about three months before the operation. She was then extremely feeble and emaciated, with the abdomen very large and tense.

In the beginning of August I made the following

short history of her case nearly from her own dictation :—

Mary Nicholson, æt. 29, married. Had enjoyed good health till her marriage, two years ago—except that for about two years previously she had frequent uterine discharge, sometimes of fluid, occasionally of clotted blood, not attended with pain or abdominal enlargement. Soon after her marriage she suffered much pain at the stomach, vomiting, headache, and constant uterine discharge, often clotted. About three months after marriage a very copious or even profuse hæmorrhage took place. She cannot tell whether abortion was the cause, but there had not yet been any abdominal enlargement.

About six months after marriage she had a severe attack of pain in the loins, which lasted four hours : soon afterwards she first felt a swelling in the pubic region, which presently extended to the right side, when a moveable tumour about the size of an orange could be distinguished. The tumour from this time rapidly enlarged, and was attended with uterine discharge nearly constant, being interrupted for a day or two only, or occasionally a week.

At the end of nine months from marriage she had uterine pain, and a medical gentleman in attendance supposed her to be in labour. The pains lasted for about a week, with intervals, during which time delivery was expected to take place. After this time they gradually ceased, but she became larger, suffered much pain and difficulty in

passing urine, and her strength rapidly failed her. From this time she gradually became more distended. Her strength gave way very much, and she had frequent clotted discharges. About two months ago mercury had been prescribed by one gentleman, which affected the mouth severely; and by another gentleman the abdomen was tapped; little else than blood in moderate quantity was discharged, but a poultice being applied, a daily discharge for about a fortnight, of nearly a quart of dark-coloured fluid, escaped from the orifice. The wound then healed, but she has been much less in size, and her general health has greatly improved. Since the operation no uterine discharge has taken place.

Present condition.—Strength much increased, and has no symptoms of constitutional disorder; tongue clean, appetite good, bowels regular, urine free and natural, is able to sit up three hours in the day, pulse 76, soft, occasional œdema of the legs. The abdomen is about as large as at the full period of utero-gestation; fluctuation in one or two situations; but generally the tumour is firm, and feels as if divided into two separate masses. She has no pain or tenderness in any part of abdomen, except at one point towards the right iliac region, where the original moveable swelling was first felt. No alteration in the os, or cervix uteri can be discovered, and, as far as can be ascertained by examination *per vaginam*, the organ is in a natural condition.

For two days previous to the operation she was

kept quiet in bed, and desired to live entirely on beef-tea. On the morning of the day before the operation, a dose of castor oil was given, which operated well, and a gruel enema was exhibited two hours before it took place. The weather was very hot, and the temperature of the room had been brought up to 76 degrees.

September 3rd, at 11 A.M.—The operation was performed with the assistance of Mr. Heath, Mr. Frost, Dr. Embleton, Mr. Taylor, and Mr. E. H. Greenhow.

The incision reached from a little below the ensiform cartilage to near the pubis. The peritoneum was opened a little below the umbilicus, near the scar left by the trocar when she was tapped, in the expectation that at this part some adhesions would probably exist. This was the case, but they were easily separated. The incision was completed upwards and downwards with a bent bistoury through the peritoneum, directed by two fingers. Several adhesions existed in different parts of the tumour, which now became fully exposed. The principal one however was to the omentum, which was spread over the upper part of the right side of the tumour, and was closely united to it. This adhesion was divided with the bistoury, and then the tumour, with some effort from its great size and weight, was raised from its situation. Being carefully supported by Mr. Frost, while Mr. Heath closed the wound as it passed out, and retained the intestines in their place, I was enabled to pass double ligatures

through the pedicle, and having firmly tied them, divided it close to the tumour, which was thus liberated from its attachments, and removed. Two arteries bled freely, one in the divided omentum and the other in the pedicle ; these being carefully secured, the wound was brought together by sutures and adhesive plaister, compresses of lint and linen were placed over the abdomen, and a many-tailed bandage which had been placed under the patient in readiness, secured the whole. The operation was well borne by the patient, though she vomited towards the end several times. This however she attributed to some spirits of ammonia, and brandy-and-water, occasionally given to obviate faintness, which she says always made her vomit. The pulse remained firm, and within half an hour from being placed on the table she was again laid in bed. The quantity of blood lost did not exceed $\frac{3}{4}$ vi. After being put to bed she complained much of pain and smarting of the abdomen. Mur. morph. gr. fs. in camphor mixture was given, which induced a tendency to sleep. The pulse varied from 72 to 90. After half an hour, the pain continuing severe, the opiate was repeated. The strictest injunctions as to quietude and diet were given, the latter being confined to barley and toast water, and she was left under the care of her attendants, my pupil remaining to watch and report progress.

At 9 P.M. she remained easy, with a short interval of pain in the abdomen at about 6 o'clock, when a dose of the opiate had been given. No urine had

been passed, though she felt a desire to do it. A catheter was introduced, and about 3xii of natural urine discharged, with relief. The countenance was good, tongue clean, skin moist, pulse much quickened, 134, but soft and expansive. Has taken the fluid allowed, in small quantities from time to time. Some oozing of bloody serum has escaped beneath the lower part of the bandage. The opiate to be repeated if restless.

4th, 10 A.M.—Passed a quiet night till 6 o'clock, having had much comfortable sleep at intervals. She then complained of abdominal pain and restlessness. About 3xii of urine, which has become somewhat turbid, was discharged spontaneously. The opiate was again given with almost immediate relief, and she has since had some calm and refreshing sleep; tongue clean but rather dry, skin comfortably warm and moist, pulse 124, soft—some thirst.

9 P.M.—Had again some abdominal uneasiness at 7 o'clock, with slight tendency to vomit. No stool since operation. Opiate to be repeated if necessary, and ol. ricini 3ii in mint-water to be taken in the morning if no stool should take place.

5th, 6 A.M.—Remained easy till half-past 12 o'clock, when pain in the abdomen took place, with vomiting, which has continued up to this time. Has passed urine twice pretty freely. She now complains of much pain and tenderness of abdomen, with tendency to vomit. Face a little flushed. Tongue clean, rather dry. More thirst—pulse 124—

some hardness—no stool.—V. S. ad 3vi,—after which she vomited again: pulse 124, softer, ol. ricini given, but immediately rejected, after which she fell into a calm sleep. Gruel enema to be given when she awakes. In my absence an urgent message was sent at about 1 o'clock, in consequence of much pain and restlessness, with frequent vomiting, and urgent desire to pass something from the bowels. When I got there I found her complaining greatly of these symptoms. No stool, but water had been repeatedly passed. Thirst, tongue red and rather dry, pulse 120, firm—V. S. ad 3viii, which decidedly affected the force of the pulse. A gruel enema was again thrown into the bowels, after which she became somewhat easier, but the desire to evacuate the bowels was very urgent. The pain and sickness were considerably less urgent after the bleeding, and the pulse softer, though of equal quickness. A tallow candle was introduced into the rectum as a suppository, with the hope of exciting alvine action, ten grains of ox-gall given, which soon re-excited vomiting, when the muriate of morphia was exhibited.

7 P.M.—An enema containing ol. terebinth 3i was injected, and one drop of creosote in mint-water was given. No action of the bowels took place, and the enema was retained,—another candle suppository was passed into the rectum.

6th, 10 A.M.—Much improved in appearance. Has had occasional griping in the night, but has slept occasionally. Vomiting continues, and some of

the ol. terebinth has been rejected from the stomach. No stool—has passed urine several times. Tongue moist and less red, pulse 116, soft and expansive. At 4 A.M. had a second dose of anodyne mixture, having become restless. At 6 the turpentine enema was given. Has taken only cold water in small quantities, but it has soon been vomited. Bandages were removed, but as there was no discharge from the wound, and the plaisters remained dry, they were not disturbed. Abdomen by no means tumid, and she complained very slightly of soreness. To have small quantities of weak animal broth, and an occasional effervescing draught.

3 P.M.—Has had a return of pain of abdomen for the last hour, which is very severe. Countenance somewhat flushed. No stool, still vomits everything, passes urine frequently, more thirst, tongue remains moist, pulse 120, and more resisting—V. S. ad ̄ viii—considerably relieved after bleeding, pulse softer, but of the same frequency. A bag of hot bran to be applied to abdomen. Muriate of morphia $\frac{1}{3}$ of a grain, and a gruel enema, to be given at 6 o'clock.

9 P.M.—The enema had not been given in consequence of sleeping at the time of its intended exhibition. A flexible œsophagus tube was carefully passed *per rectum* to a distance of about two feet, but neither fæces nor gas escaped through it. An enema with ol. terebinth was then injected, which remained at the conclusion of the visit. It seemed however to produce a feeling of comfort, and the

vomiting was less urgent. To take calomel, gr. iv, opium gr. ii, directly, and half the quantity every four hours if pain should occur, or the first dose be vomited. To take occasionally a little effervescing medicine. To rub on lower part of abdomen, if pain should be severe, a portion of ointment of equal parts of lard and ext. belladonnæ, and at 6 A.M. to have the injection repeated, if no action of the bowels should occur.

7th, at 6 A.M.—An enema was given, and a small dose of the following mixture:—R. Magnes. sulph. ʒi, magnes. carbon. ʒi, aquæ menthæ ʒviii, tinct. hyoscyami ʒfs. m.

10 A.M.—Soon after my last visit, copious discharge from the bowels took place, consisting of the enema, with much fæculent matter of natural appearance in small masses; much fatigued with the necessary changes of linen, &c., but greatly relieved; free from pain, though still retching; tongue moister, pulse soft, 130, countenance improved. To have mild articles of diet, and an occasional dose of effervescing mixture.

9 P.M.—Has remained easier, but not without occasional pain. Vomiting less frequent. No stool, abdomen less tense. No oozing of fluid from wound, even where the ligature passes through. Pulse 150, more feeble, but distinct. Skin warm, and bedewed with perspiration. Countenance more sunk, but little tenderness of abdomen—opium gr. ii, immediately—if vomited, to be repeated—and if restless, gr. i to be given at the end of two hours. Small quan-

tities of chicken broth to be given occasionally. No improvement took place after the last report; the patient gradually got worse, and died at 2 A.M. on the 9th.

Post-mortem examination fifteen hours after death.

—On removing the bandages and exposing the abdomen, which was much distended, the wound was found nearly healed throughout. Its length was now about seven inches, commencing about four inches from the ensiform cartilage, and terminating at nearly the same distance from the pubis. Its extremities certainly appeared much more distant from these points than at the time of the operation. Already the putrefactive odour was extremely offensive. On laying open the abdomen, the omentum presented itself, adhering to the intestines, and its folds matted together. It was of a dark bluish green colour, spotted with small portions of coagula. Its folds were easily separated. The intestines were much distended with flatus, and contained a quantity of yellowish fluid resembling fæces mixed with the fluids injected into the bowels. The smell of turpentine was discernible. General, but not very strong adhesions existed between the folds of intestine, as well as to the walls of the abdomen. On the latter could also be traced marks of the adhesions which had subsisted between them and the tumour before its removal, denoted by small masses of coagulated blood and abrasions of the peritoneal covering. The general colour of the peritoneum, both lining the parietes of the abdomen and covering the

intestines, was a dusky blue, with here and there a patch of redder hue, but nowhere was there any appearance of florid vascularity. The effusion of lymph which constituted the medium of adhesion between the intestines was very inconsiderable, and a very little serous fluid (not exceeding 3i) was found in the left side of the abdominal cavity. The coats of the intestines were for the most part pale and flaccid, and very thin; the mucous membrane especially, both in the stomach and throughout the intestines, had a blanched appearance, with the following exceptions:—At the pylorus was a distinct inflammatory blush, which extended two or three inches into the duodenum, gradually diminishing in intensity. In this situation the mucous membrane was softened, and exhibited numerous points of ulceration. Two or three patches of similar vascularity and softening showed themselves at long intervals in the course of the small intestines, but without any ulceration. Above the ileo-colic valve the increased vascularity was most distinct, and in the course of the ileum the mucous membrane was distinctly softened, and easily separable with the nail. The spleen and liver were natural, and their peritoneal covering healthy. The gall-bladder was full of bile. The kidneys were somewhat changed in appearance, their structure being unusually dense and indistinct when laid open, with a slight granular appearance. The bladder contained two or three ounces of healthy urine. On examining the pedicle to which the tumour had been attached, it

proved to be the left broad ligament of the uterus ; and it thus appeared that the left ovarium had been the seat of the disease, and that, after attaining a certain size, it had passed over to the opposite iliac region, the uterus at the same time making a semi-turn on its own axis, so as to place its dorsum in the anterior position. A small quantity of coagulated blood was found in the pubic region, resting on the surface of the uterus and bladder. Some portion was also found between the former organ and the rectum. The right ovarium and Fallopian tube were healthy, the left Fallopian tube was somewhat enlarged and vascular. The uterus was also healthy, but its cavity was lined with a fine vascular membrane, resembling the decidua, which gradually disappeared towards the cervix uteri.

The tumour was of an oval figure, with some irregularities on the surface. The lower portion, which had rested in the pelvis, was somewhat narrower than the rest of the tumour. The general colour resembled that of the skin, with some bluish and red patches, and the surface was smooth and polished. With the exception of one or two small cysts, containing a few ounces of yellow fluid, it was firm and solid in its character, and was the size of the uterus before delivery. Its weight was 12 lbs. 7 oz. avoirdupois. In its widest circumference it measured 2 ft. 8 in.; around the middle, 2 ft. 1 in.; and in a vertical direction, 2 ft. 2½ in.

The general structure is cellular, but in many parts it is very dense ; a number of small cells or cysts,

however, pervade its substance, besides the larger ones already mentioned. One of these cells, about the size of a walnut, near the centre, contained a brownish pulpy substance, resembling thickened pus. The centre of the mass, for the space of several inches, was of a bright red colour, as if an active circulation had been carried on in the interior. The largest cyst, at the upper part of the tumour, was white and glistening in its interior, resembling the ordinary character of ovarian cysts; but the dense solidity of the general mass, and vascularity of the interior, distinguish this tumour from the other instances of ovarian disease which have come under my notice.

It is very probable that, had the life of the patient been prolonged without the removal of the tumour, several of the cells might have been gradually enlarged, until they expanded into large cysts similar to those which usually characterize ovarian disease. If this supposition be correct, the cellular structure of the tumour, even in its denser parts, may be looked upon as a congeries of undeveloped or rudimentary cysts.

Remarks.

If I were required to offer an opinion as to the bearing of this case on the general question of the expediency of this operation in favourable cases, I do not think that it offers any very strong argument against it. The previous history of the patient, her very reduced condition, and the evident existence of peritoneal inflammation at a recent period, were perhaps arguments against the probability of a favourable issue. But I cannot but believe that her convalescence, after the inflammatory attack, was very nearly established, and that, but for the diseased condition of the pyloric extremity of the stomach, her recovery would have been effected. Nor does it appear probable, that the pathological state of the pylorus was other than an accidental circumstance in the history of the case, though assuredly it had a most essential influence over the result. But, after all, if the annals of this operation be truly written, and we are in possession of records of all the *unsuccessful cases* which have occurred, not less than those which have had fortunate results, the average is still largely in favour of the operation ; more so indeed than in most of the great operations of surgery, notwithstanding the undeniable hazards with which it is attended.