

SECONDARY OPERATIONS.

BY HENRY J. GARRIGUES, M.D.,
New York.

PATIENTS have sometimes an almost superstitious belief in the efficacy of operative procedures. While they are apt to exaggerate the danger to which they expose themselves by undergoing an operation, and, therefore, are not easily persuaded to have it performed, yet if they once make up their minds to submit to the knife, they expect that to be the end of all treatment called for in their case. I recently performed colpoperineorrhaphy and Alexander's operation on a patient who was surprised when she discovered that she had not thereby been cured of dyspepsia and pulmonary tuberculosis.

Gynecologists themselves may be led to form erroneous opinions of the final results of their work. A patient may be sent from the country to a surgical centre; she is operated on, recovers, goes home, and this is often the last the operator hears of her. It is the same in hospital and dispensary practice in large cities. In case of post-operative trouble, the patient often loses confidence in the surgeon who has operated on her and applies for help at another institution.

Often the operation should only be a link in the chain of measures adopted for the relief of a patient's sufferings, and it need by no means always be the last link. Thus, much time, trouble, pain and expense may sometimes be avoided by a curetting, packing, and drainage of the uterus instituted at the beginning of the treatment, to be followed by other remedial procedures.

In certain conditions, such as carcinoma of the uterus or of the breast, the possibility and even probability of a relapse are so great that the patient should be expressly told to report every few months, in order to be re-examined.

Sometimes all the additional treatment called for is a mere trifle, and still, by delay in seeking advice, the patient may be reduced to a condition of serious suffering and illness, as in the following case:

CASE I.—Mrs. S., aged fifty-one years. On May 15, 1895, I performed vaginal hysterectomy and double salpingo-oöphorectomy on her for uterine fibroids and chronic oöphoritis. Five weeks later she left St. Mark's Hospital, seemingly well, and I did not hear from her for a whole year, when she came to my office in such a condition of weakness that she had to be accompanied to and from the house and supported while crossing the floor. She complained of frequent attacks of vomiting and diarrhoea, pain in the hypogastrium, extending to the sacral region, and a constant vaginal discharge. Upon examination I found a small, granulating surface at the vault of the vagina, where the opening had been made for the removal of the internal genitals. There was also a tender swelling in both sides of the fornix corresponding to the stumps of the broad ligaments.

The granuloma was healed in a few days by curetting and cauterization with nitrate of silver in substance, when all discharge ceased. The swelling around the stumps required a longer treatment by electrolysis, under which her dyspeptic troubles disappeared, her strength returned, and her pains were reduced to an occasional backache.

In other more serious cases, even capital secondary operations may be required. A frequent cause of a continuation of suffering is more or less extensive adhesions formed in consequence of the primary operation, as in the three following cases:

CASE II.—Miss B., aged about twenty-five years, is one of those patients who wander about from dispensary to dis-

pensary and from hospital to hospital. She was referred to me by Dr. F. C. Valentine, who had been treating her for some bladder trouble. She had undergone no less than seven laparotomies before I saw her. According to her statement, both ovaries, the appendix vermiformis, and part of the intestine had been removed on various occasions. She complained of intense pain all over the abdomen.

In performing the eighth laparotomy I removed the whole cicatrix, six inches long and four wide, which had resulted from five of the preceding operations, leaving only two scars on the right side at some distance from the median line, and probably resulting from her scolectomy and intestinal resection. I found extensive adhesions between the transverse colon and the anterior abdominal wall, which were either torn or cut between two ligatures. This operation freed her from all pain in the abdomen.

When she consulted me some time later it was for inability to urinate, a trouble seemingly due to hysterical paralysis of the detrusor muscle of the bladder. I began to treat her with the faradic current, but soon lost sight of her, whether on account of her being restored to health or on account of her dislike of the treatment, I do not know.

CASE III.—Mrs. L. B., aged twenty-two years, who, since the birth of her child, five years before, had been suffering from constant backache. Five years before I saw her, she had both appendages removed. Of late she had complained of much pain in the left lumbar region, and often suffered from headache and dizziness. On July 18, 1896, I removed her uterus through the vagina by Péan's method, and then performed laparotomy, making the incision parallel to the old scar, a finger-breadth to the left of it. Nevertheless, I found it very difficult to work in the hard, thickened tissue. The peritoneum looked like a muscular layer and was a quarter of an inch thick. Numerous adhesions were found between the omentum and the anterior abdominal wall, some of which were torn, others tied with

single or double ligature, and others cut. An extensive adhesion between the descending colon and the anterior abdominal wall was treated in the same manner. A large portion of the omentum extended down into the left side of the pelvis, and was adherent there. This was severed between ligatures. The patient left the hospital entirely free from pain at the end of three weeks.

CASE IV.—Miss M. K., aged twenty-six years, had been operated on twice before I saw her. After the first operation, consisting of double abdominal salpingo-oöphorectomy, she had had severe pain in the right iliac region, which had ceased after the second operation, the nature of which she did not know, but which doubtless had been severance of adhesions. When she consulted me she had a similar pain on the left side and much backache. In this case I performed, on April 1, 1896, first, laparotomy, and then vaginal hysterectomy. The patient being very stout, it was necessary to make an incision up to the level of the umbilicus. As in the preceding case, it was made a finger-breadth to the left of the median line, the site of the old scar. The omentum was found extensively adherent on both sides, which adhesions were cut between ligatures; and, furthermore, there was a roof-like adhesion extending from the sigmoid flexure to the bladder, which could be torn without causing any hemorrhage. The uterus was very small, as it always is after oöphorectomy, the sound entering only two inches. On account of this and the great thickness of the abdominal wall, which made it difficult to throw light into the depth of the pelvic cavity, I thought it would be easier to remove the uterus through the vagina, which I did; but the patient being not only a nullipara but a virgin, the very small dimensions of the vagina made this difficult. The patient was entirely relieved of her pain, however, and has remained perfectly well to the present date.

In the following two cases I had myself performed sal-

pingo-*o*phorectomy, and, the complaints continuing, I added vaginal hysterectomy.

CASE V.—Mrs. C. C. was referred to me by Dr. F. M. Bauer. On June 9, 1891, I removed both tubes and ovaries, the latter being the seat of small cystic degeneration. She had less pain in the abdomen after the operation, but menstruation not only continued, but was often profuse and painful. She was treated for several months with a strong galvanic current, according to Apostoli's method, and later with the high-tension faradic current. Menstruation ceased three years after the removal of the appendages, but she always had backache and pain in both legs, and consented finally to have the uterus removed, which I did on September 25, 1895, more than four years after the first operation. The uterus was found in an atrophic condition, like that in the preceding case, and imbedded in adhesions, which made the operation somewhat difficult. It was, however, successfully removed by Péan's method. This second operation gave additional relief, but did not cure her. When I saw her again, in December of the same year, she still complained of backache and pain in the legs. I found rather considerable swelling around both stumps of the broad ligaments and at the base of the bladder, which improved much under the use of the galvanic current, and I suppose she has finally recovered.

CASE VI.—Mrs. H., aged twenty-eight years, had been suffering since the birth of a child—seven years before. Palliative treatment having proved ineffectual, I removed both appendages on October 17, 1894. There were no adhesions, and the organs were easily removed through an opening just large enough to admit two fingers. Both ovaries were much enlarged and full of cysts, many of them filled with blood, and the right ovary contained two *gyromata*. She made a good recovery, but the pain continued unabated. On January 21, 1895, I therefore removed the uterus, using Pratt's method. There were no adhesions,

except at the cornua, where the appendages had been tied and cut; but although only three months had elapsed since the removal of the ovaries, the uterus was found atrophic, as in the other cases.

While this patient was still confined to her bed she developed pain in the left side of the abdomen, and on examination it was found that the corresponding kidney had become dislodged and had sunk down to the level of the crest of the ilium. This is the only case of this kind I have seen after hysterectomy. In removing a uterus, especially if it is large, we leave a vacant space which has to be filled with some part of the contents of the abdomen. As a rule, it will be the movable coils of the small intestine that fill the empty space left between the bladder and the rectum; but it does not seem unlikely that this may occasionally give rise to the disease known as enteroptosis, or Glenard's disease, and especially to floating kidney—a disease which is found much more frequently after childbirth than in nulliparæ, which fact leads us to suppose that the great diminution in the size of the womb during labor and involution has something to do with it. I proposed to perform nephrorrhaphy on her, but being unable to obtain a bed for her right away, the operation was performed by another.

Finally, I may briefly refer to a case I have described elsewhere¹ *in extenso* :

CASE VII.—Mrs. G. V. D., aged twenty-nine years. On June 27, 1894, I performed symphysiotomy on her on account of a soft pelvic tumor which obstructed the birth-canal, and I delivered her of a child weighing ten and three-quarter pounds. Although there was no mobility in the symphysis pubis, she had a waddling gait when she got up after the operation, and pain in all the three joints of the pelvis. On December 15th of the same year I removed both appendages and the uterus through the vagina by the clamp

¹ Medical Record, vol. xlv. p. 577, November 10, 1894, and vol. xlvii. p. 284, February 28, 1895.

method. One of the ovaries was in a state of small, cystic degeneration, and the other was changed into a dermoid cyst. She made a good recovery, and her gait became entirely normal. I saw her two years later, when she was still in excellent health.

Can we do anything to avoid secondary operations, and ought they always to be done?

Since extensive adhesions, as we have seen in some of the above cases, give rise to great and protracted suffering, and necessitate delicate and somewhat dangerous operations, I think we should do what we can to avoid them. Raw surfaces may be covered with peritoneum, but the very sutures we use for this purpose act as an irritant and are covered with newly formed tissue, very apt to adhere to some neighboring surface. It is also useful to cover such raw surfaces with iodoform or aristol, which, with exuding lymph, forms a layer that to some extent prevents adhesion; but, above all, I believe the intestine should be treated with the utmost care. In order to get a view of the pelvic cavity I have seen the intestine covered with coarse towels and pushed up into the upper part of the abdominal cavity. In our just apprehension of infection we are apt to forget that violent mechanical handling, by scraping off the fine endothelium which covers the intestine and prevents it from adhering to other surfaces, may become injurious in itself independent of any infectious action. Only the very finest gauze pads or the very softest of sponges should be used in the peritoneal cavity, and they should be used as cautiously as possible. As to unavoidable adhesions, they are in some degree overcome and made innocuous by moving the bowels as soon as the patient has recovered sufficiently to stand it—as a rule, forty-eight hours after the operation.

Ventral hernia should be guarded against by a very careful closure of the abdominal wound. I use a triple suture—a continuous one of fine catgut on the peritoneum, an interrupted one of medium catgut for the aponeurosis, muscles,

and fascia, and, finally, an interrupted one of silk or silk-worm-gut for the skin and subcutaneous adipose tissue.

It has become the fashion of late to remove the uterus whenever the appendages are removed, and the only point of diversity of opinion seems to be whether it should be done through the abdominal or the vaginal wall. In the writer's opinion, it would in many cases be better only to curette the uterus and leave it, even when both appendages are removed. Experience during the twenty years in which Tait's operation was almost universally practised has shown that in the majority of cases the patients were relieved of their sufferings and restored to good and often robust health. On the other hand, the removal of the uterus entails a danger of its own. It is evident that the removal of this organ, even when done rapidly and without loss of blood, causes a much greater shock to the system than the removal of the appendages. If we leave the uterus, the operation is much safer; the uterus undergoes so great an atrophy that within a few months it shrinks to half its original volume. In most cases it gives no trouble, and is even mechanically useful by filling part of the pelvic cavity, and thereby preventing displacements of the organs enclosed in the upper part of the abdominal cavity. If in exceptional cases the patient is not cured by the salpingo-oöphorectomy, hysterectomy may follow later, when it is both easier and safer. In the meantime the organism has gradually accustomed itself to do without the uterus, and there is little or no shock.

For the swelling often forming around the stump left by the removal of the appendages or the uterus, I have found the electrolytic effect of a strong galvanic current applied to the vaginal roof and the abdominal wall very useful, both in regard to absorption and relief from pain.

Granulomata, formed in the vagina at the place where hysterectomy has been performed or where pelvic abscesses have been opened, yield rapidly to curetting, application of lunar caustic, and cleanliness.

DISCUSSION.

DR. BACHE McE. EMMET, of New York.—I have been very much interested in Dr. Garrigues's paper, because I have had very extensive experience in that same line—seeing patients who had been repeatedly subjected to operation (sometimes my own, sometimes others) because of unsatisfactory or hasty work done in the first instance. I have always believed that much work which has necessitated secondary operation has been undertaken through a faulty diagnosis or an imperfect diagnosis. The patient's history may have led to the operation chosen, when an analysis of the symptoms had not been made sufficiently complete to permit the surgeon to judge fully. In many instances wrong interpretations are given to symptoms, one ovary, possibly both are removed, and the patient has continued to suffer because her general condition had not been taken into consideration. Dr. Garrigues mentioned one case of seven laparotomies. I have also had one case of seven laparotomies. That patient has had everything removed which can be removed. Some of the operations were merely for search. I think we can correct much of that by a more exhaustive analysis of the symptoms and study of the cases which come before us.

I believe, with the author, that much handling of the peritoneum is often the cause of adhesions; that we do manipulate it needlessly and expose it unnecessarily, thus removing superficial epithelium, at which points adhesions form. I believe with Dr. Garrigues, that if we would use normal salt solution for washing, or aristol for covering, to promote healing of the surface and prevent tendency to the formation of adhesions, the patients would fare much better. Another point which I believe is not sufficiently heeded relates to choice of ligatures. No matter how much care may be given them, I believe they are still a source of infection. When we ligate a tube, or an ovary, or in any way transfix the broad ligament, it is there that we have a special source of trouble. In five or six cases which have come under my observation infection and cellulitis have resulted from the catgut used for transfixing the broad ligament. I opened up

such an abscess yesterday, following removal of both adnexa. Nothing was found until I got up to the top of the broad ligament where the ligature had been, and then four ounces of serum which was beginning to be turbid poured out. So that it becomes more and more a question how we shall prepare our patients, what ligatures to adopt, etc., so as to eliminate every possible source of infection. I think most after-symptoms can be attributed to inflammatory processes arising from septic elements.

DR. PHILANDER A. HARRIS, of Paterson, New Jersey.—This subject is a very important one in various ways. Speaking of secondary operations resulting from faulty work, a patient came to my office, before I left home this morning, whose vagina had been left so small after an operation for restoration of the perineal body, performed some years ago, that sexual intercourse has been impossible since. Such a result illustrates the advantage and the necessity of using every precaution we can to perfect the technique of small and ordinary operations. Take the closing of the abdominal incision in laparotomy, is there any gentleman in this room who has not had a case come to him the past year showing defective work in this respect? I have had several, one or two in patients previously operated upon by myself by a method which I now regard as imperfect for closing the abdominal incision, and others operated upon by gentlemen in other cities. The occurrence of hernia indicates that the mechanical technique of closing the abdominal incision is not as perfect as it should be.

DR. A. LAPHORN SMITH, of Montreal.—I was hoping that Dr. Garrigues would give us some indications as to when we should reopen the abdomen after abdominal sections in cases in which things were not going on properly. Many of us have such cases occasionally, and we look in vain for literature on the subject. I shall only touch upon one point, that is, intestinal adhesions. Three weeks ago I had occasion to do a ventral fixation, after first clearing away the adherent omentum, and breaking up adhesions binding the fundus of the uterus to the peritoneum covering the sacrum. Everything went well in this case until the ninth day, when she refused her food. The next day

she began to vomit a little, and the following day vomited feces. I waited no longer, but opened the abdomen and found the small intestine largely distended down to a certain point, and below that collapsed. The intestine had become adherent to one of the spots at the brim of the pelvis, where adhesions had existed and also where a fringe of omentum had been cut off and ligated. Between these two points the intestine was held tightly, causing constriction. I was very glad I did reopen the patient's abdomen, for she made a good recovery, whereas she would have died in a few hours had I left her alone. I was in a state of great anxiety whether to open the abdomen or not, since various opinions exist on the question among my colleagues.

Two years ago I opened the abdomen of a woman for intestinal adhesions who had been operated upon four years previously for ovarian tumor. Her physician, however, did not suspect what might be present until too late, and although, when called, I reopened the abdomen and freed the adhesion of the bowel to the stump of the ovarian tumor, it was too late for her to recover.

An important point in operations is not only to save the patient's life and remove her disease, but place her in a position where she will not be liable to these accidents. For my own part, I think we ought to take great care to cover every raw surface with peritoneum if possible. The other day I witnessed an operation in Boston, and asked the operator, who had left the stump of the broad ligament exposed in the abdominal cavity, if he thought it would be an advantage to turn the peritoneum over it. He replied that he did not think it was very important. But I do not agree with him. It is important to cover all raw surfaces or to leave as few as possible uncovered where the abdominal contents can become adherent to them.