Original Articles.

THE USE AND ABUSE OF BATTEY'S AND TAIT'S OPERATIONS.

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WITH the great relief of suffering which has come since and through the inauguration of the operations for the removal of the ovaries and Fallopian tubes, there has been almost of necessity an unwarrantable advocacy of these surgical procedures in many cases where the above operations were in no way indicated. Nor is this surprising when we remember the enthusiasm and zeal which is requisite to establish any new departure in surgery, and especially when that device is ranked among the capital operations; for if the question of life and death is involved the profession are slow to adopt a new operation, even though in the hands of the deviser it give great promise.

This conservatism has its many advantages, as its tendency is to establish any given operation on a more sure foundation, so that its proper limits become well understood before over-zealous advocates, applying it to cases so unsuitable that the result must be only failure and disappointment, bring upon it first discredit, and then neglect and abandonment. The courage and conscientious work of Dr. Robert Battey in performing the first operations for the removal of the supposed normal ovaries to bring about the premature establishment of the menopause can never be forgotten, nor would we overlook the brilliant operations of Mr. Lawson Tait, in which by the added removal of the Fallopian tubes the scope of the operation was extended to a much larger class of sufferers, or the importance of his additional steps in securing results which were sought in the first-mentioned operation, but which the second seems to more perfectly attain.

The operation, then, of the removal of the uterine appendages for various conditions may be said to have safely passed its first danger, and to have become an established and well-recognized surgical procedure, but with this security in its general adoption arises another great risk common to nearly all operations at this stage, that of its frequent application to cases where no such serious method of treatment is necessary, and which can be perfectly cured by less severe means, without sacrificing parts which may prove to be of the greatest consequence to the patient's future happiness.

That many of the fears of patients submitting to this operation, such as change in form, manners, or voice, or loss of sexual desires, have proved unfounded is quite true, but when we remember that by its successful performance we forever cut her off from child-bearing, I am sure the wiser and more cautious gynecologist will reserve this method of treatment for extreme cases, which fail to yield to the careful application of less severe but judiciously selected modes of treatment.

In order to illustrate the special points of this paper I will report four cases, the first two of which indicate an unquestionable class for the proper performance of these operations, while if the

same surgical means had been carried out in the last two cases there certainly would have been gross abuse of the procedure.

CASE I. *Removal of the Ovaries for Cystic Disease.* Miss W. was brought to me March 28, 1883, by Dr. Thompson, of Fitchburg. She was thirty-eight years of age, and had complained of the trouble for which she sought advice for fourteen years. For the first few years of her illness she was generally weak and unable to walk, and from that time there had gradually come on backache and pain in both groins, a dull ache all over the abdomen, and occasionally sharp pain through the hips, which became so severe that for a year previous to seeing her she had been obliged to give up trying to walk. She had never been very strong, and the foregoing all attempts to walk out was a serious deprivation, as her general health suffered much in consequence. Riding caused more pain than walking. Menstruation began at twelve years of age, and had continued regularly afterward, occurring each twenty-six days, and lasting from three to five days. The amount of flow in her early life had been from ten to fourteen saturated napkins, but since her illness the amount had steadily diminished, until the whole flow would not soak four napkins. She had always suffered dysmenorrhœa, but after she became more or less an invalid this symptom was much more prominent, the pain beginning from a few days to a week before the flow, and lasting throughout the period. She was usually confined to her bed four days. She had some leucorrhœal discharge, characterized as thin and whitish. She also reported frequent micturition and a feeling of pressure over the bladder. The condition of the bowels varied, being at times constipated and at other times too loose. She was obliged to lie down a great deal of the time. Physical examination made bimanually showed the left ovary to be enlarged to the size of a small hen's egg; the right ovary could not be distinctly felt. She was advised to have a leech applied to the cervix uteri a few days before each menstrual period, and an application of Churchill's iodine to the left cul-de-sac of the vagina once or twice a week in the inter-menstrual period. Her physician was to carry out the treatment, and to bring her to me again in six months.

October 12, 1883. She was admitted to the Free Hospital for Women, and on the twenty-third of that month she was examined under ether, and both ovaries were found to be enlarged, the left being the larger and more prominent. By the vagina, the size, compared with six months previously, did not seem to be much changed. There had possibly been a slight amelioration in her suffering from the treatment prescribed. She was advised to continue the treatment for six months more before deciding to have Battey's operation performed.

May 19, 1884. The patient was readmitted to the hospital, and reported no improvement, and, on examining her under ether, there was an apparent increase in the size of both ovaries over that which was found at the last examination. May 22d laparotomy was performed. Both ovaries were found to be enlarged to the size of a large peach, and were cystic. They were removed entire, and a

very small dermoid cyst on the left ovary, about the size of a large hickory nut, was ruptured in its removal. The operation was done under carbolic spray, and the strictest antiseptic precautions were observed. Greater care than usual was taken in sponging out the abdominal cavity, on account of the discharge of the contents of the dermoid cyst into it. Temperature touched 102° F. the evening of the second day, but gradually dropped to 99.5° F. on the morning of the fourth day, and kept between 99° and 100° F. for the next three weeks, during which time an abscess formed in the abdominal wall at the site of the incision, and, discharging, caused a separation of the wound at centre of the line of incision about an inch in length, which had nearly healed when she went home, June 28th.

In a letter from Dr. Thompson, dated January 5, 1885, he reports that the unhealed portion of the wound closed slowly, and that even then there was a small fistulous track extending some two and one-half inches downward, backward, and to the left, which occasionally discharged a thin, seropurulent fluid.¹ She had menstruated once since the operation, the last of November, 1884. This period lasted three days, although the whole amount of blood lost would not more than saturate one napkin. With the exception of increased nervousness and some pain in the back, the menstruation was comfortable.

I should judge from her physician's account that her condition, although very much improved over what it was before the operation, was in a state that required much to be done in the way of building up her general physical and nervous strength, and in the healing of the fistulous track referred to.

CASE II. Removal of the Uterine Appendages for Fallopian Dropsy. Mrs. M., a native of France, and resident of New Haven, Conn., was admitted to the Free Hospital for Women October 8, 1884. She was forty-three years of age, had been married nine years, but had had no children and no miscarriages. Her family history was not very good; her mother and aunt died of phthisis, and three sisters from nervous disease. Menstruation began at thirteen, and she was regular afterward, but she always had great pain, and was confined to her bed at such times.

When sixteen she had a severe hæmorrhage; on waking in the morning she found her bed soaked through. This was at a menstrual period, and at that time there was no dysmenorrhœa. When thirty-five she had another hæmorrhage at her menstrual period, and felt much relieved after it. For several years she had menstruated each twenty-five days, each period lasting four days, and its amount being large and accompanied by the passage of clots. There had been persistent leucorrhœal discharge for fifteen years. She thought she had peritonitis two years before her admission to the hospital. During nearly all her married life coitus had been painful, and for the day or two following this act she suffered from sinking feelings, "fainting spells." Her principal complaint between the menstrual periods was severe pain in the abdomen and legs, and weakness,

these difficulties being much aggravated when she was on her feet, or if even while sitting or lying she made much use of her arms; she was obliged to give up all such attempts, and to live a life of nearly complete invalidism.

A physical examination, made under ether, revealed the uterus enlarged by an interstitial fibroid in its posterior wall to about the size of the gravid uterus at two and one-half months, and apparently both ovaries increased to the size of duck's eggs. These were in close apposition to the uterus, and were movable with it.

October 29th. The patient being etherized, with the assistance of the hospital staff, I performed Tait's operation, every antiseptic precaution being taken. The abdominal incision was three and one-half inches long. The ovaries were found enlarged, but not at all to the extent that had been apparent in the physical examination. What had then appeared to be the enlarged ovaries were found to be the Fallopian tubes enormously distended with a clear fluid. In removing these the left and larger was ruptured. The ovaries themselves were underneath and behind the distended tubes, and had not been felt in the previous examination. In closing the abdominal wound Hunter's method was followed of first stitching together, with catgut over stitch, the edges of the peritonæum, and then closing the abdominal wound with interrupted silver sutures.

November 5, 1884. The stitches were removed and union was found to be good. The temperature once reached 101.5° F., on the third day, but for most of the time during two weeks it ranged between 99° and 100° F., and the pulse ordinarily at 90. After two weeks both temperature and pulse were normal. The most suffering which she had was from wind.

December 13, 1884. She was discharged cured.

In a letter from her dated January 15, 1885, she says that no menstruation has occurred since the operation, that the severe pain which she formerly felt in the abdomen and legs has entirely disappeared, and that she can walk with comfort. Her report was most satisfactory, and with the exception of some symptoms of nervous debility, such as "hot flushes," I should think her health fully restored.

In the foregoing cases it would have been foolish to delay the operation longer. The fact having been established that organic change of the ovaries or tubes had taken place, which incapacitated them from fulfilling their proper functions, or made them the cause of continued suffering, the sooner the remedy was applied the better for the patient, for she might then be saved years of exhausting pain. Nor was there anything to hope in the retention of organs so thoroughly disorganized, for the possibility of their being able to perform their functions had long since ceased. A longer delay did not seem advisable on the ground that a probable enlargement of the tumors would render the operation more easy, though in the first case such a change was to be expected; for with the readiness and greatly increased safety with which laparotomy can now be performed, such delay would only prolong the suffering of the patient without giving her any adequate return.

One of the good results growing out of the estab-

¹ In a more recent letter from Dr. Thompson he reports the fistulous track closed.

lishment of this operation, aside from the benefit derived from it by the class of cases for which this procedure was especially designed, has been its effect on the treatment of ovarian cystoma in general, influencing, as it has, the much earlier removal of such tumors, and it seems only a reasonable prediction to make that the work of the ovariologist in the not distant future will be confined to the removal of tumors of small size; that the operator will be the most successful, other things being equal, who can early make his diagnosis sure.

By the citation of the foregoing cases I would not be understood to limit the field of these operations only to these classes, for I am well aware that it has quite as appropriate a place in any cases where the mental or physical state of the patient is seriously jeopardized by the process of menstruation, and where the only hope for mental or physical health lies in its cessation.

It is rather my design that the instances given should represent the class in which structural changes leave no doubt as to the advocacy of the removal of the uterine appendages, and also those others that serve as a text to caution the profession at large against the too hasty acceptance of this extreme measure in cases where *it may* be that *there exists* some abnormal change either in the size or the position of the ovaries which with appropriate treatment might be readily relieved, and that in these laparotomy should only be advised after such well-directed care has failed to cure.

CASE III. *Ovarian Dysmenorrhœa dependent upon the Opium Habit.* Miss K., a school-teacher, twenty-eight years of age, a native of an adjoining State, entered the Free Hospital for Women March 8, 1881, for the purpose of having Battey's operation performed. She had always been well until eight years before, when she had pneumonia followed by phlebitis, and had suffered more or less ever since. Menstruation began at fourteen, and continued regularly afterward, lasted four days, and in amount was equal to five saturated napkins. It was unaccompanied by pain until after her attack of pneumonia, but since that time she has suffered great dysmenorrhœa, the pain beginning several days before the flow, and continuing not only throughout it but for several days afterward. She also complained of pain in both ovarian regions, particularly the left, and so much sensitiveness there that any pressure could not be tolerated. There was some leucorrhœal discharge, characterized as thick and yellowish. Her nervous strength was in a deplorable condition, and she had long before been obliged to give up her duties as a teacher. After her attack of pneumonia, from which she dated most of her troubles, her physician had given her morphia for her suffering; had even gone so far as to teach her to use it subcutaneously, and had provided her with a syringe and an abundance of the necessary alkaloid. On account of the amount of pain complained of she had felt obliged to continue its use until she was alarmed at the amount consumed and at her dependence upon it. She therefore determined, two years before my seeing her, to enter a hospital at Concord, N. H., for the purpose of discontinuing the morphia. She succeeded in reducing the amount from twelve grains a

day to half a grain. She was then told by the physician in charge that she could never hope to give up entirely the drug while she suffered so much at her menstrual periods. She next sought relief in a hospital in New York, where in discontinuing the drug she became very ill, and the amount was greatly increased. She was then examined by a well-known gynecologist, who diagnosticated displacement of the left ovary, and advised Battey's operation as the only means which would enable her to give up the morphia. On account of her great weakness the performance of the operation was postponed. When she entered the Free Hospital she was taking six grains of morphia daily subcutaneously. A physical examination made under ether showed the uterus and ovaries to be in a position of slight retrocession; but as there was no evidence of inflammatory action, either present or past, about the pelvis, this position of the organs was considered rather one of congenital origin. There was a slight endocervicitis present. Inasmuch as there was no structural change found in the ovaries or tubes, she was advised to discontinue the morphia at all hazards. After the two unsuccessful attempts that she had already made, with the great suffering which necessarily accompanied such efforts, she was rather reluctant to undertake another trial in the same direction, and much preferred to submit to the results of Battey's operation, which had already been described to her. She, however, soon gave her consent to the plan proposed.

With no inconsiderable experience in breaking up the opium habit, I can truly say that I never saw a patient suffer more than this woman did in the four weeks after the cessation of the morphia. Neither have I ever, with a single exception, seen one so alarmingly reduced. In three months she was sent into the country with a reliable nurse, who remained with her for three months more. In six months the local symptoms had begun to grow less, and in a year they had entirely disappeared. She was able to engage in active employment in six months, and within a year was fulfilling the duties of a position which required an extreme amount of mental and bodily strain. She has continued this employment up to the present time, and I have been assured within a few days of her continued health and strength. When last examined the uterus and ovaries were still in the position already described, but they had long before ceased to occasion any suffering.

CASE IV. *Left Retro-Lateral Version of the Uterus, with Prolapse and Enlargement of the Left Ovary.* Miss E., twenty-six years of age, first consulted me —, 1880. She had never been very strong, and her heredity was far from the best. She had suffered almost since her first menstruation from a dragging feeling in the pelvis and from dysmenorrhœa. The latter gradually disappeared, but returned in 1876. The former symptom remained. All through her early life she thought she must walk, and therefore persisted in doing so, though she felt much the worse for it afterward. In 1874 she first called a physician, and was treated for two years, for what she does not know. In 1876 she went to one of the most eminent gynecologists in this country, and remained under his care much of the time for

two years. In 1878 she left him, being told that "nothing could be done for her." She found that the more treatment she had the worse her general condition became. She had an attack of cellulitis in 1877, from which she was four or five months in recovering. She gained somewhat in general health after leaving off treatment, but the local discomfort remained much the same. Menstruation appeared at eleven, and continued regularly until about 1874, when it began to come on four or five days too early, and has continued to do so since, except twice, when she refrained from riding and walking, and was so enabled to go the full time. Through early life menstruation lasted a week; but for four years previous to consulting me it was usually four days, which she spent in bed, though she did not go downstairs for six days. This patient was in an utterly hopeless state regarding herself, and I wrote to her previous physician, who then strongly advised Battey's operation. On carefully going over the case, however, it seemed to me that possibly the nervous strength, which had never been great, had been too severely taxed by previous treatment, and that the malposition of the uterus and ovary was probably due to a relaxation of the uterine and ovarian ligaments, due, in its turn, to this very lack of nervous tone. My treatment was directed to saving her all possible nervous fatigue, and to building up her general health by carefully regulating her diet, exercise, and, as far as possible, the expenditure of nervous force. The only local treatment given was the application of a leech to the cervix uteri just before each menstrual period, to insure thorough relief to the congestion of the enlarged ovary. This course was followed out for a year, at the end of which time the uterus had completely gained its normal position, as had also the ovary, which was then of natural size. The patient had become hopeful of recovery, and could bear greatly increased nervous strain without fatigue. In 1882 she had a severe trial in the death of one of her family, and she lost something of the ground gained.

The suffering was then confined largely to the menstrual period, which process exhausted her, not from actual pain, but from the faintness and weakness which it induced. With a view of securing a more thorough examination of the ovaries and tubes, I gave her ether, and found those organs, as well as the uterus, in every way normal.

In 1883 and 1884 I saw the patient at infrequent intervals, and the local condition continuing good, I was more and more convinced of the truth of my first supposition, that is, that the malposition of the uterus and ovary was primarily due to the relaxation of ligaments dependent on a want of nervous tone, and that active local treatment only increased the difficulty by so much the more as it taxed the nervous strength. It has also been sufficiently shown that in just so far as her nervous strength improved in the same ratio the weakness and exhaustion at the menstrual periods lessened, and that her whole difficulty was one of nervous origin.

In cases III. and IV. the operation for the removal of the ovaries and tubes would have been as unjustifiable as it was warrantable in cases I. and II. The third case shows that although the patient

suffered from great dysmenorrhœa, and from ovarian pain and tenderness in the inter-menstrual period, yet the degree or importance of this pain could not be determined so long as she was using morphia; and the ovaries and tubes giving no evidence of disease in themselves they would, if removed, have been needlessly sacrificed, and the patient would not only have been subjected to the dangers of the operation, but she would have had the same struggle to go through with afterward in the discontinuance of the opium, and this, if successfully done, would have given unjust credit to the operation.

The fourth case well illustrates how easily the best of us may be mistaken in judging of cause and effect in uterine and ovarian disease. Almost any one finding a retroverted uterus and a prolapsed and enlarged ovary would see therein cause sufficient not only to *occasion* great disturbance, but to *perpetuate* it, and would feel unwilling to go on without rectifying the malposition, particularly if we had every reason to believe that from the absence of adhesions this could be readily accomplished. Had this not been most faithfully tried by one in whom I had the most implicit professional confidence, I should probably have fallen into the same error; but realizing that as a cause of the nervous debility the local treatment had been faithfully tried and failed, and seeing in her whole history and in that of her family sufficient reason to consider the uterine and ovarian symptoms an effect rather than a cause, I was led to treat it as such with sufficiently good result to make that plain, and to show that the permanent cure could only come through the establishment of the nervous strength; that the sacrifice of the ovaries would not only be useless, but would greatly increase the difficulty through the large nervous tax that the operation and the subsequent convalescence must demand. In conclusion I would suggest the following:—

(1) That these operations be restricted to cases in which structural changes in the ovaries or tubes have been clearly made out in advance, and where well-directed treatment of less formidable character, though perseveringly tried for several months, has wholly failed to give relief.

(2) That, in addition to the foregoing, the removal of the uterine appendages may be necessary in some cases where the process of menstruation immediately jeopardizes the life or the mind of the patient, even though no structural change in these organs can be previously diagnosed.

(3) That when once the diagnosis of cyst of the ovary has been established, delay in its removal only increases the danger to the patient without giving any adequate return from the increased facility in performing the operation gained by the greater size of the cyst.

(4) An exploratory incision may sometimes be warrantable if, from various reasons, there is an inability to perfect the diagnosis without.