

## ABSTRACT

OF A

## CLINICAL LECTURE

ON

## ABDOMINAL SURGERY.

BY DONALD MACLEAN, M. D., Professor of Surgery and Clinical Surgery in the University of Michigan REPORTED BY WARREN B. SEXTON.

Gentlemen: Two weeks ago to-day the patient before you walked into this amphitheatre and we then made a careful examination of an abdominal tumor, which from its appearance, situation, and history, we supposed or rather suspected to be ovarian.

Two days after that examination, she was operated upon here in your presence. It was then found necessary to remove her left kidney, and both her ovaries, together with a large mass of the great omentum. The tumor which we had supposed to be ovarian, proved to be the left kidney, enormously enlarged and cystic. Both ovaries were also cystic. In addition to this the uterus presented marked evidences of being pregnant.\* In performing this operation it was found necessary to leave a large number of ligatures (cut short) in the peritoneal cavity.

\*Ulterior developments showed that the uterus was not pregnant, and that serious complications arose which will be given in the full

report of the case.

To-day is the fourteenth day and I am very glad to be able to present the patient to you in an advanced stage of convalescence; her wound healed, the stitches removed, the secretions natural, the temperature normal, the countenance bright, in short, every indication of a speedy and complete recovery. You will remember that our patient is a married woman, aged

twenty-seven, the mother of two living children.

Before going further let me impress upon you the fact, that a full and precise diagnosis in this case was not possible until the abdominal cavity was opened, and even then the difficulties were very great indeed. We had to proceed with an unusual degree of hesitancy, cautiously feeling our way through an intricate tangle of abnormal structures, the precise nature and relations of which, it was well nigh impossible to unravel. The operation lasted, I am told about thirty minutes, and the patient's appearance now furnishes the most satisfactory evidence, that all the dangers and risks inherent in such an oper-

ation must have been safely avoided or provided for.

Her record shows one serious drawback, which may be met in the healing of the wound in any surgical operation. At times there were sudden elevations of temperature, and other indications that there was absorption of septic material, or that a pus cavity was in process of formation. Her tongue was dry, rough, and red, and she was restless and uncomfortable. In abdominal surgery these are unfavorable indications. The cause of this disturbance was carefully sought after, and it was found to be due to the formation of small abscesses along the incision, at the seat of the silk sutures used to close the wound. This occurrence is an unusual one in my experience, in the healing process of abdominal incisions. Whether it is due to some defect in the mode of preparing the silk used, or to the effect of the fluid of the cyst, I cannot say.

As I have remarked a large number of ligatures were left in the peritoneal cavity, but by this time they are all enveloped in a thick deposit of inflammatory new-formation. Being thus protected they will not be the source of any trouble. I have never had any suppuration at the seat of ligatures. All the postmortem examinations that I have had the unfortunate privilege to make, showed the ligatures covered up and com-

pletely encysted.

The other two abdominal operations which you have witnessed this term were not so desperate. Although the one previous to this was in some respects less favorable for recovery. Your notes of the case will show her to be a woman aged sixty-eight years, feeble and emaciated. The tumor weighed forty-five pounds. Moreover, there existed adhesions that necessitated the removal of a great portion of the omentum. The hæmorrhage from surfaces where firm bands were divided was free and obstinate. A number of ligatures had to be used and there were

in all thirteen silk ligatures left in the peritoneal cavity. The operation was on Monday; on the following Saturday the patient was brought before you and the sutures removed, and one week from that day she left the hospital for her home, cured.

The other case, Mrs. M., aged fifty-three years, was a very favorable one. The tumor was a simple ovarian cyst, moderately large, and free from adhesions. The peritoneal cavity was not open more than eight minutes. She was returned to her room in twenty minutes from the time she left it, and returned home

cured in two weeks from the date of the operation.

Let our review of this class of operations go back farther. Within fifteen months previous to the first of these later cases. and within the recollection of many of you who are now present as students, there have been four other ovarian tumors removed in this amphitheatre, under similar circumstances, exposed to the same atmospheric impurities and septic dangers, as the cases just enumerated. Not one of the four could be regarded as a favorable case for operation. Three of the patients had reached the age when the reparative processes of nature have lost their force and activity. They were debilitated and their strength so exhausted and so enfeebled that a surgeon more jealous of his statistics and reputation, than of the interests of his patients, would not have operated. Yet all three cases got well, making very rapid, and I may say, brilliant recoveries. The other case was quite remarkable for several particulars. The patient was a young woman; her strength had not yet become impaired; she was strong and full of hope and courage. The tumor was large, and was growing rapidly, but the one remarkable complication in her case, was a large gravid uterus, the patient being in the seventh month of pregnancy. In consequence of the rapid increase of the tumor and the intense suffering which it occasioned, there was no choice but to operate at the earliest possible moment after the patient presented herself at this clinique. The operation in every particular passed off satisfactorily. It was done rapidly, but gently, and safely. The peritoneal cavity was open not longer than fifteen minutes. The uterus was handled with the utmost gentleness and received the least possible amount of manipulation, nevertheless, labor pains came on in a few hours and the woman sank under the combined shock of the operation and the miscarriage.

This completes the list of ovariotomies performed in this clinique and hospital during the time specified, making seven operations; six recoveries and one death. The latter clearly

independent of anything like septic influences.

Two weeks ago I operated upon Mrs. O., at Otisville, in this State, in her own house, and amidst surroundings the most unfavorable and discouraging that could possibly be imagined

The patient was sixty three years old. The tumor was large, multilocular, extensively adherent, had been tapped and the cysts contained enormous quantities of purulent fluid and masses of inflammatory lympth. I never had the privilege of seeing Mrs. O. until the day of operation (October 16, 1884), and then I had only two hours to spend there, before the train was due by which I returned home. Having performed the operation as carefully and completely as if I had the whole day before me, I left her in the care of Dr. J. D. Laing, from whom I received daily reports as to her symptoms and condition for two weeks, at the end of which time he pronounced her cured. Being financially poor, and physically in an advanced stage of exhaustion, her removal from her bed or her home to any more comportable or healthy surroundings, much as that was to be desired, was simply impossible. Not only so, but the patient had remained firm and immovable in her determination to be operated upon in her own home or not at all, We had, therefore, no choice but to operate where we did and as we did, or else leave the unfortunate patient to her miserable fate.

Again on the 30th of October last, I performed ovariotomy upon Mrs. W., of Manchester, in this state, under circumstances, which, if we except the age of the patient, were more unfavorable and deplorable than those of the case just described. The patient, Mrs. W., is thirty-eight years old. Her tumor had grown rapidly, having commenced, so far as could be discovered, just ten months before I saw her. She also was a poor woman, and all her surroundings accordingly unsuitable for the safe and satisfactory performance of any surgical procedure. She was much emaciated and greatly exhausted. Her tumor, along with the ascitic fluid withdrawn from the abdominal cavity at the time of the operation, weighed one hundred and three pounds. Owing to the enormous distension of her abdominal cavity, and pressure upon the thoracic viscera, she was unable to stand on her feet, lie on her back, or turn over in bed. Her removal, therefore, to any more favorable place for operation, desirable as it might have been, was a physical impossibility. Here we had once more to choose between operating there and then or abandoning her to her fate. chose the former, and the result has demonstrated the correctness of our course. The patient has made a rapid and most satisfactory recovery. Before leaving this case, I should mention the fact that the tumor was multilocular, and some of the larger cysts were filled with a semi-solid mass presenting a striking resemblance to soft soap. I will also mention the fact that the case had not been seen by me before the time of the operation, nor have I seen her since. The after-treatment was placed in the care of her family physician, Dr. A. C. Taylor, of Manchester, assisted by my brother, Dr. A. M. Maclean, and

then by Mr. Julius Noer, a member of this class, who was sent from here to remain a few days by the patient's bedside.

You will note that we have now described five cases operated upon within the month of October last. Three here in your presence, including the case of extirpation of kidney, and two in remote country villages. All have made rapid recoveries.

Going three or four months farther back in the retrospect, I have to record three cases operated upon by myself in the public amphitheatre of Harper Hospital, Detroit, during a time when, to my certain knowledge, erysipelas, diffuse suppuration and diphtheria existed in the institution. Three cases, which as regards the character and relations of the tumors, and the general health of the patients, might be truthfully described as desperate. Of these three two were dismissed cured inside of three weeks from the date of their operations. The third, the most desperate of all, a case which my professional brethren, who were present at the operation, without a dissenting voice, regarded as practically beyond the reach of hope, was dismissed cured, after eight weeks of the most careful and devoted after-treatment.

In the latter part of July I performed ovariotomy upon a lady, aged sixty years, in delicate health, at Midland City, this State. Owing to a very large adhesion, which was broad, thick, and short, and very vascular, the operation was made difficult and tedious. Every effort was made and all possible care taken to prevent and control hæmorrhage from this peculiar structure. When the cavity was closed it seemed that every vessel had been secured and all oozing stopped. But at the end of twenty-four hours, without a previous bad symptom, she began to sink rapidly, and in a few hours life yielded to an easy, painless death. No postmortem was allowed, but the mode of death suggests internal hæmorrhage as the cause.

A short time prior to the operations in Harper Hospital, I had two cases in the city of Detroit. Both operations were performed in private residences. The hygienic surroundings, in both instances were as bad as it is possible to imagine; one being a third-rate boarding house in a cheap back street of the city. In this case both ovaries were removed. The other, a small room about twelve feet by fourteen feet, one door of the room opening on a damp, foul street, and another into the kitchen. These cases were dismissed cured within two weeks

from the date of operation.

But our list is not yet completed. On the 15th day of January, 1884, I went to the city of Kalamazoo, in this State, for the purpose of performing ovariotomy on a young lady eighteen years of age, who insisted upon having her operation done in her own home. But for the existence of glycosuria, the case was in all respects a favorable one for operation. The patient was not on the operating table more than fifteen minutes.

The recovery in this case was rapid, uneventful, and complete. Immediately upon the completion of this operation, I was asked to see another patient suffering from ovarian disease. This proved to be a very different and much more unfavorable case. The tumor was large and multilocular, the general health of the patient much broken down, and her spirits very greatly depressed. Her lower extremities were swollen to their utmost capacity by dropsical fluid. Notwithstanding the unfavorable nature of the case, and the no less unfavorable condition of her hygienic surroundings, I proposed to afford her at once, the only chance of life which remained, namely, the removal of her disease by operation. This proposal having been considered and accepted, I proceeded without further ceremony or delay to carry it into execution. Both ovaries and a large mass of adherent omentum were removed. For some hours after the operation the patient suffered severely from shock, but in due time rallied and recovered without a bad symptom, and is now in the enjoyment of robust health. Even the habit of using large doses of morphia, acquired during the period of her ovarian trouble has been completely abandoned.

The last case about which I will speak now was operated upon in the city of Pontiac, this state, Mrs. S., aged thirty-five. Her tumor was large and had been allowed to go on until the vitality of the patient was about exhausted; she was reduced to such an extent that even hope itself was gone. The operation was not a difficult one, but the patient never recovered

from the shock, and gradually sank.

Here are eighteen cases, all that I have operated upon during eighteen months, with fifteen recoveries and three deaths. I have reviewed these cases for a double purpose; to show the folly and the danger of neglecting an early operation; and to criticise some ideas that have been recently advanced, regarding the place of operation and the qualifications of the operator; and at the same time to protest against making figures the basis for estimating the value of such results as are here shown; the intrinsic merits, the difficulties and peculiarities should be the points considered. The eighteen cases here mentioned, represent the sum total of all cases of ovarian tumors that have applied to me during the time specified. The great majority being difficult, dangerous, and unpromising cases. In view of the fact that in each case the operation was done with a full understanding that the patient had everything to gain and nothing to lose, and that it was done for the purpose of giving her the benefit of any possible chance remaining, I feel that saving fifteen lives out of a possible eighteen is a result which satisfies my conscience, and as a surgeon I can be tried before no higher or more severe tribunal. Claim has been made in certain quarters for the exclusive performance of ovariotomy in special hospitals set apart for

that purpose and by special operators, who confine themselves to abdominal surgery. A claim which it must be admitted possesses some theoretical foundation. Unfortunately there are practical difficulties in the way which are sufficient to render this claim cruel and selfish and worse than absurd. No stronger argument could be made against this new doctrine than is found in such a retrospect as we have now taken. An ostentatious advocate for special abdominal hospitals and special abdominal operators, he himself being a representative of the latter, at the late meeting of the American Medical Association, argued that for an operator to open the abdominal cavity, anywhere else than in a private abdominal hospital, and especially in a public amphitheatre, amounted almost if not quite to the crime of manslaughter. The same speaker, on the same occasion used the following language:

"If he," [the operator] "chooses to do an ovariotomy in the amphitheatre, in the presence of one hundred medical students with dust flying with zymotic influences of the dissecting room, I say that, if that woman gets well in spite of all that, the Almighty is to be given more credit than the operator."

You are well aware I have always believed and taught that the functions performed by the surgeon, with all his skill, and care, and experience, as compared with those performed by nature are impotent and insignificant. While, therefore, we modestly refrain from, and repudiate any such comparison, we do claim on the strength of the statistics now presented, to be deserving of more credit, than the man who would deliberately consign to lingering and miserable death, all the unfortunate sufferers of ovarian tumors, who cannot avail themselves of the advantages of his special hospital and of his alleged mar-

velous power as an abdominal operator.

The ovarian operator should always select the best possible hygienic surroundings for his patient, but at the same time there are other matters of no less importance to be considered. Among these are tenderness and delicacy in all his manipulations: thorough cleanliness on the part of the surgeon himself, his assistants and his appliances, the cleansing of the peritoneal cavity of all fluids and foreign matter of all kinds, the perfect control of hæmorrhage, the accurate closure of the abdominal wound, efficient drainage, the application of dressings such as you have seen us use, which are simple and comfortable, and efficient as a means of protection not only to the wound but to the abdominal cavity and its contents. This, you have noticed, consists of a piece of carbolized oil silk to cover the wound, and over this a thick padding of clean white cotton wadding, held in place by a flannel bandage snugly applied and secured by safety pins.

The diet, nursing, and after-treatment will furnish a subject

for a future hour.

Since the above was printed it has been thought advisable to refer to an article published in the *Physician and Surgeon* December, 1881, under the heading: "Practical Observations on Ovariotomy," containing views which are yet firmly maintained by the author, and to make the following quotation: "First of all I desire to say that in my opinion the operation in question, requires for its successful performance, so much surgical experience and dexterity, carefully arranged surroundings, so many appliances and such perfect preparation in all respects, that its practice should be confined to a comparatively limited number of surgeons who should be in the truest and best sense of the term specialists."

Of late years I am sure that the operation has been notoriously abused in this and other states. It would be an easy matter to collate a long list of unpublished cases operated upon under circumstances which rendered success an exceedingly remote possibility, and in which, as a matter of fact, the rate of mortality is almost one hundred per cent. Unless a surgeon is so situated as to give him in point of experience, surroundings and equipments, special advantages for performing ovariotomy, justice, to all concerned, demands that he should refrain from recklessly attempting to gratify his personal ambition at

so great a risk to his patient's life.

The remarkable success of certain celebrated ovariotomists, has been attributed to the cautious manner in which they have selected their cases, declining to operate whenever the difficulties and complications of the cases have seemed to endanger the chances of success. My own conviction is, that the care and thoroughness with which they prepare themselves and their patients, in each and every instance, furnish the true explanation of their success, and I am sure that their example has not been followed as universally as it ought to have been.