membrane continued long after he ceased to have diphtheria, as the result of local irritation. Possibly both might be right.

I have not felt warranted in repeating this experiment; nor should I have pushed things as far as I did with this patient but at his understood wish, he being entitled to an opinion and being in my care by regulation, not by choice. The case is, however, rather suggestive. It is barely possible that such treatment for a few applications at the very beginning of the disease is not to be condemned, provided the patient is strong enough and can be closely watched. If unsuccessful, however, just so much strength will be used up at the beginning of a prostrating disease.

Since becoming dissatisfied with the use of peroxide of hydrogen for the nose, I have gone back to insufflations of iodoform, first clearing the way if necessary with forceps or a spray of sterile water. This answers as well as any treatment of the diphtheritic nose with which I am acquainted, but leaves much to be desired in bad cases. In such cases, I doubt if any spray reaches the whole surface. The opinion of aurists seems to be opposed to a douche. Accidents have occurred which have led to loss of hearing and loss of life. Still I am not satisfied that in a few septic cases, the risk of driving diphtheria bacilli and other germs into the Eustachian tube may not be legitimate, in view of the gravity of the disease. The difficulty is in selecting the cases, because some very bad cases do recover without running this risk. I have no experience in this matter to report.

REMOTE RESULTS OF THE REMOVAL OF THE UTERUS AND OVARIES.¹

BY ERNEST W. CUSHING, M.D.

THE question in regard to the removal of the uterus, which usually carries with it the appendages, is a very important one. It is a subject which it is well to consider because it is one of the latest developments of surgery, which promises a great deal and is overcoming the opposition to it. When, in 1887, A. Martin came over and performed the first vaginal hysterectomies for cancer, there was intense opposition. Reeves Jackson denounced the whole procedure in Washington, and the opponents said that it was a terrible and dangerous operation, and should not be tolerated for cancer even. Certainly that has passed now. When more operators began to do it, it was found that it was not dangerous. Martin did the first three cases in Boston, in September, 1887. In March, 1891, I reported before the Obstetrical Society of Boston, 21 cases with 19 recoveries; and I have done a very large number of vaginal hysterectomies since then for cancer, with even better average results. Anybody will now admit that the remote results of the removal of the uterus are good if it can save a woman from cancer, and about one-half the cases are saved for three or four years, and something less than that are saved permanently. I know it rather made me shiver when in 1885 Martin proclaimed that every uterus affected at all with cancer should be removed entirely—yet now this rule is established.

Then came the question of removal of the uterus for fibroids, and that again worked its way against op-

position. Where the mortality used to be 60 per cent. it is now less than 20 per cent., and the best results give not over six to ten per cent.; so that the removal of the uterus for myoma is now as well established as the removal of the ovary for ovarian tumor. The increased safety of it and the advantage to suffering women is forcing surgeons continually to operate in cases where they would not have done it a few years ago; that is, the increasing knowledge of the bad effects of leaving myomas, such as complications which finally ensue from pressure on the ureters, on the intestine, from degeneration of one kind or another, long-continued hemorrhage, complications of salpingitis, etc., have wrought such a change of opinions, that surgeons are much more ready to remove the uterus now than a few years ago. And some are going so far as to say—which makes the conservatives rather hesitate—that they will remove a fibroid the size of the fist to guard against future growth and accidents. Now, however, by the development of surgery it is found that by vaginal hysterectomy a small fibroid can be removed with ease and with practically complete safety. If we can essentially without danger remove the little fibroids, presently there will not be any big fibroids, just as there ought not to be any big ovarian tumors in civilized communities. Here is a fibroid I removed the other day. There was a prolapse and fibroid. The fibroid could not be brought down whole; but by pulling it down and splitting it, the whole thing was easily removed. The woman is cured of the prolapse. She does not realize that anything has been done to her. The entire absence of shock after vaginal hysterectomy, is one of the marvels of surgery.

If it is safe enough for that, then comes the question of removal of the uterus for prolapse. You know the difficulties of the operation for prolapse and all the different things tried. Finally, A. Martin propounded removal of the uterus for prolapse. Now it is done by many, and laid down as a proper thing to do. If a woman has prolapse and is past child-bearing, slip the uterus out; it is the easiest thing in the world, and fasten the stumps of the broad ligaments to the angles of the wound in the vagina. Now, when we can remove the uterus by the vagina so readily, I cannot see the need of doing it from above as Polk in New York does.

What are the remote bad results of removal of the uterus and appendages? What has been charged against it is, in the first place, production of insanity; and, in the second place, the production of obesity; and, in the third place, loss of sexual desire, by which I suppose is meant sexual feeling. Now, in regard to the production of insanity, it is a fact that various gynecological operations are followed sometimes by insanity. I remember out of perhaps some 900 cases of all sorts of gynecological operations which I performed in the Murdock Hospital there were some three cases of insanity, all of which recovered. I had one case at the Charity Club Hospital, where after removal of a large fibroid the woman became violently insane in a few days, but she recovered. I have one case of a fibroid removed two years ago, where the lady, although apparently sane, confesses that she has occasionally suicidal tendencies. She wants to commit suicide, but knows it is wrong and does not do it. How far that is insanity, some of the alienist experts will tell.

¹ Read before the Obstetrical Section of the Suffolk District Medical Society, November 28, 1894.

I reported last year fifty abdominal hysterectomies for fibroids. Those included only the ones I did at the Charity Club Hospital and in private practice. During the last year at the Charity Club Hospital I did 11 abdominal and vaginal hysterectomies altogether, and outside about 20. Now, out of 150 abdominal and vaginal hysterectomies, the only permanent bad effect of any kind I know of is this lady who says she has suicidal tendencies. (I do not mean to consider here the recurrences of cancer.)

Now, in regard to the removal of the ovaries and tubes, we are getting on ground which is not quite so satisfactory as that for the removal of the uterus. The removal of the uterus is done for certain very definite indications. It is done for cancer or fibroids or prolapse, or by the extension which some operators are introducing now as a means when the tubes are badly diseased and the interior of the uterus inflamed with gonorrhea, etc., of getting rid of the whole trouble at once; therefore, you have certain definite diseases or states or troubles which are, as I might say, mechanical, at any rate not nervous. You can see and feel and demonstrate them, and the woman knows what she is cured of after she is operated on.

In regard to the removal of the tubes and ovaries, we get into a mixture of several different conditions. If a woman has tubes and ovaries diseased, full of pus, big as potatoes perhaps, and high temperature, chills, likely to die, it is one's duty to remove them. You let pus out anywhere else; and you must let it out there. What the remote effects are is of no consequence; you must get her out of immediate danger. If the woman has catarrhal salpingitis or the remains of old salpingitis which has bound the tubes and ovaries so that every month she is in agony; if she has had packing tried, the uterus pried up, pessaries used and she goes from one doctor to another, damning the last one all the time, it is time to do something; and even if she is not entirely cured, she is cured of the worst of it, and she gets over this agony every month.

Then comes the question how much she is cured. A certain portion of these women continue to suffer. It is partly owing to conditions which could not be helped at the time; the uterus was brought up, but possibly it does not stay up; there may be new adhesions to the bowels, to the abdominal wall. Some of us keep running across these cases. I have had a case where a woman could not control her urine at all for three or four years. I found that the previous operator had put on a ligature which had got one of the epiploic appendages in with the stump of the ovary, and was pulling and pulling and twisting; and the epiploic appendage and a bit of the base of the bladder and stump of the ovary were all together, with this ligature in the middle. Her sufferings were because something had not gone quite right. In another case you will find firm adhesions to the abdominal wall; somebody has not pulled down the omentum, or there has been an adhesion of the intestine to the abdominal wall, or it may be that there are adhesions of the stump to the intestine or the bladder. There are these different complications, and they require the thing to be done over again, and a great deal of that work is gradually being done. Sufferings are caused by the fact that there is still some trouble which may require another operation.

Another class of cases is where there are cirrhotic

ovaries. The great trouble is dysmenorrhea. First, the woman has medical treatment, then gets a surgeon, gets dilated, curetted and packed with gauze, and does not get any better, and somebody has to sit up and give her chloroform and load her full of morphine every menstrual period; and finally she has to have an operation, and you find something of which very little is said in the books. The first stage seems to be an enlargement of the ovary; it becomes large and white; gradually the white tissue begins to shrivel, until the ovary keeps getting smaller and smaller and harder and harder until there is no chance to swell and open and let the ovum out, and the woman suffers tortures. After she has suffered that way for years her nervous system is broken down; that is the result of the long-continued injury to the nervous system by the disease. It must not be laid up against the operation.

There is another class of cases, however, which are the weak-backed sisters who do not have any anatomical disease that can be discovered. They have pains, aches, miseries; they may have studied too hard, may be neurasthenic by nature, and they are very apt to suffer from dysmenorrhea; and finally somebody comes along and removes the ovaries, and they do not get a bit better. It is just as if a woman had neuralgia in the teeth, and you pull the teeth and it goes back of the ear. These women are miserable and would be miserable, and nothing I know of will stop it. The surgeon gets to recognize them as a "holy terror." The distinction in my judgment is that the pain does not limit itself strictly to the menstrual period. With the cirrhotic ovary, as I have found it, the pain is strictly limited then and there to when the ovary tries to functionate; but the woman who has pain in the head, pain in the back, and pain all over, is not a good case for surgery. Some of those women were operated on years ago. It is especially these cases where there is little to go on except pain, which are the legitimate causes of reproach to surgery; and I do not think surgeons are now as ready to interfere with those cases.

Then come the cases where the ovaries are removed for dysmenorrhea where there is a real anatomical basis, such as inflammation of the ovary, suppurative of the ovary, inflammation of the tube, adhesions; those are removed for disease, not dysmenorrhea. The woman has a right to have them removed, and if she is not entirely cured it cannot be helped.

There is one other cause of suffering that many set down to disease of the ovary, and that is varicocele of the pampiniform plexus. It is liable to give rise to various sufferings, such as pain, pressure, nervous and mental symptoms, similar to those caused by spermatocele in the male.

There are cases where the ovaries are removed for other kinds of nervous symptoms; in the first place, for hystero-epilepsy, epilepsy coming on at the menstrual period and at no other time. I have not seen many of those cases. I have operated in two; one was cured and the other ameliorated, but not cured. I fight shy of that all I can.

The cases where the ovaries have been removed in case of insanity, with the effect in a certain proportion of cases of curing the insanity, have been, so far as I know, always cases of anatomically demonstrable tubal or ovarian disease. The woman after long-continued suffering finally breaks down, gives way in the intel-

lect and is put in an asylum, and is found to have an old pus-tube or retroverted uterus bound down which is the centre and starting-point of suffering and probably a long course of morphine, and not a very small number of those cases have been operated on and occasionally one has been cured. The cure is not on account of the removal of the ovaries, it is on account of the removal of an inflamed and irritating mass, and it is possible it might be something else than the ovary and the removal of it might have the same effect.

Then come the cases where the ovaries have been removed for nymphomania and masturbation approaching idiocy. I have had only one of those cases. The woman was becoming insane, a terrible sufferer from masturbation, utterly miserable, felt she had committed the unpardonable sin. Within two days from the operation she said she felt as if a weight had been rolled off her soul; she got well. It took her six months to recover her nervous health. She first did work for her sister and helped about the house, and then came to me and confided that a widower with four children wanted to marry her, and I advised the marriage, which has been very happy. That is the only case of that kind I have seen reason to operate on.

In regard to this whole subject there is at present a sort of reaction in surgery. It was started a year or two ago by a paper by Dr. Goodell in which he set forth the various woes and evils which might follow removal of the appendages. Dr. Polk at Washington, at the meeting of the Congress of American Physicians and Surgeons, took up something in the same strain. He called attention to the fact that removal of the appendages which brought about the change of life, caused not only the temporary symptoms, flushings and various miseries which women have to go through at some time any way, but it also brought about atrophy of the vagina and genitals in some cases, and a loss in some cases of sexual desire and feeling, which certainly is a serious matter.

My experience, however, has been very different from that of Dr. Goodell. I have taken pains to inquire, both personally and through the superintendent of my private hospital who is a lady physician. The women have talked frankly, and almost none of them have complained of or admitted that they felt any difference in their sexual desires or feelings. As a matter of fact, actual sexual desire is not a condition in which most women take pride or feel it is anything to be particularly cherished or desired. It is rather an uncomfortable state. The ability under proper circumstances to have as much sexual feeling as they previously had is not impaired in the vast majority of cases. On the contrary, in all these cases where there has been inflammatory trouble where the women have been made sick, where they have been nursing a tender ovary, the removal of the disease which had caused suffering and extinguished sexual desire and made sexual connection intolerable has been of very great relief. The removal of the uterus has no more effect than removal of the appendages. Many of the women are married women, and they tell me they are just as well off as they ever were. That some of them grow stout I also believe; but some women grow stout any way and being laid off active exercise and pretty well fed and urged not to do anything and having good care, it is a good starter to getting stout.

Therefore, to sum up, my experience has been that

the removal of the uterus has no more evil effects than the removal of the appendages alone, and that the removal of the appendages alone has in itself under very rare circumstances caused a loss of sexual feeling, that is, of the capacity for sexual orgasm, which is to a certain extent regrettable, but those instances are very rare. If we take one hundred women whose ovaries have been removed I very much doubt whether you would get a much greater proportion who gradually lose their interest in sexual matters than in an equal number without the removal of the ovaries.

ULTIMATE RESULTS OF THE REMOVAL OF OVARIES AND TUBES.¹

BY J. G. MUMFORD, M.D., BOSTON.

THE operation of removal of the ovaries and tubes seems to be gradually finding its proper place in surgery, as the indications for it, the manner and extent of the proceeding, the subsequent treatment and the results obtained are better understood.

We have no more right to talk about these operations as distinct species, and to discuss the results as a whole, than we have to talk in a general way about the uniform results of skull fractures or leg amputations. Twenty-five years ago most severe compound leg fractures were amputated. Six or eight years ago very many painful ovaries were removed. In both cases we have got beyond that stage of cutting off the offending member. It is now for good cause only, and as a last resort, that the uterine appendages are removed. Any tyro — I had almost said — can tie off a Fallopian tube; it is the ingenious and successful surgeon who restores the organs to their normal function.

The personal factor of the patient enters largely into this question of ultimate result. The patient very commonly wishes the operation for the relief of subjective symptoms. Often when these symptoms are but partially relieved she expresses the greatest satisfaction. On the other hand, there are cases in which the operation is imperative — for gangrenous, sloughing or suppurating organs, and in which their removal has saved life. Yet we often find the patient constantly thereafter complaining of recurrence of the old symptoms and not at all grateful that her life has been saved. It is obvious, therefore, that the question of ultimate results is in one sense a relative one and must be answered by each individual surgeon and patient. On the other hand, one may look at the question from the broadest point of view and ask if the general health of woman has not been improved by this operation.

I found that I could put my hand on seventeen cases of removal of tubes and ovaries, of which some sort of a subsequent history could be given. Two were cases of cystic ovaries; painful, about the size of pullet's eggs. In one I did the partial operation of Polk and Pozzi on both ovaries. The woman has since married and had a child. She menstruates regularly and is free from pain. From the other woman both tubes and ovaries were removed. Ever since the operation she has, on sitting, pain, sometimes very severe, which seems to be referred to the right stump. She looks upon herself as a castrated woman

¹ Read before the Obstetrical Section of the Suffolk District Medical Society, November 28, 1894.