The treatment of chronic disease of the uterine appendages / by Alban Doran.

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THE TREATMENT OF CHRONIC DISEASE OF THE UTERINE APPENDAGES.

By Alban Doran, F.R.C.S.

My object in reading this essay is to review briefly the subject expressed in its title. I purposely avoid the introduction of original matter. At the same time, I refrain from all purely analytical subjects. Clinical records would be out of place in this paper. Statistics are equally unsuited for my purpose. In discussing one particular method of treatment, statistics may form the title-deed of the speaker's experience. In reviewing all methods, the sources of statistics are of relatively little value. Thus, by the aid of series we cannot fairly compare such an operation as salpingostomy, which has been performed two or three times by two experts, with oöphorectomy, which has been largely practised by innumerable specialists, surgeons, and practitioners.

Treatment by rest, which is, relatively speaking, expectant, cannot be satisfactorily judged by statistics. It involves essential factors very hard to tabulate. Such a task demands special mental gifts and opportunities such as enabled Dr. Boxall to prepare, at the cost of enormous labour, his invaluable tables relating to pregnancy and childbed. On the other hand, the tabulation of operations, with the results and after-histories, is work which most men may, with due deliberation, undertake. We do not yet know how to reduce our "rest" cases and operation cases to equal terms, in a mathematical sense. We must content ourselves therefore with a brief review of all forms of treatment.

Throughout this memoir I will, except when I specify to the

contrary, speak of chronic tubal and ovarian disease as one complaint, "disease of the uterine appendages." Their distinct pathology cannot be discussed.

The specimens which I now exhibit will demonstrate the usual varieties of chronic disease of the appendages.

I cannot dwell upon the sources of chronic disease of the appendages. The acute forms do not come within the scope of this memoir. Before discussing the treatment of chronic disease in detail, I will, for purposes of convenience, classify the different remedial measures now more or less in vogue. They are :—

1. Rest.
2. Electricity.
3. Massage.
4. Curetting of the uterus, and Emmet's operation.
5. Catheterism of the tubes.
6. Vaginal puncture of cystic tubes.
7. Abdominal section, which includes the following subdivisions :—

a. The complete operation, removal of the tube and ovary, or oöphorectomy.

b. Drainage of a hydro-salpinx.

c. Breaking down of adhesions and drainage.

d. Essentially "incomplete operations," or simple opening of the peritoneum.

e. Plastic operations on the tube, or salpingostomy.

Rest is in itself sufficient to cure most recent cases, especially if they have not been aggravated by injudicious therapeutic measures. The exceptions are chiefly those rare instances where suppuration of the tube or abscess of the ovary sets in early. Therapeutic measures of a kind familiar to every practitioner must not be neglected, but must not be frivolously undertaken. The effect of drugs and applications should be carefully watched. Saline aperients are usually beneficial, yet in some of the mildest cases they may cause prolonged abdominal pain with rise of temperature, probably through disturbance of intestinal adhesions. I saw this occur last spring in a young woman, aged 24, with symptoms of disease of the appendages. Tympanitic distension of the abdomen remained for several weeks after the subsidence of the pain and fever. Now, early in November, I removed two ovarian cysts with twisted pedicles from a middle-aged patient. I had to sepa-

rate abundant intestinal adhesions, and small patches of the serous coat of the ileum were unavoidably stripped off. On the eighth day I gave a drachm of sulphate of magnesia; and severe pain, rise of temperature, and tympanites rapidly followed, and did not subside for several days. I have no doubt that the former case suffered from the same complication, disturbance of intestinal adhesions around pelvic structures. Both patients were afterwards treated with enemata, and henceforth gave me no trouble.

Again, the tampon sometimes sets up severe irritation. The uterine cavity must, as a rule, be left alone. Frequent passing of sounds, and dilating of the os, will certainly aggravate the disease, and may set up fatal complications.

Care must be taken when rest is prescribed that the patient really rests. To tell a patient to lie up for an hour or two in the middle of the day, and then to cut off her ovaries a month or two later, because she reports herself as no better, is wrong. The patient must lie in bed, and, while perfect repose is insured, the attendant must also steer clear of the danger of making her a chronic invalid. The double task is difficult. Friends must not be allowed to bring her unprescribed delicacies; nor, on the other hand, must she be kept on slops.

How electricity can cure diseased appendages is a mystery which it is for those who practise the method to explain. In alleged cases of recovery, it is the subjective symptoms which have been relieved. Dr. Kehrer has shown ('Centralbl. f. Gynäk.,' 1889, p. 736) that electricity applied to the cavity of the uterus may cause the rupture of a suppurating Fallopian tube. The application of electrical appliances involves a considerable amount of handling. Nothing bears handling so badly as a suppurating tube or ovary. This handling, whether for diagnosis or treatment, may not kill, but it is almost certain to aggravate the disease. Anæsthetics may relieve the pain, whether from electricity or massage, but they encourage very rough handling of the diseased parts. Electricity *may* check the growth of fibroids, but that subject is not to the point. It *may* cure gonorrhœa by killing the gonococci; indeed, Dr. Prochownick declares that he has slaughtered those germs by the galvanic current.* This statement sounds wild, yet it at least claims a definite action. In disease of the appendages,

* 'Münchener medicin. Wochenschrift,' No. 27, 1890. The uterus bears a current up to 120 milliampères, which is strong enough to kill the gonococci;

it is hard to understand how the current can possibly open tubes, clear adhesions, and remove the products of inflammation.

There are obvious objections to massage when practised upon the genitals. The authorities who advocate it must be much at variance with those operators who remove cystic tubes to anticipate rupture and peritonitis. It is very reasonable to fear that the manipulations of massage may burst a distended tube. Dr. Koplik, of New York,* believes that massage is indicated in many forms of disease of the appendages. He considers the employment of this method unjustifiable in all cases where the tubes feel in the slightest degree dilated or the ovaries uneven, that is, in almost the entire class now under consideration. He admits that diagnosis is very difficult. In a woman, aged 31, where he diagnosed chronic parametritis, a profuse purulent discharge from the vulva followed massage. Examination showed a marked diminution in the thickness of the adhesions posterior to the uterus. Dr. Koplik surmised that a collection of pus had found its way into the body of the uterus. The emptying of a pyo-salpinx seems a more probable explanation. Dr. Koplik thought that "the patient was fortunate to have escaped an exit of pus into the cavity of the peritoneum." We must all agree with him in his opinion, and we must feel that other patients may be less fortunate. Let it be granted that in any particular case pyo-salpinx may be accurately diagnosed by a clinical history and by palpation, who would be so bold as to deliberately attempt to squeeze the pus out of the tube into the uterus?

Certain gynæcologists, especially in France and Germany, trace inflammatory disease of the appendages to endometritis, and accordingly, after their custom, dilate the uterus and scrape the endometrium. The use of the curette in chronic salpingitis may mean the sacrifice of the patient to a theory. Its advocates maintain that there is a disease called endometritis, and that in certain forms of the complaint the endometrium is converted into a fungous surface which discharges muco-pus and sanies. Being reproduced, like the normal endometrium, at each menstrual period, the traces of the diseased structure infect its successor.

but the urethra, according to Dr. Prochownick, can hardly tolerate 40 milliampères, so electricity is useless for the purpose when the urethra is affected.

* "A Contribution to the Literature of Massage of the Uterus and Adnexa," 'Amer. Journ. Obstet.,' vol. xxii, 1889, p. 136.

Conception is impossible and, what is more to the point, the morbid discharge gets into the tubes and sets up salpingitis. Let the diseased endometrium be scraped away, and let the uterine cavity be well swabbed with antiseptic lotions, and the case is cured. A healthy endometrium can now form, the uterus will hold a fertilised ovum, and, should tubo-ovarian disease exist, the cause being removed, it will soon disappear.

Such is the teaching of the advocates of the curette. Unfortunately it is based on assumptions and on confusion of cause and effect, and is practised recklessly by many who are taken in by pretty French words like "curettage," "hersage," and "écouvillonage." The precise physiology of the endometrium is far from being clearly understood. Part of its substance is certainly shed at each period. The doctrine of the production of a new diseased endometrium as a necessary consequence of disease of the old endometrium previous to a given menstrual period is indeed hardy. Considering that other mucous membranes are not periodically shed, it seems strange that the uterus should be worse off than the respiratory or alimentary tracts, when its mucosa is diseased. Applying this doctrine to those tracts, it is to be wondered how bronchitis or enteritis can ever undergo spontaneous cure.

Yet the endometrium certainly *is* unhealthy in some cases, and the scraping *may* in such instances prove beneficial. We cannot, however, assume that true endometritis sets up tubal disease. Should disease of the tubes be present, few proceedings can be more dangerous than dilatation and scraping. Tissues are thereby irritated in the neighbourhood of inflamed pelvic structures, and all for an unsettled theory. On the other hand, there can be no doubt that the curette has been the direct cause of severe inflammation of the appendages. Whatever may be the value of that instrument, it must be discarded in the class of cases now under consideration.

There are some gynæcologists who fancy that laceration of the cervix is the source of wide-spread evils, inflammation of the appendages included. On this theory, they advocate Emmet's operation, or trachelorrhaphy. I do not myself believe that a laceration of the cervix is in all cases absolutely innocuous, but there is little evidence that it can play a conspicuous part in causing inflammation of the tubes and ovaries. Cases of that disease which have recovered after repair of a laceration most

probably owe their cure to the enforced rest which follows that operation.

Catheterism of the tubes in order to employ them is a fine idea, in theory. In practice it cannot well be carried out. The uterine orifice of the tube is not to be reached with surety or safety. Should a sound be passed into that orifice by chance or skill, the dangers of pushing it, in the dark, along the canal of the tube remain evident. No attempts to open the ostium would be justifiable, whilst if accidentally opened the results might be grave, for the sound might introduce morbid materials into the peritoneal cavity. Neither the ostium nor the uterine end of the tube would necessarily remain patent after successful catheterism. Lastly, the tube might be healthy, or at least patent, whilst the disease lay chiefly in the ovary; then catheterism would be useless.

Vaginal puncture of the cystic tube has been strongly recommended by Leopold. He maintains that, even if the tube be not completely emptied by the puncture, its muscular coat can once more act, just as the uterus contracts if the membranes be ruptured and the waters escape during pregnancy. Above all, this proceeding avoids mutilation. Leopold, however, honourably admits that puncture sometimes fails to cure, and confesses that he has wounded cystic tumours and fœtal sacs by mistake. To push a supposed cystic tube downwards by pressure on the abdominal walls, and to puncture through the vagina, is indeed operating in the dark. As in the case of catheterism, the ovaries may be the main seat of disease.

If the reader wishes to study an example of all that should be avoided in the treatment of an advanced case of disease of the appendages, he should carefully peruse Professor Reverdin's honest report of a case of "Pyosalpingitis with Perforation of the Bladder," in the 'Revue Médicale de la Suisse Romande,' November, 1890. Trocars and knives plunged into the swelling above and below nearly killed the patient by sepsis and hæmorrhage. Abdominal section, boldly carried out, just saved her life, which would never have been endangered had it been undertaken in the first instance.

Granting that rest and therapeutics fail, abdominal section is more satisfactory, and even safer, than the measures above noted.

Oöphorectomy is the best operation in a large class of chronic cases where subacute seizures occur frequently and at gradually shortening intervals, and where careful bimanual palpation proves

the existence of a mass, usually tender, on one or both sides of the uterus. The tube and ovary are degenerate and useless. The more cystic they become the more discomfort they cause, and the more probably will they form adhesions to intestine, omentum, &c. Pyo-salpinx, a not unfrequent complication, is in itself a source of danger to the patient.* The health suffers, the patient is crippled, and, if poor, incapacitated from earning her bread.

There are several grave considerations in respect to oöphorectomy. The operation is most difficult in those cases where it is most justifiable. The surgeon who has triumphantly performed half a dozen ovariotomies is dismayed when he finds, on attempting oöphorectomy, how unfamiliar to his touch are the affected parts, hidden deeply in the pelvis, soldered together, and often intimately adherent to the intestines. The abdominal wound involves trouble, the omentum frequently adheres to the parietes, and the intestines are hard to get out of the way. Nor does the wound always heal kindly. Hernia of the cicatrix is more frequent than after ovariotomy. This appears to be in part due to the fact that, the abdominal walls not having been distended by a tumour, the muscles are of normal power, and frequently contract with force during convalescence. This seriously interferes with healing. The intestines, when distended with flatus, can act more directly on the wound than after ovariotomy, when the flaccid walls allow of more room for distension, and can readily be supported by bandages and pads. This pressure from within, and not muscular action, is the great enemy to sound cicatrisation of the wound. Again, there is another objection to oöphorectomy. The painful symptoms are not always relieved by that operation. This may be due to irritation of the ligatured stump; more often it depends on the presence of adhesions between adjacent coils of intestine. Dr. Coe, of New York, was among the first to turn attention to this fact. These adhesions may easily be overlooked, and, when detected, the operator is loth to disturb them. Oöphorectomy for the removal of diseased appendages is, in fact, difficult, and not always successful in the experience of the best operators. When incomplete, or clumsily performed, it is very dangerous.

* Especially when there are fibroid growths in the uterus. See Adenot, "Salpingite Suppurée Double; Péritonite Suppurée; Mort Subite," 'Archives de Tocologie,' November, 1890. In many suddenly fatal cases of suppurative peritonitis, pyo-salpinx may be overlooked.

Certain details of the operation must now be considered. The abdominal incision should not be made long; about 2½ inches will, as a rule, be sufficient. A long incision is absolutely necessary for the removal of a large solid fibroid, and, when the tumour is extracted, there is little difficulty in preventing the prolapse of intestine. For there is plenty of room behind the now flaccid walls, and a large flat sponge may be slipped in with perfect ease. In removal of the appendages, a long incision cannot aid the operator in finding and extracting the ovaries and tubes; but it is certain to give him great trouble through prolapse of the intestines, which are normally, that is to say closely, packed in the abdominal cavity. The introduction of a sponge, necessary in every case, is somewhat difficult, and requires careful manipulation. The danger of hernia has already been mentioned. The incision must be brought down close to the pubes without damaging the bladder, for if the lower angle of the wound lies too high, manipulations deep in the pelvis will be awkward and difficult.

The after-treatment is the same as in cases where ovariotomy has been performed. In the Samaritan Hospital I have watched the recovery of a large number of cases in the practice of my colleagues and myself. As far as convalescence from the operation is concerned, matters usually proceed in a satisfactory manner. We rarely see the severe constitutional disturbance which sometimes follows oöphorectomy for bleeding fibroids. The two especial complications are suppuration of the pedicle and delayed healing of the abdominal wound. The pedicle of an ovarian cyst is generally made up of healthy tissues and experience shows that it tolerates the ligature, properly applied. The pedicle of an inflamed tube and ovary is not always healthy; it includes broad ligament infiltrated with inflammatory products, and the exposed unhealthy mucous membrane of the stump of the tube. Here lies a source of danger, and free suppuration occasionally occurs. The abdominal wound, exposed to the action of powerful muscles, not weakened as in ovariotomy by previous stretching, is often slow to heal. Nevertheless, as a rule, oöphorectomy for chronic disease of the appendages is followed by speedy convalescence.

Unfortunately, a permanent cure is not so frequent. The cases where the stump suppurates are particularly unsatisfactory. Fistulous tracts open, close, and re-open in the abdominal wound

for months, discharging thin pus. Such cases find their way to the consulting-rooms of others, or to other hospitals than the institution where the operation was performed. The operator hears no more of them, and he, or the surgical registrar, records them in perfect good faith as "cures." A larger minority suffer from continuance of the pains which preceded the operation. The ill-success is not hard to explain. Sometimes inflammatory products, pressing on nerves, are, unavoidably, left behind. Sometimes adhesions between coils of intestine—the cause of the pelvic pains in these particular cases—remain undisturbed. The ligatures may set up fresh trouble, most commonly parametritis, fixing the uterus for awhile. Lastly, grave mental symptoms may follow oöphorectomy, especially when a neurosis exists. No doubt this neurosis is aggravated by the menstrual periods which the operation suppresses. But the artificial and premature menopause thus introduced may prove a far more severe shock.

Still the majority of cases of oöphorectomy do well. The patient is restored to health and comfort.

The simple draining of a hydro-salpinx is an operation that often proves highly satisfactory. Many large pelvic cysts, with a history of old inflammation, represent a dilated tube alone. But, whilst a true cystoma of the broad ligament is often shelled out of its healthy capsule with ease, the enucleation of an old diseased and cystic tube may prove very difficult. Incision and drainage, on the other hand, are simple proceedings, and give the best results. The pain is caused by the tension of the vascular capsule, always increased at the menstrual period. Incision and drainage remove the cause of pain. A considerable part of the cyst and capsule should be trimmed away so as to prevent any chance of closure and refilling. One great advantage of incision and drainage and complete removal of the appendages is that no diseased ligatured stump is left behind in the pelvis, as is the case when a tube and ovary in an earlier and less degenerative stage of inflammatory disease has perforce to be amputated. The relief, after the opening of a painful tubal cyst, is intense. Most satisfactory cases of drainage of hydro-salpinx have occurred in my own practice.

Another less radical measure is abdominal section, with free breaking down of pelvic adhesions and drainage, the appendages (be it understood) being found relatively healthy, and the ostia of the tubes unobstructed. If the local adhesions be carefully

broken down, the cause of suffering is removed. By appropriate treatment, for a few weeks after the operation, a recurrence of the inflammation may be avoided. Two considerations must be taken into account in respect to this proceeding, namely, the experience of others and the difficulty of the operation itself. We hear much about consecutive cases of removal of the appendages, but little about this simple breaking down of adhesions. Men do not like to record what may be set down as a "partial operation." They have an idea that it may be set down by their rivals as a failure. The most honest operator in these cases usually sets to work with a fixed notion that the tube and ovary is at the time the sole or chief cause of trouble. The cutting away of a tube and ovary is definite—even if difficult. Then, in the amputated structure there is something to show for one's trouble, and for the risks to which the patient has been exposed. In so many operations it is right to take something away, that surgeons very naturally tend to believe that it is wrong to take nothing away. Lastly, the patient's prejudices may give us great trouble, since, though she usually dislikes the prospect of any kind of amputation or mutilation, she, on the other hand, having undergone an operation, is often dissatisfied if she learns that nothing has been removed. Hence the surgeon should clearly explain beforehand, in all cases where he intends to operate, that the abdominal section is intended to set right what is wrong and is not necessarily undertaken in order to remove anything.

The operation itself, however, the breaking down of adhesions alone, is not, as a rule, easy. It is indefinite. No set of rules can be laid down to guide future operators. It is only when operating that the surgeon can determine if the tube and ovary be not sufficiently diseased to require removal, whilst certain adhesions should be deliberately broken down. Most assuredly, in any case, there are adhesions that had much better be left alone; whilst to disturb others would be criminal. Experience can alone guide in these cases, and the surgeon who has not done many abdominal sections must not look upon this proceeding as a mild affair. He must not hold it as an intended preliminary to removal of the ovary, which, if the ovary be found, in his opinion, to be irremovable, will signify little or nothing—a little benefit and no risk. On the contrary, such an operator should remember that carelessly breaking down adhesions is far more dangerous than cutting away an ovary, and, as in the kind of case we are considering, he is

doubtful about the propriety of oöphorectomy, it stands to reason that he had best leave everything alone, and close the abdominal wound. In breaking down adhesions, the operator must take the fundus uteri as a landmark. He is certain to take care lest he should mistake intestine for tube, but he will confuse himself if he take an inflamed and distended tube for intestine, especially if it should rupture and discharge fœtid, dark, pus resembling fæces. The operator can only ascertain at the time of operating the very conditions which demand this procedure, for, should the appendages be extensively diseased, of course they must be removed. The breaking down of adhesions, as a distinct operation, always necessitates, in my opinion, flushing of the peritoneum and drainage, for capillary oozing is free in these cases, and suppurating foci are sometimes opened up between coils of intestine. In my experience, it is precisely the well-flushed cases that have done best. The advantages of this operation over oöphorectomy are evident; as in drainage of a hydro-salpinx no ligatured stump is left behind. As the ovaries are not removed, there is no danger of the mental complications which follow their amputation.

I must repeat an observation which I have already made. Should the appendages be found to be extensively diseased, of course they must be removed. A dilated and obstructed tube, or an ovary, enlarged and cystic, will probably be a greater source of danger after they have been disturbed from their adhesions than before. Both may contain pus, and a tentative incision involves as much risk as extirpation, and complicates the more radical proceeding should it be undertaken.

We must not omit some consideration of those instructive cases where the operation is absolutely incomplete, yet the patient is cured of her pain. From this class all operations where adhesions have been undesignedly broken down must be excluded, as they come under the kind of procedure just described. I now speak of cases where an abdominal incision is made, and no morbid condition discovered, no objective signs of disease of the appendages, and no adhesions. In other cases the operator finds numerous intestinal adhesions which he fears to disturb. In either of these circumstances nothing further is done beyond speedy closure of the wound.

These incomplete proceedings are not popular amongst operators who tend to believe that they are stultified should a patient

get well after "nothing" has been done. Hence these cases are seldom published. Yet I have known of more satisfactory results after these purely incomplete operations than after removal of the appendages. The latter may make a patient absolutely worse. The former may prove a perfect cure.

Is it "nothing," this simple opening of the abdominal cavity? Does the handling of the appendages perchance set up some salutary change, whether through mild stimulation of limited products of chronic inflammation or purely through nerve influence? Is the cure mainly due to the mental impression of the operation? We will put aside the possible effects of rest necessitated by the operation, for these cases have often been unsuccessfully treated by enforced rest already. Yet no doubt the repose is a factor in the cure. It is certain that where chronic peritonitis is present simple incision of the walls has the most frequently proved beneficial, especially when the parietal peritoneum is much thickened, as in a case under my care four years ago. The cutting through the thickened and vascular serous membrane appears to relieve the whole peritoneum.

There remains a somewhat difficult operation of an entirely conservative character, first advocated by Dr. Skutsch, of Jena, and Dr. Martin, of Berlin, within the past two years. Both claim good results. This operation is salpingostomy, or the fashioning of an artificial ostium. A kind of button-hole is cut in the end of the tube, and the mucous and peritoneal surfaces are sewn together. This operation is not justifiable in pyo-salpinx, and not likely to succeed if any active inflammatory process be present, since the new ostium must, in such a case, be soon covered over by fresh bands. Salpingostomy seems to be a step in the right direction, especially in hydro-salpinx.

In conclusion, Mr. President, it is evident that removal of the appendages is an operation to be avoided whenever possible. In long-standing, neglected cases it is hardly avoidable, but, even then, one of the less severe operative measures, already indicated, may suffice. Already neglect, as the result of professional ignorance, is becoming rare. In this country, practitioners and nurses are growing more and more skilful in the management of lying-in women. Hence serious pelvic inflammation, even after abortion, is becoming uncommon. When it occurs it is generally detected and treated in its earliest stages, and then complete recovery is almost

certain. Unfortunately, a large number of women will always neglect themselves, or else be exposed to neglect. Some of the more serious forms of inflammation, especially the gonorrhœal type, involve so much local damage that it is hard to see how an era can ever arrive when there will be no more patients who would be the better for the removal of their diseased and useless tubes and ovaries. I hope, on a future occasion, to be able to analyse a series of cases within my own practice, especially in respect to the relative results of complete and incomplete operations.

Professor SINCLAIR, of Manchester, pointed out that severe attacks of puerperal perimetritis were a frequent cause of the affections for which these operations had subsequently to be undertaken, and, as these had decreased of late years in consequence of greater care and skill in operations and instrumental labours, the number of cases of disease requiring operative interference had tended to diminish. He observed that little had been said of gonorrhœa as a cause of severe forms of the disease. In relation to this subject he related an anecdote of a student of his, a man who knew his work well, who, on presenting himself for examination in London, had been asked the most frequent causes of ovaritis, in answer to which he had mentioned gonorrhœa. Thereupon the examiner retorted : "I am talking of respectable married women, and not of strumpets." He urged that strumpets were not the only people who suffered from severe attacks of gonorrhœa ; on the contrary, they took care of themselves, whereas the respectable married women, not being warned, frequently fell victims to infection from their husbands. Another frequent cause of these diseased conditions was ill-advised treatment, especially at the hands of the younger men who had obtained a smattering of gynæcology, and were but too anxious to display their skill. He instanced the case of a weakly married woman who had applied to a newly-fledged practitioner on account of a sore throat. The practitioner elicited the fact that, though married, she had never been pregnant, and thereupon he obtained permission to examine her, declared that the uterus was retroverted, and forthwith inserted a pessary. In the sequel the woman developed a hæmatocele, followed by abscess in the left broad ligament and Fallopian tube which burst into the rectum. He hoped someone would be bold enough to condemn this tendency to rash treatment on the part of general practitioners. He alluded *en passant* to cases of intermitting hæmatocele, and mentioned an example of this affection. The patient had been under his observation for several years, but as the tumour invariably cleared up after treatment, he had been unable to ascertain the condition of the parts. He had frequently operated for removal of the tubes during the last ten years, but he had found it a difficult and dangerous operation. With regard to prognosis, he said there were operators who assured their patients that the operation was practically unattended with danger, and he mentioned a striking example of the folly of so doing. He urged that the Staffordshire knot ought to be abandoned as utterly unreliable, as much so, indeed, as Keith's clamp for ovariotomy. Lastly, he expressed unreserved approval of the practice of flushing the peritoneum, and expressed his surprise that Sir Spencer Wells should have obtained his results in view of the fact that he mentioned in a recent speech that he

had resorted to flushing on only two occasions. In conclusion, he said that operators were disposed to regard the woman's escaping with her life as constituting *per se* a satisfactory result; but he urged that more attention should be paid to the ultimate effects upon the general health.

The PRESIDENT (Mr. Knowsley Thornton) said that, before proceeding to discuss in detail the various propositions which had been brought before them in the papers which had been read as introductory to the discussion, he must recur for a moment to the question which he asked at the last meeting, and to which he thought Dr. Duncan gave a very imperfect answer. He had elicited from Dr. Duncan that the table of cases now before them did not represent his whole practice in this operation, and that his results at some antecedent period were so unsatisfactory that he was not prepared to publish them; but he (the President) did not elicit the reasons which made Dr. Duncan fix upon these particular thirty cases to tabulate for their instruction. Now, whilst not a great believer in the value of these statistical records, because it is impossible in them to show the factors which in the individual cases may lead to success or failure, still he thought it was of some value to have the whole experience of any individual operator, and to watch and learn from it how far he had learned his work before he ventured to risk the lives of patients entrusted to his care, and how great was the amount of failure necessary before he attained fair success in operating. Such a record, he held, had a certain value, and so had the records of large masses of cases operated upon by one operator, which can be compared with similar masses operated upon by another of like experience. He thought, however, a limited list, such as that laid before them by Dr. Duncan, without anything to guide them as to dates, and without anything to guide them as to the reasons of limitation, was not only valueless, but was likely to mislead, and not only to give an entirely false impression as to his own practice, but to lead to far more serious mischief, inasmuch as it gave a false impression of the dangers of these operations, and encouraged inexperienced men to attempt operations they were totally unfit to perform, and thus added to the already formidable mortality of this class of operations—operations, be it remembered, not by any means entitled to rank with ovariotomy for tumour, because tumour always kills if not removed, whereas a large proportion of these women would certainly not die, and would most of them get well at the menopause. In saying this he was far from wishing it to be understood that he did not approve of these operations of expediency. There are many cases in which the patient is so miserable that he thought she was quite entitled to run the risk of operation. He would now follow the arrangement of Dr. Duncan's paper. The first thing which struck him was that, according to all ordinary ideas, Case 6 in the table, upon which the author had enlarged in his remarks, was not a case of chronic disease of the uterine appendages, but an ordinary ovariotomy for dermoid ovarian tumour. Then he should like to ask Dr. Duncan whether either Case 9 or Case 24 was the one which he saw with him in consultation, and suggested the use of white mixture, with, as Dr. Duncan afterwards told him, the happiest results. Passing to the pathology, he should be inclined to reverse the order of events, as described by Dr. Duncan, in the formation of cystic tube, either hydro-, hæmato-, or pyo-salpinx. He thought it was much more probable that the narrow orifice towards the uterus first became occluded, at first merely by inflammatory swelling, and then by adhesion of the sides of the tube thus pressed together, and that the result of this obstruction was the escape of morbid material backwards, at

the open peritoneal end, which caused adhesive peritonitis, an effort of nature to prevent more general contamination of the peritoneum, and hence cystic dilatation of the closed tube. Then with regard to cirrhosis of the ovary being the result of pressure from adhesions, he doubted the conclusions; they knew that cirrhosis did result from inflammatory changes in the course of some or all of the acute exanthemata, and they also knew that such cirrhotic ovaries, performing their functions badly or not at all, were a cause of great suffering, and yet were often found entirely free from adhesion to neighbouring parts. Such ovaries may of course he surrounded by adhesions, but in the great majority of the cases of what may be called adhesion tumours, the ovaries are found large and œdematous, their tunic markedly thickened, their stroma also thickened, and full of abnormal cell growth with much fluid, and their follicles unruptured and tending to become cystic. It is of course possible that such ovaries may, as the result of long pressure from surrounding adhesions, eventually waste and resemble the true cirrhotic ovary; but he thought the two conditions should be carefully distinguished, and that careful inquiry into the history of the patient would leave little doubt in most cases that she had cirrhosis of her ovaries, before she had the pelvic peritonitis. Such patients were especially liable to find their way into the hands of those too active gynæcologists to whom Professor Sinclair had referred, and as a result of treatment, have added to their miseries inflammation and matting of parts around their already diseased ovaries. So, again, he thought the majority of the cases which Dr. Duncan described as congenitally ill-developed ovaries were really not congenital, but the result of acute disease during childhood, especially about the time of the onset of menstruation, in the case which he gave as an illustration, he mentioned, as if of no consequence, the ordinary diseases of childhood; and he (the President) thought these were often of the first consequence, and were too often overlooked in considering abnormalities in the future menstrual history. In such cases he should carefully avoid the free dilatation of the cervical canal, which Dr. Duncan recommended, because it was just this sort of interference which was likely to lead to inflammatory mischief and adhesions. Then Dr. Duncan said the symptoms of diseased appendages were essentially two—pain and menorrhagia; in his (the President's) experience they were essentially three, for amenorrhœa was even a more important symptom than menorrhagia; many of the cases which suffer from pain and menorrhagia will cure without surgery. None of the cases, so far as his experience went, which suffer from pain and amenorrhœa, will so cure, and still worse, it was very doubtful if they will cure with complete removal of the appendages. He, at any rate, had found them not always, but very often, most unsatisfactory as to their condition after operation. Then Dr. Duncan said the pain was referred to the side most affected, and left the statement without qualification; now one of the earliest observations he (the President) made after commencing to operate upon these cases was that the side in which the pain was chiefly complained of was the one in which, so far as one could judge on opening the abdomen, there was least disease, and this he had repeatedly pointed out to those present at his operations. Then again, his cases did not bear out Dr. Duncan's statement with regard to increase of flow being most marked when there was merely salpingitis or ovaritis present, and that when the tubes were distended with fluid this symptom was not marked. He (the President) found that in most of the cases that had had palpable tumour, there had been very marked increase

of flow, and often also great irregularity, whereas it was by no means a constant symptom in the milder cases which had not progressed beyond chronic inflammation of the appendages. He quite agreed with Dr. Duncan that rectal examination was very valuable; indeed, it was often more so than vaginal, and will, as he said, frequently decide whether there was mobility or not, when mere vaginal examination will not do so. He found that with the index finger in the vagina, and the second finger in the rectum, one can often define most accurately the size, relation, and amount of fixity of a swelling in a way which is altogether impossible by any other means. He believed that anæsthesia was rarely, very rarely, necessary, and it should be avoided for several reasons: 1st. Its own inherent risk; it was in small matters, such as this, that the accidents of anæsthesia often happened; therefore, avoid it whenever possible. 2nd. When pain was abolished one was very apt to push one's examination to dangerous lengths, and fresh escape of morbid material into the peritoneum might result. He had seen a lady black and blue after an examination under anæsthesia, made by very distinguished gynæcologists. 3rd. The absence of the patient's sensations was a great loss to the examiner, in forming a correct opinion as to the need for operation. Therefore, he would strongly urge the advisability of avoiding anæsthesia for pelvic examination whenever possible. He did not think he used it twice a year, and he doubted if he had ever gained any marked advantage from it; but sometimes it might be necessary in a very neurotic patient to distinguish between the real and the ideal. They should be very careful in accepting a patient's statement as to gushes of fluid, and unless they knew their man well they should not even be satisfied with the statement of the medical attendant on this point; the escape of fluid which frequently followed any manipulation of the uterus, and especially the use of the sound, he had seen frequently mistaken for such gushes. He did not deny the occasional presence of intermittent hydro- or pyo-salpinx; it was a proved fact, but it was a very rare condition. Dr. Duncan said it must not be forgotten that the full benefits of the operation were not usually felt for several months after, but he would say, were never felt till several months after and often not for some years. With regard to treatment, he, in the main, agreed with Dr. Duncan's first and second propositions, but not with the last part of No. 2, where he dealt with "suspected tubal gestation." He (the President) thought there were many cases in which waiting and watching was the only proper course, and he knew of several cases in which many competent observers were agreed as to the probable presence of tubal pregnancy, in which the patients got perfectly well with rest and care without operation. Of course they must always be prepared to operate at once if any urgent symptoms arose. With regard to proposition 3, he found that ergot, given in bitter tonic mixture, for a long time between the periods, in combination with efficient hot douching, was very valuable; but both these things must be properly carried out. He had recently seen a case in which, after a month of very imperfect trial, it was decided that this treatment would do no good. This was a farce. Blistering and tampons he never saw do any good, and the latter frequently did much harm. He did not quite see how proposition 4 was meant to be taken. He entirely disagreed with No. 5 as to dilatation, electricity, and in great measure as to the necessity for operation, or, perhaps, he should rather say the good of it. And with regard to unsexing, he again affirmed, as he had often done before, that removal of both ovaries in a woman, who

had no supernumerary ovary, did unsex her, and destroyed the sexual desire and pleasure. He affirmed this as the result of careful inquiry, addressed some years ago to all the patients on whom he had performed the double operation, either in ordinary ovariotomy or in the operations under consideration. He should fully agree with No. 6, if he were sure that it could be decided by mere inspection when an ovary was healthy and when diseased. He was not at all sure that they could always do so, even by careful microscopic examination. He (the President) had only once failed to complete this operation, and that was in the case of a young married lady who had had general peritonitis in her girlhood, and when the peritoneum was opened the intestines were so closely matted and so completely covered in all the pelvic organs that he could not find any of them. If they could reach an ovary or tube or the uterus as guide, he did not think any operation need be left incomplete; it was only a question of time and care, but with the greatest care fæcal fistula will sometimes result, either immediately or some days after operation, from sloughing of a portion of gut damaged at the time of operation. He did not believe that it was necessary to tie in three portions, nor did he think it advisable. The middle loop is very liable to be left looser than one thinks. He thought it was of the first importance to make the transfixion through the utero-ovarian ligament; it gave firmer hold, bled but little, and avoided the risk of puncture of a vessel, which was undoubtedly a not uncommon cause of phlebitis. He was more and more convinced, too, of the great importance of using fine silk, and tying slowly and carefully, by a series of gentle tractions, with a rest between each; if this plan were followed, fine silk was sufficient for most of these cases; he generally used No. 2 now, and he never saw the after-suppurations and fistulous tracks referred to by Mr. Doran. With regard to drainage, he now drained more often than formerly, but left the tube in a much shorter time—rarely more than forty-eight hours; it had, however, the disadvantage of leaving, in many cases, a weak place in the scar. He was glad to find that someone besides himself thought flushing was a proceeding of risk. He had tried it in a few cases, but had seen but little good from it, and very decided evil in at least one case, in which it washed pus into the upper part of peritoneum, and the patient died of suppurative peritonitis, clearly commencing from this infection. With regard to the dressing, he was surprised to hear anyone advocating oil silk; anything that keeps a wound moist was, in his opinion, bad; and since he had discarded oil silk many years ago, and used simply gauze next the wound, he did not think he had had half-a-dozen cases of stitch hole suppuration in his whole practice. In the main he agreed with Dr. Duncan's remarks on peritonitis and flatulent distension and sickness; but he was not sure about re-opening in peritonitis. He had seen so many cases get well without it, and he had seen so much evil from interference during the acute stage of peritonitis, that he was inclined to think that, on any large series of cases, opium and atropine and the expectant treatment would beat the heroic. Passing now to Mr. Doran's paper, he had no experience of massage for the cases under consideration, but he should think it was not likely to be of service, and would be decidedly dangerous in a great proportion of the cases. He agreed with what Mr. Doran said with regard to electricity, that it must be a robust faith, indeed, which can believe it capable of opening up closed tubes, destroying adhesions, and killing gonococci, and yet be harmless to the individual in whom it works these wonders. Catheterism of the tubes he should

prefer to leave to more skilful and experienced manipulators than himself, and with all their skill he should venture to prophesy that their death rate would be considered greater than that of the skilled and careful abdominal surgeon. Vaginal puncture had nothing to recommend it, and much to contra-indicate its use. With regard to the new departures suggested in abdominal section, he should distrust the permanence of cure in drainage of a hydro-salpinx, and should consider it likely to be far more dangerous than salpingostomy. He thought, in carefully selected cases, there was something to be said for mere separation of adhesions, and he had himself used it successfully for one ovary and tube, where the other clearly needed removal; but, as he had already pointed out, the difficulty was to distinguish in these cases when an ovary was still healthy. He must most emphatically dissent from Mr. Doran's dictum, that in every case in which mere separation of adhesions was performed drainage and flushing were necessary. The latter he should think rarely, if ever, necessary in such a case, and many cases need not require drainage if hæmorrhage was carefully checked before the abdomen was closed. The presence of the tube was very likely to excite fresh adhesion of the recently freed surfaces. He doubted if mere rest ever cures, and he quite agreed with what Mr. Doran said as to the danger of encouraging chronic invalidism. Rest just before, during, and just after the period was essential, but the patient should be encouraged to take gentle walking exercise at all other times, and in every way to lead a natural life. The curette might be useful in endometritis, before the tubes and ovaries become involved; afterwards it could not remove the whole of the diseased surface, and the manipulations which it required must be very dangerous in spreading mischief. But in endometritis they were not treating diseased appendages, though they might possibly prevent their becoming diseased if they curetted early enough and with thorough asepsis. The curette was more likely to set up disease in the appendages than to cure it. He had had practically no experience of the mental conditions as after-effects to which Mr. Doran referred, and he could not believe that they were at all common. He had already referred to what Mr. Doran said as to persistent fistulous tracks; bad ligaturing, or too thick silk, sepsis, and a too prolonged use of the drainage tube must, he thought, be at the bottom of such misfortunes. A disappointing continuance of pain they certainly had in some cases, and he thought it usually arose from inflammatory troubles following the operation and consequent adhesions, especially of the intestines, and he expected was commonly due to imperfect asepsis. He should expect the artificial opening made in salpingostomy to be closed in twenty-four hours after the operation, by adhesion to some neighbouring peritoneal surface in about nine-tenths of any series of cases in which it was made. It was a somewhat suggestive circumstance that neither Mr. Doran nor Dr. Duncan had referred to the persistence of menstruation after these operations. He had always believed, and still firmly believed, that when it did occur it was due either to imperfect removal of ovarian tumour or to the accidental presence of a supernumerary organ. His own experience of it was practically *nil*. Neither did they offer any remarks on the relative value of removal of tubes and ovaries as affecting the menstrual flow. He still had no doubt that if all the ovarian tissue a woman possessed was cleanly removed she ceased to menstruate, though she might, for a time, have periodic metrostaxes, the result of long habit, or through irritation of the ovarian nerves by the encircling ligatures and the

changes going on around them. In the last discussion at this Society, in 1888, Mr. Tait quoted, with approval, the following words of Dr. Mary Dixon, in speaking of the operation for removal of the appendages :—"It will save more lives than ovariotomy, because more need it." He did not know that he had ever read a more absurd or misleading statement. The diseases for which ovariotomy was performed always kill in time without operation ; the diseases for which they removed the appendages rarely killed, and in the vast majority of cases did not even shorten life, though they often rendered it very wretched. How then could they compare the operations as to their life-saving ? He was strongly of opinion that the views held and promulgated by many authorities as to the amount of sterility due to these chronic diseases of the appendages were exaggerated and misleading. He could quote some striking cases in support of his view, if time permitted it. He was also of opinion that both ovaries and tubes were too often removed when one side was only really diseased, and that many of the cases in which pain recurred on the other side were neurotic cases, which should never have been touched at all, and that most of the rest were the result of bad surgery at the first operation, want of thorough cleanliness or asepsis, and consequent inflammatory trouble.

Dr. Routh was somewhat surprised to find that mutilations in the past appeared to be more objected to than in the present day. Mr. Brown's clitoridectomy cases led to his condemnation by the entire profession, and yet, as evidence proved, neither sexual faculty nor mental trouble resulted therefrom. On the contrary, women became mothers who had been barren before, and the sexual orgasm was even intensified. Witness the Abyssinian Jewesses, who were in part circumcised, that is, clitoridectomised. The Abyssinian men often became Jews to marry these women. Nor was the deformity apparent after years. The castration of a woman was a lasting mutilation, and made a woman often most miserable. He did not say it should *not* be performed in cases of life and death, and as a *pis aller*, but not otherwise. In these thirty cases of Dr. Duncan we were told some had been ill for years, but we were not told what treatment had been followed before ; and he was sure if proper active treatment had been pursued, they would not probably, at least several of them, have got in the state they were when treated by Dr. Duncan. The President had found fault with many of the cases, and Mr. Doran had told them that in many the mere separation of the adhesions would quiet the patient and cure them. He also had protested against necessarily taking away the appendages, because the abdomen was opened to see what the mischief was. Mr. Doran had also spoken of salpingostomy as recommended by two gentlemen abroad, and successfully practised, in cases of *hydro-salpinx*. He had not referred to Dr. McCan's three cases, also successful. Why remove, therefore, except in very exceptional cases, the appendages in hydro-salpinx. The President had spoken not encouragingly of puncture *per vaginam* or *rectum* into a pyo-salpinx or ovarian abscess. Now, in some of these cases the pus contained was intensely fœtid, full of adhesions, and the sac very thin. In all abdominal sections there was the greatest risk of rupture. But if an aspirator puncture was made through the vagina or rectum, and, after voiding it, it was washed out with iodine and a drainage tube kept in, and the sac daily washed out with an antiseptic, it would contract, and recovery follow. He had once seen this bursting take place in an abdominal section, and death followed ; while he had had several cases in which the

aspirator and subsequent aseptic washings were carried on, and perfect cure followed, except in one case, which had left him, and the ultimate result of which he knew not. Now, he did not accuse Dr. Duncan of immorality in these operations, because he had operated well, and he was sure he acted to the best of his judgment ; still, if it could be proved that the comfort and life of the patient could be ensured without castration, he thought that every moral or Christian man would not practise it. There was another point he wished to dwell upon. Dr. Duncan had said he had not included *all* his cases, because the results of some of those practised in Waterloo Road Hospital were so unfortunate. But still, in the abstract published, there were five successful cases treated in that hospital. Now, this would prove one of two things. Either that at first he was not successful, from want of experience or the unhealthy state of the hospital, but that, later on, both his skill and the sanitary state of the hospital improved. Thus we should be able to estimate the full value of the cases, because then we should have the whole truth declared. Lastly, it had been said that in pyo-salpinx electricity was never to be employed. Now, whoever said it should? What he did know was this : in cases of early gonorrhœa (three or four days) with urethritis, you often felt the appendages swollen and tender. Now, if in those cases you applied a negative current within the uterus, it acted in some way or other, perhaps as a derivative, and recovery followed rapidly. This he had seen done by Apostoli, but no man in his common senses would think of applying electricity in an advanced case of pyo-salpinx.

Dr. Heywood Smith said, in answer to the remarks that had fallen from the President, that in his experience menorrhagia was a more frequent symptom in cases of chronic disease of the uterine appendages than amenorrhœa ; but he agreed with the President in his observation that the pain was often on the side opposite to the diseased ovary, and he thought the explanation was that the swollen ovary pushed the uterus over to the opposite side, and the pain arose from the pressure on the cervix uteri or the ovary on that side. He was surprised to hear the President say that in cases of tubal pregnancy it was better to wait, and that such cases often got well. He (Dr. Smith) considered it endangered the woman's life to wait beyond the third month of utero-gestation, as, though the pregnancy might become extra-tubal, and so abdominal, she ran the risk of rupture. He would like to hear from the President his explanation of such a statement. With regard to what had been said, both by the President and Dr. Routh, on the question of the sexual appetite, in his experience it was quite the exception when desire had been at all lessened. In those cases where it was desirable to lessen a morbid sexual craving, the operation of clitoridectomy afforded a far more satisfactory result than the removal of the uterine appendages. It was beside the mark to speak, as Dr. Routh had, of the immorality of the operation, of the unsexing of the woman, and her consequent degradation. Our duty was not only to save life, but lessen misery, and in the case of those who had to earn their daily bread by labour, it was incumbent on medical men, if possible to relieve patients of their suffering. As to the question of salpingectomy alone, he considered it was worse than useless to leave the ovary without its tube to become perhaps the seat of further complication and pain.

Mr. Lawson Tait was glad to find himself in the main in agreement with the author of the paper and with those who had spoken. He disagreed entirely with the moral view of the question which Dr. Routh had

put forward. He was surprised to hear the President say that flushing did harm, for he was in the habit of using it most days of the week, and he had never had a mishap from it. The same remarks applied to drainage. Sir Spencer Wells had said that the drainage tube should be done away with, but he found it most valuable, especially in giving warning of the beginning of hæmorrhage. He kept it in a much shorter time than he used to—two or three days, instead of five or six. As to the Staffordshire knot, like other knots, it could not be tied with negligence. Once or twice he had failed with it, through not attending to his own directions for its use. It was not fair to say that the knot was not to be trusted; it was the man who tied it who was not to be trusted. Referring to the quotation of Dr. Mary Dixon, he called to mind the fact that at the time it was made there was great scepticism as to the very existence of pyo-salpinx, and Dr. Fowler's remarkable figures from the Middlesex Hospital records showed how fatal that disease was. Hence it was not unfair at that time to say that more women would be saved by removal of the appendages than by ovariotomy. Now, however, the fatality of this disease was not so great, because many cases were treated early. He was constantly protesting against the mixing up of cases which ought to be operated upon with those which should not, and because some of his critics were unable to recognise those which should be treated by operation they accused the operators of practising ignorant empiricism. He emphasised the essential difference between cases like those neurotic ones which demanded a guarded opinion and those cases of clear diagnosis in which operation was the only thing to save life, or at any rate to relieve suffering. In cases like those of menstrual epilepsy, where he had once removed the appendages he now hesitated to do so; but still, from recent experience, he was inclined to think that a vast field lay before them in these neurotic cases where operation might give relief. The gain at any rate would probably be greater than the evil, moral, Christian, or other, likely to result therefrom. Referring to the treatment of pyo-salpinx by electricity, he said it required a very robust faith to believe that this measure could cause pus to dry up. Let the advocates of it try a whitlow or a suppurative arthritis, where one could see and judge the result, before making assertions which could not be proved.

Dr. Lewers said it was most important to inform ourselves as far as possible as to the natural course taken by cases of diseased Fallopian tubes when not operated on. He referred to a series of seventeen cases of dilated tubes which he had described in a paper read before the Obstetrical Society as bearing on this point. The late Dr. Matthews Duncan had commented on the apparently advanced age of the patients in this series, and had argued that, as fifteen of the seventeen died from causes unconnected with disease of the Fallopian tube, it was probable that in many of the cases the disease had undergone the process of natural cure. Dr. Lewers believed this to be the true explanation. He considered, therefore, that a prolonged course of palliative treatment—one year and a half to two years—should precede operative interference. He commented on a case of ill-developed ovaries and uterus described in Dr. Duncan's paper. He could not agree that because the sound passed only 2 inches in a virgin of 20 the uterus was ill-developed, as this measurement was the normal length of the uterine cavity in the virgin according to all standard authorities. The specimen of the appendages removed in this case had been shown, and he felt bound to say that, as to size and all other obvious characters, they, in his opinion, showed no abnormality.

Dr. Amand Routh emphasised the value of palliative treatment in cases of tubal disease where the only alternatives to relief were chronic invalidism or surgical interference. He had seen many apparently complete recoveries, and instanced a lady whom the President had seen with him five years ago with double tubal disease who was now in perfect health. He noted how averse the surgeons at the Samaritan Hospital were to this operation, and how ready they were to transfer the cases of tubal disease to the medical side of the hospital for a prolonged course of palliative treatment. Rest was essential, especially sexual rest, whilst free purgation, ergot, hot douches, and the treatment of any existing diathesis were very important. He had found that much relief, both to the pain and swelling, was afforded by the occasional application of tin. iodi to the posterior vaginal *cul-de-sac*.

Dr. Rutherfoord was struck by the large number of diseased appendages which Dr. Duncan had found and the very few ovarian cysts. At the Samaritan Free Hospital he had been greatly impressed by the fact that, though more abdominal sections were performed there than at any other London hospital, the number of ovarian tumours exceeded by a very large majority the number of diseased appendages removed. He could not account for this difference between Dr. Duncan's practice and that which obtained at the Samaritan. Perhaps Dr. Duncan could give some explanation. The ovaries exhibited by Dr. Duncan as congenitally ill-developed were, in his opinion, judging from their size, contour, consistence, and general appearance, perfectly healthy and normal ovaries. He could not understand Dr. Duncan's method of treating cases of dysmenorrhœa by dilatation of the cervical canal when the uterus and ovaries were congenital, especially as in the case recorded by Dr. Duncan the dysmenorrhœa was clearly ovarian and not uterine. He regarded the statement that no glands existed in the Fallopian tubes as bold, and referred Dr. Duncan to a paper by Mr. Sutton, in the 'Obstetrical Transactions' for 1888, and to Ballantyne's and Williams' extensive researches published in the 'British Medical Journal,' in January, 1891.

Dr. Cullingworth said that he was in general agreement with the views and practice advocated in Dr. W. Duncan's paper. In some minor details, no doubt, the paper was open to criticism, but previous speakers had already alluded to most of the points to which he had intended to take exception. He thought it was a mistake to include a case of suppurating dermoid cyst of the ovary in a series like the present, and, in all probability, the reader of the paper, now that he had heard the matter discussed, thought so himself. There was a point bearing on diagnosis to which Dr. W. Duncan had scarcely called sufficient attention, and that was the great significance of recurrent pelvic peritonitis as an indication of the probable presence of chronic disease of the uterine appendages and especially of the Fallopian tubes. It was true that recurrent pelvic peritonitis was occasionally caused by other conditions, as, for example, disease of the vermiform appendix, but, in the vast majority of cases, occurring in the female, it was due to chronic inflammatory affections of the tube or the ovary or both. The fact, therefore, of a patient being the subject of such recurrent attacks, should always arouse suspicion as to the condition of these organs, and lead to a thorough and careful examination of them. The pith, however, of Dr. W. Duncan's paper lay in the series of propositions on the subject of treatment; to some of these propositions he would, therefore, now address himself. To the first two he fully assented; but, with regard to the course of treatment laid down in the third, he

thought that, in omitting all mention of rest, he had left out the one really important element. The treatment laid down by Dr. Duncan had in itself little or no value. It would only succeed if absolute rest were enjoined at the same time, and then it would be the rest that did the good. Tonics, for example, could only have a very indirect influence on pelvic inflammations. Taking the next remedy on the list, it was no doubt important to prevent accumulations in the lower part of the large bowel, but, beyond this, aperients were of no special value. Repeated blisterings he regarded as a cruel and useless barbarism, and the same might be said of the practice of painting the roof of the vagina with iodine, as recommended by one of the previous speakers. Hot vaginal douches were harmless, and no doubt were fashionable, but it could not be seriously maintained that they were capable of exerting any remedial action on parts so distant as the ovary and Fallopian tube. Dr. Emmet, their strongest advocate, adhered to the old view that these were cases of cellulitis. It might be possible for hot douches to have some effect in cases of inflammation of the cellular tissue of the pelvis, so that Dr. Emmet and those who thought with him had some excuse for ordering them and even for regarding them as important elements of treatment. But it was now well known that pelvic cellulitis was a comparatively rare affection, and that cases formerly classed under that head were for the most part cases of peritonitis secondary to salpingitis, affections that hot vaginal douches could not influence. The only remaining remedy in Dr. Duncan's list was glycerine tampons. The most enthusiastic admirers of these uncomfortable applications did not credit them with any power beyond that of draining the tissues in immediate contact with them of a little watery fluid. What possible influence for good could they have in chronic inflammatory disease of the uterine appendages? Probably neither they nor the douches did any harm, however, and if their employment enabled the treatment by rest to be more readily accepted by the patient they fulfilled a useful function. Nevertheless, he must repeat that it was the rest did the good, and the improvement that rest brought about was often most marvellous. It permitted absorption of peritoneal exudations, it gave freedom from pain, and it restored patients to a condition of apparently good health. If, however, the Fallopian tubes contained pus, the mischief would again sooner or later declare itself and it would become evident that the improvement had been merely temporary. On this ground he deprecated unnecessary waiting before operation, especially in the case of women belonging to the labouring class. With Dr. Duncan's sixth proposition he quite agreed in principle. There was, however, one case in which his own experience had shown that it was not always safe to leave parts behind because their external appearance was normal. He alluded to the case where there was a pyo-salpinx on our side and an apparently normal tube on the other. He had two or three times found such apparently healthy tubes to contain pus, and he believed that it would prove to be a wise rule to remove both tubes in all cases of pyo-salpinx. He heartily assented to the last proposition as to the unjustifiability, in the present state of our knowledge, of removing the uterine appendages in cases of neurosis, in any case, in short, where, on physical examination, no obvious lesion could be detected. He thought that, on this point, Dr. Duncan's practice scarcely agreed with his preaching. The removal of ill-developed ovaries came very nearly if not quite in the same category. On the subject of drainage, and flushing the peritoneal cavity, he had nothing to

add to Mr. Lawson Tait's remarks, with which he entirely agreed. The President had anticipated him in some remarks he had intended to make on the various methods of treatment mentioned in Mr. Doran's paper. There was only one point in that paper to which he would, therefore, refer. Mr. Doran spoke of the difficulty of estimating by statistics the value of treatment by rest. He desired to point out that, even if we were able to obtain such statistics, they would be liable to a fallacy that would render them utterly valueless. The length of time during which collections of pus in the pelvis may lie dormant in patients who have been treated by rest is almost incredible. In a valuable paper by Dr. R. B. Maury in the current number of the 'American Journal of Obstetrics,' which he commended to the attention of some of Dr. Duncan's critics, there were two signal examples of this prolonged immunity in patients with pyo-salpinx, not only from active pelvic mischief, but from any indication of ill-health. In one case the period of latency extended over four years, in the other it actually extended over seven years. Such cases might easily be reported as instances of permanent cure. Yet in both the disease ultimately asserted itself and called for energetic and radical treatment. He had notes of similar cases, though not extending over quite so long a time, in his own practice at St. Thomas's Hospital. It had been asked why these cases are not met with more frequently in the post-mortem room. The answer was that they were not looked for. When Dr. Kingston Fowler and Dr. Lewers instituted a systematic examination into the condition of the female pelvic organs in the post-mortem room, they found them seriously diseased in a proportion that was quite startling. If such a systematic examination were the rule instead of being the exception, there would be no lack of evidence to show that chronic inflammatory disease of the uterine appendages is not only a common affection, but one that not infrequently ends fatally. It was time that our pathologists realised that the parts below the brim of the pelvis were of some importance to the female economy, and were worth examining in the ordinary routine of the post-mortem room.

Dr. Duncan, in reply, was very glad to find that in the main the various speakers agreed with the views expressed in the paper. He said the thirty cases tabulated began some two years ago, from the date when the obstetric physicians at the Middlesex Hospital obtained the right to perform abdominal section. Prior to that date he had removed diseased appendages nine times, with one death from septic peritonitis. Since the last published cases he had operated ten times, with, unfortunately, two deaths, the first from slipping of the pedicle ligature and fatal hæmorrhage, and here he emphasised the importance of tying the broad ligament in three places. He could not agree with the President that doing so was dangerous, and he meant in future, in those cases where the broad ligaments were bound down by old inflammation, to follow out this method, and trusted by doing so to eliminate one cause of death. The last death occurred a week ago, owing to a bit of the omentum getting strangulated, first in the drainage tube, and then in the abdominal wound after the tube was removed. He still maintained that whenever tubal gestation was suspected an immediate operation was called for. He could not agree that dilatation of the cervix was attended by risk, provided the strictest antiseptic precautions were taken. He had never had any ill-result. His experience was similar to that of Dr. Heywood Smith, who said that amenorrhœa was the exception and menorrhagia the rule in cases of diseased appendages. He was sorry to hear Dr. Routh ad-

vocating puncturing a pyo-salpinx *per vaginam*, as it was a most dangerous proceeding. He mentioned a case on which he intended performing abdominal section the following morning where a pyo-salpinx had been punctured two years ago, causing general peritonitis, and not curing the disease. He did not think the operation of making an artificial ostium was of practical use, and he had no intention of performing it. He was sorry to hear Dr. Lewers recommending that these cases should be treated by an expectant treatment for eighteen months. Indeed, he was in complete accord with the forcible remarks of Dr. Cullingworth, who insisted that the time mentioned in the paper (two months) was too long. He also quite agreed with the last speaker as to the frequency of recurrent attacks of pelvic peritonitis in the causation of chronic disease of the uterine appendages.

Mr. Alban Doran regretted that the lateness of the evening prevented him from replying fully to some of the observations which had been made on his paper. He defended the practice of setting free tubes and ovaries by breaking down adhesions, without removal of those organs. It by no means followed that, because there were adhesions before the operation, more would necessarily form afterwards. The patient was surrounded by more or less unfavourable influences before, which favoured the development of adhesions. After the operation the rest in bed and general care tended to prevent even the most local form of adhesive peritonitis. He was not at all sure that adhesions formed around the drainage tube, or that an artificial ostium, cut out in the operation of salpingostomy, must necessarily be closed by lymph soon after the patient was put back to bed. Mr. Doran always believed that tubal diseases arose from infection passing up the vagina and uterus, but this fact did not justify the use of the curette to the endometrium when the tube was already extensively diseased. He had purposely avoided all references to sexual appetite, in his own contribution, as it was exceedingly difficult to get sound and trustworthy evidence on an entirely subjective condition which involved innumerable matters of delicacy. Lastly, in comparing ovariotomy, the practical basis of abdominal section, with removal of the appendages, we must act, Mr. Doran maintained, like Danton, in cases of ovarian cysts, and like Fabius Cunctator, in chronic disease of the appendages. When we have to deal with an ovarian cyst, we must avoid all Fabian tactics, all delay. We must be bold and operate at once, we must be bold and not get frightened after opening the abdominal walls, and lastly, *encore de l'audace*, as Danton said, we must be bold and patiently grub up the base of the cyst out of the deepest pelvic connections, if need be. With chronic disease of the appendages, the opposite principle was our duty. The policy of Fabius, masterly intelligent delay, would save many ovaries ; on the other hand, the name of Danton was significant in this respect. The sacrifice of many heads, unjustifiable even after his own views of fraternity, suggested an obvious parallel.

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__Bühle__ (Monatsschr. f. Geb. u. Gyn. June 1901 p 850–852.) Fibroma in parietes of fundus, patient preg.t, subserous myoma of uterus diagnosed until after delivery & involution of the uterus had occurred. Removed with ease (Good summary of subject)

__Mr Adam Eccles__ "Three Cases of Fibro-Sarcoma of the Muscles of the Abdominal Wall" __West Lond. Med. Journ.__ July 1906. __Leonard Bidwell__ "Two Cases of Fibro-Sarcoma of the Abdominal Wall. __Id.__ same date.

__Koroschin__ Fibrom der vorderen Bauchwand Zentralbl. f. Geb. u. Gyn Nov 1906 p 609. as in A's case Trans. Obst Soc Vol 39 p 42, in regard to pregnancy

__Weissvange__. Bauchdeckenfibrom. Rep. of a meeting Dresden Obstet. Soc. Zentralbl. f. Gyn 20/7 1908 p. 572. He resected adherent __incorporated__ peritoneum and Leopold held that the perit.m should always be resected as the tumour was of doubtful innocency. __Bode__ related an instance where tuberculosis of the sheath of the rectus proceeding from disease of the pubes near the symphysis was taken for fibroma.

__Lange__. "Fibrosarkomen der Bauchmuskel- und Beckenmuskelfaszien" Soc.d report. Monatsschr. f. Geb. u. Gyn. May 1908 (Vol 27) p. 609; Sarc. of abd.l wall removed 1898 In 1906 labour obstructed by a pelvic tumour. Caes. sect.n supravaginal hysterectomy: pelvic tumour occupying left iliac fossa, deep fascia of abd.l muscles and muscles of wall of true pelvis: irremovable. Now, 2 yrs after the labour (child saved) the p.t is still in good health, the tumour is not much larger except that a process, of the size of a child's head, has extended into left labium.

Lockwood Lancet August 1911