

ritation of the nerves, but afterward menstruation occurs without pain."

I have heard gynecologists declare that they never make use of tents, that such methods are antiquated; but in this class of cases the laminaria tent unfolds a power that can be equaled by no other known plan of treatment. In cases complicated by chronic endometritis and in those in which a myoma is situated in the uterine wall I make use by preference of the dilator of Pryor, which possesses many advantages over the ordinary dilators, for the purpose of thorough dilatation. The uterus is then curetted with the Sims sharp curette and tightly packed with strips of iodoform gauze. In this way the dysmenorrhea is cured with the endometritis.

For the membranous form I use the same method of treatment with decided benefit. Fritsch recommends the prolonged use of uterine irrigations of lysol, 1 to 100, after thorough dilatation, and this method is well worthy of adoption. Finally, it should be mentioned that oophorectomy has been recommended as a last resort in cases of persistent and obstinate dysmenorrhea. Against this practice I must make my decided protest; in the first place we have no certain guarantee that the patient's condition will be better after the operation than before, and secondly with the less radical means at our command I am absolutely sure that we can attain the desired goal by persistence, patience, and wise discrimination.

#### TREATMENT OF MENORRHALGIA OF PELVIC ORIGIN BY ELECTRICITY.\*

G. BETTON MASSEY, M.D.

PHILADELPHIA.

What are we to do for the relief of our young women patients who suffer persistently from menstrual pain and spasm? I allude to those cases which have resisted all approved drug medication, including alimentary correctives and eliminants, as well as antispasmodics, and whose life is clouded during one-fourth of each month by an ever-increasing degree of morphia stupefaction as the only relief from intense pain.

The pathology of cases of this nature is usually of a dual character. There is commonly a chronic inflammatory process present in the endometrium, accompanied by congestive conditions in the ovary, the endometritis being merely catarrhal, and there is also a most pronounced erethism of the pelvic neuromuscular apparatus. This neuromuscular erethism is the feature wherein these cases differ so greatly from those of mere endometritis in parous women, unaccompanied by the menorrhagic spasms. The pain and spasm are probably present in the younger women because of developmental imperfection, the result being very much like a tic-douloureux due to a bad tooth. Should pregnancy occur a spontaneous cure is probable, not because the cervical cavity is then larger, as incorrectly supposed by some, but because a full development of the organs has been produced by the remarkable trophic accompaniments of the gravid state.

The idea that dysmenorrhea is due to obstruction of the menstrual flow has been shown to be a delusion. No accumulation is ever found in these cases. The steel dilators that are still improperly employed in a treatment based on this obsolete theory themselves

disprove the presence of obstruction, for a canal that will admit them in their closed state is far larger than necessary as a hydraulic drain for the menstrual fluid. If the purpose in view, in the use of these instruments for forced dilatation under ether, is not the permanent enlargement of the canal, but the mere divulsion of the spasmodic stricture, it follows that the method should be employed only during the actual spasm of the period, and should be repeated at each period, conditions never present in these operations as advised in the books.

The truth is, that this formidable operation, the forcible dilatation of the cervical canal by steel dilators, oftener does harm than good; the cases temporarily relieved rarely experiencing comfort more than during one period, and this probably owing to an amelioration of the endometritis. The harm at times done by the operation is, on the other hand, an actual aggravation of the subacute catarrhal condition, ending, in some instances, in an ascending catarrh of the tubes and ovaries.

Too often the final history of a case which has been placed under forcible dilatation, is abdominal section for removal of inflamed ovaries. This result may at times be merely in spite of the treatment, which failed to cure the case in its first stages; but in other cases I have the unquestionable testimony of patients and their physicians that what had been merely menstrual pain in the uterus and back before dilatation, was changed to constant pain in the ovarian regions after dilatation, and this without relief from the menstrual pains.

There are at present a large number of physicians in this country who agree with me that in electricity we have a most valuable remedy for the permanent cure of persistent menorrhagia, even of the most severe forms. Unfortunately, little is written at present from this point of view, and the unopposed views of the wisdom of dilatation remain uncontradicted. The method may be carried out in office practice, is free from risk to already congested appendages, and may be relied on to cure when conjoined with intelligent regulation of the general health and habits of the patient.

I have given the exact technique elsewhere, but may say that it consists of judicious blending of vagino-abdominal applications of the positive pole of the galvanic current with similar intrauterine applications of the same current. The intrauterine applications must not be used, however, until the congestive condition of the appendages is relieved, after which the local effect of mild mercuric cataphoresis within the cavity will quickly remove the endometritis, which, having its inception in "catching cold" during a period, is the initial lesion of the affection.

It will be noticed that I recommend that the positive pole of the galvanic current be used and not the negative. This choice is deliberately made as the result of large experience, and shows that electricity does not owe its value in these cases to a dilating effect, as some think, this effect being greatest at the negative pole, but rather to the cure of the endometritis. If there is no endometritis I do not pass the electrode within the uterus at all, but apply the internal electrode within the vagina alone.

I would urge an intelligent use of electricity in this condition on the part of all physicians engaged in general office practice. Expertness is readily gained by those equipped with sufficient gynecological and electrical training, and though the actual work will require

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some time and trouble, the result can not be other than pleasing when it keeps the patient at home, makes her a well woman, and robs an operating-room of another sexless product.

#### DISCUSSION ON PAPERS OF DRS. THAYER, HARRISON AND MASSEY.

DR. E. G. ZINKE, Cincinnati, Ohio—This is a subject with which we are all more or less familiar, but we all differ as to the proper treatment of the various cases. I have listened very attentively, and I must say that I have heard nothing especially new. So, too, the criticism I may make is not particularly new. I have ceased to use electricity for fully eight years in the treatment of gynecologic cases. I have purchased hundreds of dollars worth of apparatus for this work, but have derived absolutely no benefit from it, especially in the treatment of dysmenorrhea. I am free to admit that in some of these cases I did not, in all probability, determine the real cause of the trouble. When a case of dysmenorrhea presents itself to me now, I make every effort to determine the cause. Those cases which are amenable to treatment at all can be cured without the use of electricity. The most difficult are those in unmarried women, especially when under 18 years of age; in these it is exceedingly difficult to determine the nature of the trouble unless an examination is made, and this is not always advisable or possible. We might treat the patient from a neurotic standpoint, but we should not waste too much time. After temporizing for awhile and failing to relieve the patient, I invariably insist on examination under the influence of an anesthetic. If we can exclude want of development of the generative organs not much can be accomplished by electricity. We should pay attention to the general health of the patient, proper diet, daily action of the bowels, outdoor exercise, change of climate and good habits, especially in girls who go to school or who work in ill-ventilated tailor shops, where they are obliged to sit for eight or ten hours in a cramped, unnatural position, breathing bad air. When we find a want of development or diseased conditions, we must give them the proper treatment, and I am sure that in cases of endometritis, metritis, salpingitis or oöphoritis the least beneficial treatment is electricity. I have absolutely no use for it in my practice.

DR. MAXIMILIAN HERZOG, Chicago—I wish to put myself on record as against the view that menstruation and ovulation are absolutely independent of each other. Truly, it is a fact that ovulation occurs without menstruation. It is also true that we have hemorrhages from the uterus, which are menstrual in character, without ovulation, but the exception only proves the rule. It was formerly claimed that in menstruation the major part of the uterine mucosa is shed. This view was derived from the examination of post-mortem material, which is unfit for studies of this kind. We must examine menstruating uteri obtained from the living if we wish to make correct observations. I am in a position to confirm the statements of Mandel and others that there is little of the uterine mucosa shed in menstruation, and that little consists only of some of the superficial epithelial cells. I have made this observation repeatedly on menstruating uteri obtained *per operationem* from the living. The changes which do occur in menstruation are the following: The capillaries of the intertubular connective tissue are enormously dilated and there is an extravasation of blood into the connective tissue. Some of the blood makes its exit toward the surface, and some of the surface epithelia are lifted away from their basement membrane and shed. Those are all the changes we find in a normal menstruating uterus. The object of this change is to prepare the soil for an impregnated ovum. It has recently been shown by Peters and others, that the human ovum, like that of lower animals, when it first begins to develop in the uterus, is surrounded by a solid layer of ectoblast with phagocytic properties. The changes occurring in menstruation are for the purpose of allowing the implantation of the ovum. The changes in the uterus in menstruation serve a specific purpose, viz., to prepare the soil for an impregnated ovum, and they therefore do stand in a certain relation to ovulation.

Regarding dysmenorrhea, our knowledge of the pathology of this condition is a very hazy one. Our classification of dysmenorrhea is incorrect. Obstruction to the menstrual flow plays a very insignificant rôle in the causation of dysmenorrhea. There are practically only two types of dysmenorrhea. One which is dependent on inflammatory changes in the uterine mucosa and the other dependent on inflammatory changes in the ovary. The inflammatory changes of the uterine mucosa are of the type of an endometritis interstitialis. In cases where the membrane is shed the uterine mucosa undergoes a change much like that in normal menstruation, except that the limit is overstepped and we have the formation of tissue very much resembling a young decidua. Several interesting papers on certain forms of oöphoritis characterized by changes in the vessel walls have recently been published. In these forms of oöphoritis we find processes of endarteritis obliterans and hyaline changes in vessel walls. We know little of the cause or causes of most cases of oöphoritis.

Some time ago I studied the histopathology of syphilis, and I have been able to confirm the work of Rieder, who found that the vessel changes in syphilis are mostly found in the veins and lymphatics and not in the arteries. I have examined a number from cases of dysmenorrhea, and found conditions very much resembling those found in syphilis. It occurred to me that it is possible that there are certain cases of oöphoritis which are of syphilitic origin. There is, however, nothing definite known as yet about this point, but I think it would be worth while if the gynecologist would keep in mind that certain forms of oöphoritis are probably due to congenital or acquired syphilis. In such cases mercury and the iodids would probably be of greater service than the knife.

DR. GEORGE J. ENGELMAN, Boston—I have always been very much interested in this subject since my study of the menstrual changes in the uterine mucosa, in 1870, and am at present engaged in an investigation of the menstrual condition among school and college girls; it has brought to my attention the various forms of dysmenorrhea common among young women in supposedly good health. Dr. Harrison mentioned two forms: one an acute inflammation of the uterine tissue and the other of the appendages. The majority, certainly many, of the cases of dysmenorrhea I observe among school girls are due to nervous influences. I have gone over nearly 5000 cases of menstruation in so-called "well women," girls in educational institutions, neither hospital nor private patients, and find from 42 to 83 per cent., perhaps an average of 66 per cent., afflicted with more or less menstrual suffering. The pain is increased with hours or intensity of study, with worry or emotion, and is diminished or ceases during vacation time without treatment of any kind. These are nervous menstrual pains, which are augmented by physical exertion and mental application and strain. I believe that the mental or nervous element is a more prominent factor than we usually take it to be, and clearly demonstrates the necessity for a general management of these cases. The character of the pain does not necessarily differ from that which accompanies inflammatory conditions, and how the diagnosis is to be made I do not know, except by examination and study of the individual case, but let us by all means, in the young girl, first attempt the general management, the relief of all abnormal and injurious conditions of worry or debility, of mental or physical prostration. As a large majority of these cases are unquestionably due to nervous disturbances, much can be done without local interference. Electricity I have used much and successfully for the relief of menstrual suffering and in the management of pelvic disease, and am sorry to see the contempt with which this really valuable agent is referred to by many and the superficial way in which it is disposed of. I know that many able observers say precisely what Dr. Zinke does. I differ with him, as my own experience is decidedly at variance with his. I like the effect of electricity, but would not rely on its use alone and unaided as a means of treatment. It is a valuable and effective agent, but must be used at the proper time, and in suitable cases, precisely as any other remedy or drug. I have found electricity an admirable remedy for the relief of pain in cases of

inoperable tumors, or when an operation is not desired, in neurotic and neurasthenic cases, in cases where stimulation is needed in debility, local or general, and where thickening of tissue exists, with a want of absorption. Electricity can be applied by a cotton-covered electrode in the vagina as the active pole, and the other over the abdomen, using mild currents. A very satisfactory method in dysmenorrhea due to flexion, narrowing of the canal or chronic inflammation is to use the dilator as an electrode. The dilator is connected with one pole, the abdominal electrode with the other, and the blades gently separated during the séance. In this way the electrode is brought in contact with the tissue, and dilatation is much more easily accomplished with than without the current. It has a relaxing effect and this overcomes the pain of dysmenorrhea. A few applications a month are enough, but most effective is one immediately before the appearance of the flow. The treatment is one requiring time and careful manipulation, with some knowledge of currents and instruments, but it has its good points and I am sorry that men of authority like Dr. Zinke express themselves as he does, as others will be guided by their very positive statements so unfavorable to this agent, which is truly valuable in its proper place, and unjustly abused because enthusiasts have claimed too much for it.

DR. C. L. BONIFIELD, Cincinnati, Ohio—Dr. Massey, in his remarks, said, much to my surprise, that those patients where we have a large accumulation of fluid in the uterus suffer no pain. I have seen a number of such following amputation of the cervix, this growing together and the obstruction being absolute or nearly so. They also follow curettement, where proper precautions are not taken to keep the os patulous. It has been my experience that such patients suffer the most intense pain at the menstrual period.

Dr. Herzog's observation that the mucous membrane of the uterus is not thrown off at the menstrual epoch, is the very latest view of German observers on this subject. The pain these patients have may not be due to the difficulty the fluid has in escaping from the uterus, but the difficulty it has in escaping from under the mucous membrane. A fact I have observed, and which speaks for an accumulation of fluid, is that if one of those girls suffering from dysmenorrhea for years, a girl who begins with an undeveloped uterus, be examined under an anesthetic, almost invariably the body of the uterus will be found dilated and pear-shaped. The walls of the uterus are not in contact as they ordinarily are, and one can direct the curette freely within the cavity. Whether this is from an accumulation of secretions or an hypertrophy of the organ I am not prepared to say.

As to electricity, I am willing to grant that Dr. Massey gets the result he claims, and other men who will take the time to learn his methods will get the same good results. I can obtain as good results in other ways that are less objectionable and not so difficult and objectionable. Dysmenorrhea is a disease of the unmarried, and such patients do not like to come to your office to be treated for weeks and months. It is best to dilate the uterine cervix, pack the uterus as firmly as possible with gauze, and thus produce a miniature labor, which will do more good than months of electric treatment.

DR. F. F. LAWRENCE, Columbus, Ohio—Some three years ago I wrote a paper on this subject and emphasized the important fact that painful menstruation is not a disease but simply a symptom, and that we should begin the treatment as soon as possible. The conditions giving rise to it must be treated as such, and the symptom of painful menstruation will rapidly disappear with the disappearance of the conditions treated. We might as well talk of leucorrhea as a disease as of dysmenorrhea. I am pleased to note that the doctor makes practically the same statement that I have made in my paper, and that is that obstructive dysmenorrhea has not only been shown to be a mistake, but is something we do not find. The conditions causing the pain may be classified as of uterine, intra-uterine, ovarian, tubal, local or general origin, and we must fight the condition itself and treat that condition, and not treat a symptom.

Electricity may be, as Dr. Massey said, of some value; he

is competent and we will take his word for it. Is it by its tonic effect, by increasing tissue metamorphosis, or what? Cases of small cervix are usually undeveloped ones. On examination of these—they are usually in young girls—we may find ovaries so small that we can barely tell that they are ovaries. The uterus is completely undeveloped, infantile in fact. These poor girls, suffering frightfully every month, are told that if they will marry they will get well. Cases of hyperemia, if permitted to become chronic, will result in a subsequent destruction of the ovary, and later it will break down into a cyst or become cirrhotic. These latter are the cases which give the most trouble. I have had a number in which a small, hard, cartilaginous ovary was responsible for the most marked disturbance, such as obscure neuralgia, convulsions and other nervous troubles. They are the patients who are not benefited by any local treatment. Many cases of hyperemia treated early will probably be cured by electricity. Of equal benefit are rest, local depletion and abstinence from all things which will produce sexual excitement or physical excesses. We have ovarian, tubo-ovarian, uterine, intrauterine and extrapelvic conditions, which are responsible for this trouble. Our chlorotic girls suffer severely from painful menstruation and nervous disturbances in connection therewith.

DR. E. G. ZINKE, Cincinnati, Ohio—I did not wish to convey the impression that I was opposed to the use of electricity, nor that I condemn any individual who may be disposed to resort to it as a means of treatment. What I did wish to say was this: Our chairman, with his experience, endorsed what I said, that there was no case on record in which the use of electricity produced a cure of any diseased condition of the pelvic organs. It may give relief under certain conditions, although personally I have seen none. No fibroid, ovariitis, salpingitis or endometritis was ever cured by electricity. I know of no man who has more experience, who has investigated more ardently, more diligently, more earnestly than Apostoli, and yet none of his patients, where measurements and plaster casts were taken, was benefited more than temporarily. We never have menstruation without ovulation. We must have had ovulation in order to have menstruation. We may have menstruation after ovulation has ceased, as, for instance, when the menopause has been brought about artificially; but there is no case on record in which menstruation made its appearance when ovulation had never occurred.

DR. C. C. THAYER—I have nothing to say in regard to my paper, as the points are put there for the consideration of others. The facts are recorded in many of the latest textbooks on the subject, and personally observed in clinical practice. In regard to the use of electricity in dysmenorrhea, I am greatly in favor of it in such cases. I have used it for twenty years, and appreciate its advantages more to-day than ever before. I have no criticism to make of people who have not used it or become familiar with it, but those who have tried it extensively find it to be a wonderful remedy in some patients with dysmenorrhea. Those gentlemen who look for the causes of this affection in the genitalia, do not look far enough. They do not understand the real elements that enter into the condition of dysmenorrhea in many cases, aside from the anatomic derangements or malformation. A most important cause is found in the disturbances of the nervous system, and oftentimes we must begin the treatment of it by directing our attention to general physical conditions. Hygienic treatment is an important item. Along the same line electricity comes in with its influence on the nervous system. It is not so much in dilating the blood-vessels, on which dysmenorrhea is not always dependent, but it is the general tonic effect of electricity. It facilitates free circulation and stimulates the entire nervous system.

So far as accumulation of fluid is concerned, I think that is an exploded theory. I have dilated the uterus time and time again, using the suction syringe to see if there was an accumulation, but found none, and when curetting have found nothing except what was necessarily attached to the mucosa. The accumulation theory is a false one, and in most of these cases I think we will find, as Thomas so beautifully and strikingly

showed in his last text-book, "that dysmenorrhea is more often cured by a trip to Europe than by any process or treatment he ever used in his office."

DR. G. T. HARRISON—Dr. Massey can not prove the assertions he made. It is a pity I could not read the whole of my paper, so that you could see the argument. In speaking of Dr. Sims, I think he spoke rather slightly of him. Of all the names that shine in the pages of the history of our profession, he can not bring forward any two greater names than J. Marion Sims and Carl Schroeder. The latter was one of the greatest and most gifted of modern surgeons. Those who have had the pleasure of seeing him in Berlin were impressed by his greatness, as his was one of the most majestic figures in Germany. As Martin said to a friend, we did not appreciate—fully at first, his loss—and it is only years afterward, after these men are lost to us, that we realize how great their value has been. When I can quote such authorities for the views I hold, I feel that I would rather err with those men than be right with Dr. Massey.

DR. G. B. MASSEY, closing the discussion—I do not wish to be behind in my homage to Marion Sims, but the thought occurred to me recently that the day of authorities in medicine had passed away a short time after I graduated. More harm has been done by the blind following of authorities in medicine than by the inquisition of the middle ages. We want facts, not the personality of the man who brings them forward. Sometimes noble personages lead to the perpetuation of great errors. My paper was a very short one and referred only to the incurable sort of cases, those which are supposed to go to the surgeon, hence I welcome the many remarks made about the neurotic cases, those that can be cured without even the means I recommend. I took especial occasion to mention that the uterus should not be invaded by an electrode, or anything else, unless there was local disease of the endometrium. I can not too strongly corroborate the remarks made that needless examination should always be avoided, but there are cases, and I have in my mind quite a number that are destined to shipwreck in life unless they are cured. They come to me before, and they come to me after the dilatation, and it is to those that the second part of my paper particularly refers.

I need hardly say anything on the question of the accepted theory of obstruction. Dr. Bonifield's evidences of pain in connection with accumulation in the uterus were all traumatic. They were operative. You will find in the literature of the non-operative cases of pelvic accumulation that those are not diagnosed until the accumulation will at times amount to a pint of fluid. In other words, the patients have no pain. I have proven, too, that there is no obstruction, that there is no spasm, no actual muscular spasm. I reported a case some years ago, in which I found the cervix more dilated, coincident with the pain, than in the normal condition. After all, the most important element, as pointed out by other speakers, is the neuromuscular storm of the apparatus connected with the reproductive organs, and that explains the pain. It is not the physical obstruction, but it is the painful condition superinduced by the effort of the diseased organ to throw off the immense amount of excrementitious material which is to be thrown off at that time.

## MOVABLE KIDNEY, FROM THE STANDPOINT OF THE GENERAL PRACTITIONER.\*

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Movable kidney was first described by Rayer, in 1836, and since then various authors and writers have called attention time and again to the importance of this abnormal condition, among whom I might mention Hare, Keppler, Sulzer, Hahn, Edebohls, Ewald, Einhorn, Israel, Lewis, Noble, Senn, Keen, Reed, and others. The earlier writers treated it almost entirely from a medical

standpoint and the later ones as entirely from the surgical.

My object is primarily to endeavor to interest the general practitioner in the subject, in order that he may be able to diagnose the condition, and to determine which cases should be treated medically and which surgically. I would also like to impress him with the fact that in many cases this condition is a most serious one, and unless it is recognized, and promptly and intelligently dealt with, very grave consequences may result.

The normal location of the kidneys, as well as their anatomical relations to adjacent viscera, are so well understood that I will not take up your time with a description of where they ought to be found, but will try to point out how you may be able to tell when they are in an abnormal position, and outline the symptoms somewhat in detail. The frequency of malposition of the kidney is astonishing, and it has been estimated that one woman out of every four has a movable kidney, and while they are not all of them suffering from it, yet in the vast majority of these cases it does produce symptoms which need attention.

There are probably thousands of women and many men suffering from the effects of a movable kidney to-day, and many of them seriously, who are being treated for indigestion, hysteria, neurasthenia, heart disease—so-called—albuminuria, and even mental disorders, such as hypochondria, melancholia, epilepsy, etc., and who are being drugged almost to death, and yet receive practically no benefit from their treatment. Such a condition of affairs should not exist, and there is no reason why any intelligent practitioner should not be able to recognize and diagnose a movable kidney, if he carefully examines his patient, and after having found it, he should be able to advise the best method for getting relief.

The etiology of this condition is a difficult problem, and the causes assigned by different writers are very many. In some cases it is undoubtedly a congenital condition, but in most of them it is acquired, although I believe that in a very great many there exists an individual predisposition, which is due to some abnormal congenital conditions.

Among the various causes assigned are tight lacing, relaxed abdominal parietes, the result mainly of child-bearing, traumatism, and absorption or atrophy of perirenal fat. The last is probably one of the most common causes, as the greater number of cases of movable kidney will be found in thin people; in fact, it is almost axiomatic, given a thin woman, weighing 110 pounds or less, with various reflex nervous symptoms, and you are pretty sure to find a movable kidney.

Movable kidney occurs in the great majority of cases on the right side, and why this is so no satisfactory explanation has as yet been offered. Occasionally it occurs on the left side, and quite frequently both sides are affected at the same time.

The symptoms of movable kidney are very complex, and are common also to many other diseases, particularly those of the female sexual organs. In fact, in very many cases, there is coincident disease of the uterus and its adnexa. The nervous disturbances are greater in the early history of the displacement, and in those cases where the range of motion is not very great, while the localized discomforts are more pronounced where the condition has existed for a longer time, and where the range of motion is greater.

This is probably because the sympathetic nervous system, through the influence of which the various reflex

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