A DISCUSSION ON CORPOREAL ENDOMETRITIS: ITS FREQUENCY, DIAGNOSIS, AND TREATMENT.

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ENDOMETRITIS of the body of the uterus seems to me a subject very fit for discussion at a representative meeting such as this, because it is a disease about which we know comparatively little, and, therefore, one which needs discussion, and concerning which the student and practitioner find apparently conflicting statements in the works to which they are accustomed to refer. Some authors speak of it as common, others think it so rare that they omit it altogether. The explanation of this apparent conflict of opinion is this: that some authors refuse to admit the existence of endometritis of the body of the uterus unless the diagnosis is more than an inference, is supported by some sort of demonstration that inflammation is present, and that the lining membrane of the body of the uterus is its seat. Others, looking at the fact that in many minor maladies, (and not in those of the uterus only,) no demonstration of their existence or nature is ever attainable, and that in cases of corporeal endometritis which end in recovery the nature of the morbid changes never can be demonstrated by any means at present known to us, are satisfied with a diagnosis based only on inference from the signs and symptoms. In practice we must often act on a diagnosis based only on inference. Still a diagnosis based only on inference does not compel assent, but rather invites scepticism.

What anatomical evidence ought we to require as proof of endometritis? We may accept the fact of its existence if we find products of inflammation—in a word pus—discharged from the body of the uterus. But the secretion of the body of the uterus comes to us through the cervical canal, and mixed with the secretions from that mucous membrane; and although attempts have been made to get the secretion of the body of the uterus separately from that of the cervix, there is no way in which that can be done without an amount of discomfort and risk to the patient quite incommensurate with any practical good that can at present result from doing so. And pus in the cavity of the body of the uterus is not of necessity therein produced. Pus in the tubes may escape into the uterus. Still, if we find a purulent discharge seen to come from the uterus, not merely clinging about the os uteri, or filling the cervical canal, but, after the cervix has been cleaned, distinctly flowing down into the lower and visible part of the cervical canal from the part of the canal which we cannot see; and we find no evidence of disease either of the cervix or of the Fallopian tubes to account for the presence of the pus; then it is a reasonable inference that it is the body of the uterus which supplies the pus.

But in the absence of pus, what evidence of endometritis can we get? The answer which naturally suggests itself is, evidence of inflammatory change in the mucous membrane. In any other mucous membrane, we should look for evidence of abnormal vascularity, and of exudation and multiplication of leucocytes in the tissue. But in the case of the lining membrane of the uterus, monthly changes take place in it; it is shed wholly or partly every month; before its menstrual separation, vascularity, unusual at other times, is a normal condition, and at this time infiltration with round cells, very like what in other parts is called granulation tissue, is present, at least in many places, in the endometrium. The monthly cycle of changes has not yet been described in a manner which commands universal assent; but as to the vascularity and the presence of large groups of round cells in many parts of the endometrium in women about to menstruate, who are free from any evidence of disease, the observations of Kundrat,¹

Williams,² and Wyder,³ differing as they do about other features of the menstrual changes, are in accord. Neither vascularity nor infiltration of the endometrium with round cells is therefore evidence of endometritis.⁴ It is impossible to anatomically recognise the slighter kinds of suspected endometritis until we know accurately the state of the endometrium at each stage of the menstrual cycle; and this knowledge we at present have not got. The fact that with the curette a little bit of membrane can be withdrawn, having the appearance under the microscope of what in other parts we should call very vascular granulation tissue, is no evidence of an abnormal condition within the uterus. We need also to know, but we do not, what alterations there are that depend upon age.

One disease, well known and usually described under the name of endometritis, namely, fungous endometritis, some authors refuse to admit under that designation, because the morbid changes are rather those of a new growth than of an inflammation. Multiplication of gland tissue certainly, one would think, should be regarded as growth rather than inflammation.

It is not possible, in the time limitations of this discussion, to enter upon all the questions that suggest themselves in connection with endometritis; and I think that it will be most useful to restrict ourselves to the clinical and practical aspects of the subject. I do not propose, therefore, to discuss the histology of endometritis, nor those forms of endometritis which are represented in literature by isolated cases only. Changes in the endometrium are met with along with chronic metritis; but they are also found without any of the symptoms of chronic metritis. I speak only of these latter cases, regarding cases of chronic metritis with endometritis as examples of a combination of morbid conditions which do not convey instruction as to the clinical history of endometritis. In fibroids, again, besides the changes in the shape and size of the uterine cavity, the structure of the endometrium is altered in a way very like endometritis. This I shall not speak of.

An atrophic endometritis has been described, but I am not satisfied that the changes described under this name are anything more than changes due to age or imperfect formation of decidua from other causes. I have seen cases of hæmorrhage, without apparent cause, in which nothing could be scraped from the interior of the uterus; but I have been content to look on these as cases in which the diagnosis was incomplete—the cause of the hæmorrhage not ascertained. I have had no facts before me in such cases to lead to the view that the hæmorrhage was the result of an inflammatory process.

There are forms of endometritis associated with pregnancy, such as decidual endometritis and puerperal endometritis; but the limited time allotted to me, and the still more limited time to which subsequent speakers are of necessity restricted, forbid me to go beyond the more common kinds. Therefore I pass by the pregnant and puerperal forms. I pass by also the purulent endometritis sometimes seen after the menopause, and confine myself to uncomplicated corporeal endometritis occurring independent of pregnancy, and during menstrual life. I shall briefly describe the comparatively well known and common forms of corporeal endometritis; and point out where our knowledge seems to me to be most deficient, and how the interchange of experience may help to enlarge that knowledge.

1. *Fungous Endometritis*.—This is not a common disease, but its characters are well marked, and it has been much studied. It occurs in two forms: these two forms were, so far as I know, first clinically described by Routh,⁵ although the description subsequently given by Olshausen,⁶ and usually quoted, is more complete. These two forms are the hyperplastic and the polypoid. In the first there is general thickening, softening, and loosening of the endometrium; in the second there are distinct polypoid growths. The uterus is bimanually found slightly enlarged, and when the cervix is dilated, the cavity of the body is found slightly expanded. The symptoms are hæmorrhage, with pink or watery discharge in the intervals of hæmorrhage. The treatment which is usually successful is to scrape away the diseased mucous membrane with the curette, and then apply a caustic. Some practitioners use the curette, and not the caustic, some the caustic

² *Obst. Journal*, Vol. ii.

³ *Arch. für Gyn.*, Band xiii.

⁴ Wyder says: "All authors agree in describing the mucosa uteri during menstruation as in a condition of acute catarrh."

⁵ *Obst. Trans.*, Vol. ii.

⁶ *Arch. für Gyn.*, Band viii.

¹ *Stricker's Med. Jahrbuch.*, 1873, S. 140.

and not the curette. Cure often follows (I think usually) either method, but we have no exact data that I know of on which to base a preference for either of these methods of treatment. My own impression is that to do both is the most sure; while in the polypoid form the curette is the more essential. If caustic be used, it matters very little what the caustic is; whether nitric acid, perchloride or sulphate of iron, the actual cautery, or strong carbolic acid. Some use a sharp spoon, others a blunt curette; my own preference is strong for a blunt instrument. There is now abundant evidence that after this treatment complete recovery may follow, and that subsequent fertility is not interfered with.⁷ According to Sinéty, the uterine granulations or fungosities may be of three kinds, and the symptoms vary with the kind. They may consist of an overgrowth of gland tissue, and in that case the discharge will be abundant and mucous; or they may be formed of granulation tissue, and then the discharge will be purulent; or they may be composed almost entirely of vessels, a form in which the discharge is hemorrhagic. This author does not say on what number of cases he bases these beautifully simple generalisations, nor does he tell the reader how he has separated the discharge from the body of the uterus from other secretions with which it may be mixed. I confess I do not think that this classification helps in actual practice.

Polypoid growths are more commonly, though not exclusively, met with in those cases in which the symptoms date from delivery or abortion. I have met with them in the unmarried, without any history pointing to previous pregnancy, but such cases are the exception. Treatment is more uniformly successful in the cases which date from a pregnancy, more uniformly successful in the cases in which there are localised outgrowths than in those in which there are not.

Brennecke⁸ has sought to show that the hyperplastic form, that is the form attended with diffuse thickening and softening, but not distinct growths, is dependent upon ovarian influence. He bases this view on the facts that in many of his cases the first deviation from the normal was that menstruation became irregular. He regards the disease as a pure hyperplasia of the mucosa, a result of chronic hyperæmia produced as a reflex effect of abnormal ovulation. He describes a uterine form and an ovarian form, the chief practical difference being the greater ease of curing the uterine form, and its less liability to relapse. The uterine form seems very like what others have described as the polypoid form.

We want records of experience as to the circumstances of origin of the hyperplastic form. I have met with it in a virgin of 25, and I have met with it in older women who presented histories of menstrual irregularities like those of the cases described by Brennecke. But mere menstrual irregularity is not, to my mind, any evidence of ovarian disease; and to put down menstrual irregularity to a reflex influence from the ovary does not in the least help us, unless we know something about the state of the ovary that sets up the reflex influence. On this point, although I think Brennecke has done useful work in calling attention to the frequency of menstrual irregularities as part of the early clinical history of the disease, yet I do not think his work carries us further than this fact. The frequency of relapse points to some cause other than in the uterus. I have seen cases in which, after treatment, symptoms have recurred, but further treatment has been declined, but the patient has ultimately got well. From this I infer that spontaneous cure is possible. We want information also as to the relation of these cases of endometritis to cancer. Everyone knows that there are cases in which, after the uterus has been scraped and hæmorrhage arrested, the disease returns, and the patient ultimately dies of indubitably malignant disease. In most cases of this kind, the explanation that naturally suggests itself is that the original diagnosis was mistaken, and that had the bits removed been examined by a competent histologist, the cancerous nature of the disease would have been recognised from the first. But opinions have been expressed by very competent judges as to the occasional development of malignant disease out of changes which at first had no such character. Instances of this in other parts of the body will occur to everyone. It is rational to expect that it might happen in the body of the uterus, but I know of no satisfactory evidence on the point; and a record of cases illustrating this would be most

instructive. This form has no tendency to spread to the Fallopian tube.

The next form of corporeal endometritis to which I would ask a little attention is one about which we know scarcely anything beyond that it exists, and is very important. We know of its existence by inference only, but nothing about its morbid anatomy or its symptoms. I refer to gonorrhœal endometritis. We know that gonorrhœal inflammation starts in the vagina, then affects the cervix, and, later on, the Fallopian tubes; and it is an irresistible inference that the affection of the tubes must have arisen by continuity, and that, therefore, corporeal endometritis must have been present at some stage in the history of the case; that it probably follows the affection of the cervix and precedes that of the tubes, and that, if we could ascertain its presence, we might forestall the imminence of tubal inflammation. Had we this knowledge, it might lead to the discovery and adoption of measures for preventing extension to the tubes; but at present we know nothing, so far as I am aware, either of the morbid anatomy or the symptoms of this form of endometritis. I believe it does not commonly cause hæmorrhage. Such discharge as the body of the uterus, when infected by gonorrhœa, pours out, comes to us mixed with secretions from the cervix and vagina, and therefore cannot be readily, if at all, identified. On this point we urgently want more knowledge, and those who have charge of hospitals in which many cases of gonorrhœa in women are admitted have it in their power to give us more help in this direction than can those who do not see the cases till the tubal disease, by its persistence, drives the patient to seek the advice of a specialist.

There is a form of corporeal endometritis which is more often seen on the *post-mortem* table than recognised clinically, but which, there is reason to suppose, is more important than is generally thought. I allude to the endometritis which sometimes—I know of no statistics to show how often—occurs in the course of the specific fevers, typhoid, typhus, measles, etc. In the acute stage the symptoms caused by this endometritis are so slight in comparison with those of the grave diseases they complicate, that they seldom incur the danger of undue attention. But *post-mortem* research leaves no doubt of the existence of this form of endometritis, and it has long been known that these acute diseases are occasionally followed by amenorrhœa, menorrhagia, dysmenorrhœa, sterility. More recently abortion and placenta prævia have been traced back to an attack of acute febrile disease. Our knowledge of this connection is at present only conjectural: that endometritis resulting from febrile disease may prevent the ovum from getting embedded in the proper place *in utero* is a hypothesis at present, invoked to explain a few cases, which may be merely instances of coincidence. But it is an eminently reasonable hypothesis—far more so, I think, than the more generally accepted theory of the mechanical effect of enlargement of the uterine cavity.

I think these after-effects of acute diseases deserve more attention than they have received. General practitioners are better able to help us here than anyone else. A series of cases of typhoid, scarlet fever, etc., occurring in women during the reproductive period, and showing the after-history as to menstruation, fertility, complications of pregnancy, or symptoms of uterine disease during the two or three years following the disease would be of eminent utility, and I could wish that the Collective Investigation Committee would use their machinery for an inquiry of this kind. I would respectfully ask members to relate what experience they have had of these after-results of acute disease.

I have read descriptions of acute endometritis as a disease attended with high fever and much pain. There can be no doubt that peritonitis following delivery or operations on the uterus sometimes commences as endometritis, and quickly extends to the tubes and peritoneum. But in these cases the endometritis is merely an initial stage, which is quickly passed over, and by the time that high fever and much pain have developed I should be of opinion that this stage has been passed, that something more than endometritis is present.

I have hitherto spoken of cases in which there can be no question of the existence of disease of the lining membrane of the uterus. I come now to the cases which most perplex the student and commencing practitioner: those in which the diagnosis rests on inference only, and is not verified by inspection or examination of the part supposed to be diseased or the secretion which comes from it.

There are cases in which, after exposure to causes of such a

⁷ See Heinricius, *Arch. für Gyn.*, Band xxvii, S. 225, for a collection of evidence.

⁸ *Manuel Pratique de Gynecologie*, 1879, p. 332.

⁹ *Arch. für Gyn.*, Band xx, S. 456.

kind as we know to be capable, when acting upon other parts, of setting up congestion and inflammation in them, the uterine functions become disordered; the patient suffers from slight pain, from hæmorrhage, and from discharge in the intervals of hæmorrhage. Such symptoms follow, for instance, irritation of the uterus with an intrauterine pessary, excessive functional activity such as sometimes follows marriage, excessive fatigue, etc. Mere hæmorrhage is not evidence of endometritis, for metrostaxis may occur, like epistaxis, without discoverable disease of the mucous membrane. But when we have recurrent hæmorrhage, persistent pain, and persistent leucorrhœa, I think the inference is a justifiable one, that there is a persistent change which is causing the symptoms. When we take into consideration the mode in which the symptoms have been produced, and their course, the inference that the change is an inflammatory one is in harmony with the facts. The one great feature which all inflammatory changes have in common is that when the cause is removed they tend to recovery. And in these cases, when the patient is kept at rest, the irritating instrument removed, or the mode of life under which the disease has developed altered, the symptoms diminish and disappear. The endometritis is here part of a general congestion of the pelvic organs.

I know of no evidence that this kind of endometritis ever leads to the production of fungous endometritis or malignant disease. I believe that its tendency, if left untreated, is for the inflammation to spread to the tubes, and thence to the peritoneum. Chronic endometritis has been described as a very intractable disease, one which lasts over years, and producing slight local trouble, yet causes numerous reflex nervous symptoms. These cases I have no acquaintance with. In the analysis of cases of this kind the most difficult part of the problem is to distinguish between the symptoms proper to the disease and those proper to the patient. Any slight disease occurring in a weakly woman of neurotic temperament will produce reflex nervous symptoms. I know nothing of indirect symptoms of endometritis, except those due to anæmia. Those forms which cause much hæmorrhage weaken the patient, and so may produce indirect symptoms. The difficulty of curing these cases is not that of curing the disease, but of curing the patient. Endometritis is generally an easily curable disease, and when uncomplicated is attended with but little pain.

It is often stated that there are chronic forms of endometritis due to struma and syphilis. These statements, so far as I can gather, are purely theoretical. No evidence has ever been brought forward to show that endometritis or any other disease of the endometrium is any commoner in patients who have had syphilis than in those who have not; nor has any definite statement ever been made as to what are the special characteristics, if there be any, of the endometritis due to syphilis or to struma. Tubercular endometritis of course occurs, but is such a pathological curiosity that I have nothing to say about it. Endometritis has been described as due to obstruction (not closure) of the cervical canal. I know no evidence of this. Endometritis secondary to atresia I do not discuss here.

I have indicated the treatment in speaking of the different forms. In fungous endometritis I think it will be generally admitted that local treatment is the only thing that will do good. We know nothing about the treatment of gonorrhœal endometritis, because we have not yet succeeded in diagnosing it. In endometritis from slight causes the main point is to alter the conditions which have set up the disease, and to use remedies which diminish congestion of the pelvic organs, namely, recumbency, laxatives, the local use of glycerine, either in the shape of tampons or pessaries, and the hot douche. If this treatment be used early, the symptoms quickly disappear; and if the patient avoid the cause which has led to it, the symptoms will not return. In these slight and recent cases, active intrauterine treatment is injurious rather than beneficial. If the case be more chronic, and simple treatment fail, then the use of the curette or a strong application to the endometrium seems to me much preferable to the use of so-called alteratives, either in the form of intrauterine irrigation, which I confess I have not had the courage to try, or ointments, which I have tried, and been disappointed with. The introduction of remedies on cotton wool wrapped round a probe, which is a most scientific and effectual method of treating cervical endometritis, seems to me, if I may be pardoned for saying so, illusory as applied to corporeal endometritis, because in the passage through the cervical canal the medicament gets wiped off, and the probe coated instead with a layer of cervical mucus.

I have said nothing about membranous dysmenorrhœa, for that

is a disease having characters of its own; and it does not seem to me yet established that this disease should be regarded as a form of endometritis.

Dr. BYRNS (Belfast) said that what most struck him in Dr. Herman's paper was its suggestiveness. In reference to the treatment by caustics or the curette, he preferred the latter method, using the sharp instrument, followed by the local application of iodine, strict antiseptic precautions being always employed. The advantages of curetting were that it enabled the surgeon to do in one sitting what might require several applications of caustics; allowed the removal of the diseased membrane at once; and could be used without previous dilatation beyond what was usually present in these cases. As to the gonorrhœal variety, he thought it occurred often in nulliparous women who were sterile, and here the history was of moment. He thought the application of remedies to the body of the uterus by probes was of little use, the caustics being rubbed off on the cervix, and never reaching the part affected. He believed that cases of corporeal endometritis had a direct bearing on obstetric practice, often causing sterility and abortion.—Dr. C. H. F. ROUTH thought it easy to get at the upper part of the uterus with Simpson's instrument for applying powdered caustic to the lining cavity. This he had often done. Pure pus and other inflammatory products might thus be obtained for microscopic investigation. In regard to gonorrhœal inflammation leading to endometritis and pyosalpinx, etc., he thought not only gonorrhœa but simple vaginitis in a pure virgin might induce it. The mistake of diagnosis arose from the belief that the presence of urethritis was coexistent. But urethritis might and did exist sometimes with simple vaginitis, but whenever present it was the fact that if examination was made of ovaries and tubes, these could be found inflamed and swollen. The urethritis was co-existent and so far pathognomonic. He also stated as to cases of vaginitis following exanthemata, that in many such cases which he had watched there had followed sterility or chronic endometritis. There were cases also in which no local application or curette could cure. He instanced two such cases. But injections were not dangerous; even strong ones could not do harm if the uterus was previously dilated so as to allow escape of fluid injected. He however differed from Dr. Herman as to the great difficulty of diagnosis in chronic cases, if the nervous distribution were borne in mind. In most of these cases the fundus was affected, which being supplied by nerves from the renal plexus and ovary were most likely to produce the reflex symptoms mentioned as difficult to differentiate.—Dr. GRAILY HEWITT said that the subject of "fundal endometritis" embraced a consideration of fundamental uterine pathology. The causes of congestion of the uterus had to be regarded. The most common causes were associated overfulness of the mucous membrane recurring month by month, general systemic feebleness of circulation and, locally, sluggishness of uterine circulation, due to displacement and flexion of the organ. The latter condition, though not essential, was very frequent. The presence of discharge from the interior of the uterus might have two sources, the uterus itself or the Fallopian tubes. The recently acquired knowledge as to the greater frequency of Fallopian accumulations added to the difficulty of diagnosis of the source of the discharge. The discharge as a rule closely followed the menstrual period, and resulted often from slow oozing of secretion, a sort of continuation of menstruation, which gradually passed off, leaving the patient free perhaps for a few days. He believed the best treatment for these cases was to establish free drainage of the uterus. This principle agreed with the one advocated by Dr. Routh of dilating previous to internal uterine medication. His view was that the value of intrauterine treatment, which he considered necessary in some few cases, depended largely on the incidental dilatation, whereby drainage was established. The cases of polypoidal or fungoid endometritis required separate consideration. He related a case where a young lady was affected with severe metrorrhagia and discharge, and fungoid growths were felt at the internal os; the uterus was very large, ante-flexed, and the seat of great pain; malignant disease had been diagnosed. As a preliminary to removal of the growth, vaginal douches and rest in bed, and elevation of the uterus were employed. On proceeding to operate it was found that the fungoid condition had disappeared, showing the condition was one of simple congestive hypertrophy of the mucous membrane. The result was perfectly satisfactory. This was perhaps an extreme case, but he regarded it as very typical.—

Mr. PRIDGIN TEALE considered that the increasing attention that was being given to affections of the interior of the uterus was being productive of great benefit to women suffering from uterine affections. This treatment implied as a necessary step dilatation of the cervix and os internum, and this dilatation he believed to be of itself a great, even in some cases the chief, factor in giving relief. Further, the fact that such dilatation could be done at one sitting, under anæsthetics, and without any previous use of dangerous tents, rendered it possible to examine and relieve many cases which formerly would have continued to suffer for years, imperfectly relieved by other methods.—Dr. ROBERT BELL considered that endometritis was not a rare disease. With regard to the diagnosis, he considered there was not much difficulty. In fact, it might almost be diagnosed by the subjective symptoms alone. For example, if a patient complained of a bearing down sensation, accompanied by pain and a burning sensation in the pelvis, acute suffering over the sacrum, dysmenorrhœa, a copious purulent or muco-purulent discharge, and an irritable condition of the bladder and bowel, and also suffered from lowness of spirits, irritability of temper, disturbed sleep, on a vaginal examination the uterus would be ascertained to be hyperplastic and flabby, while from the os a copious purulent or muco-purulent discharge would be seen to exude. In addition, there might be exaggeration of pain in the pelvis at the menstrual period; in consequence of this aggravated congestion, there was coagulation of the blood occurring at the moment of its exudation which necessitated the clots being expelled by uterine contractions. The inflammatory condition might be so acute that coagulation actually took place within the lining membrane itself, and thus there would be, if not absolute absence, yet paucity of discharge, and from the same cause there might be an absence of catarrhal discharge also. He held that salpingitis never occurred without a prior endometritis having existed, and that the inflamed condition of the tubes was due to the inflammation having spread by continuity of tissue. In treatment, the first object must be to dilate the os internum, then to swab out the uterine canal, and apply freely some form of stimulating antiseptic (iodised phenol).—Dr. MORE MADDEN (Dublin) believed that endometritis was probably the most frequent of the diseases met with in gynecological practice. He desired to point out the facility with which it might be cured. The essential points of that treatment were the following: First, the uterine cavity was made accessible by rapid dilatation of the cervical canal with his own form of dilator. Secondly, the disease of the endo-uterine membrane was thoroughly curetted. Thirdly, the denuded surface was brushed over with iodised phenol. Fourthly, the generally hypertrophied uterus was supported by a properly fitting Hodge's pessary, so as to take off the weight and lessen the congestion of the diseased organ. Fifthly, the patient's general health was carefully attended to by appropriate constitutional treatment in every case.—Dr. BRAITHWAITE divided the treatment under the following heads: 1. Position of patient for examination. Dr. Braithwaite considered Mr. Teale's plan of putting an unmarried girl into the lithotomy position unnecessary; but it was proper in some cases of aggravated endometritis in married women. 2. Dilatation to an excessive amount was not necessary. The 16 of Hegar mentioned was quite beyond what was required in unmarried women. At the Leeds Infirmary he used Duke's stem to produce free drainage. 3. Curetting should not, as a rule, be used, because the hæmorrhage interfered with the application of caustics at the same sitting. 4. As to caustics, besides the carbolic, so generally found advantageous, he used iodine, iodide of potassium, and spirits of wine, equal parts, whenever the uterine cavity was enlarged as well as diseased.—Dr. M. HANDFIELD-JONES called attention to the various stages of the disease and the importance of recognising these in reference to treatment. In the early weeks of endometritis hæmorrhage (either menorrhagia or metrorrhagia) was a prominent symptom, and, on vaginal examination, the uterus was found large, soft, and tender. At this stage rest, leeching, and hot douches probably sufficed to effect a cure. In the majority of cases, however, the disease had advanced to a chronic stage before the patients came under treatment. In these patients nothing did any good but dilating the cervix, and following this up by scraping with the dull wire curette, and then rubbing iodised phenol thoroughly into the bared tissue. In cases where there was a well-marked history of gonorrhœa, it was well to pass rod-shaped suppositories of iodoform into the uterine cavity at intervals of two or three days after the dilatation. Three or four applications of these suppositories generally proved sufficient.—Dr. DUKE had always con-

sidered that the essential point in the treatment of endometritis was the securing of free drainage for the secretions by dilatation. In nulliparæ the cervical canal was generally constricted at the inner os. In these cases he recommended the division of the cervix and constricted inner os, thus giving free exit to the discharge. In pluriparæ with lacerated cervix, endometritis often existed with copious discharge, and it might be thought that there must be plenty of exit for discharge, but the inner os would be found closed or rather constricted. It was essential to preserve the patency of the canal in all cases. The spiral wire stem, by straightening the uterus and keeping the parts patulous after the operation of rapid dilatation, prevented the subsequent contraction so certain to follow, just as in similar cases of stricture of the urethra after a similar operation.—Dr. WALKER (Pollokshaws) desired to approach this discussion from the point of view of the general practitioner. Among the various causes stated to produce endometritis, sufficient importance had not been attached to uterine displacement. Uterine displacement was often the first of a series of changes, as congestion and enlargement of the body of the uterus, with intrauterine discharge. In many of these cases, if the displacement was rectified and general treatment was adopted when requisite, recovery ensued without further interference. He thought too much importance was attached to uterine symptoms in females of a peculiar nervous temperament. Treatment of the general nervous condition was, as a rule, the most successful in cases of this nature.—Dr. M. CAMERON thought that the advice to resort to rapid dilatation of the uterine canal should be received with caution, for, whilst this procedure might be carried out freely in many, cases were met with in which rapid dilatation set up very extensive inflammation, which might be so severe that a patient who was formerly able to attend to her household duties was confined to bed for six or seven weeks. As regards the use of an instrument to scrape out any membranes or growths, he preferred a blunt one for general use, although there were cases where the sharp one was preferable. In several cases he had used a wire brush resembling the hair brush used for cleaning a feeding-bottle tube, whilst for medication he had found equal parts of carbolic acid and rectified spirits of wine very beneficial.—Dr. HORROCKS said that whilst it was easy to diagnose some cases of corporeal endometritis, there were others in which it was very difficult. Practically he divided cases into acute and chronic, but he considered that the causes of each of these were multiple. Thus tubercle produced a form of endometritis which was chronic, but which was quite a different disease from that which had been discussed by most of the speakers. He mentioned a case that he had diagnosed as follicular endometritis, and which was afterwards considered by another gentleman as a case of sarcoma, in consequence of which he removed the whole uterus, and this was examined at the College of Surgeons of England, and pronounced to be tubercular endometritis. He mentioned also another case in which microscopic sections of the uterine mucous membrane were exhibited at a Society where considerable differences of opinion were expressed. Whilst agreeing with Dr. Herman in the causes he had enumerated, Dr. Horrocks thought that alcohol was a cause in some instances in which the patient was generally over 40 years of age, and in which hæmorrhages were a prominent symptom. But he thought that the real ultimate cause in these cases was a germ of some kind. The tendency of modern research was to show that chronic inflammatory processes were always due to the presence of some germ or other. If this were the case, this germ must have a life history—a birth, growth, development, reproduction, and death. Now assuming the presence of this germ, one could readily understand why the treatment was so successful, and why different methods of treatment were successful, and why more energetic remedies up to a certain degree were more successful than milder means. But even though this germ had not been seen, much less its life history worked out, treatment could be adopted with the object of ridding the mucous membrane of the irritating cause. To illustrate this, he mentioned the treatment of threadworms by rectal injection daily in succession until not only all the parents, but every seed as it came to life had been destroyed; in this way a permanent cure could be effected. Whereas if one injection was made, it killed all the parent worms, and did good for a time, but more worms were seen as the ova developed. Acting on this hypothesis, he had treated patients by several applications repeated at short intervals, in order to destroy any developing germs. Finally, he pointed out that surgical procedure was limited; that it was not justifiable, for instance, to excise the rec-

tum to cure threadworms, nor was it justifiable to cut the cervix in order to reach the interior of the cavity of the fundus uteri, more especially when they had amply sufficient means for dilating the uterus to enable one to get at the disease.—Dr. HERMAN, in reply, said that the discussion had shown what great differences of opinion existed as to the frequency of corporeal endometritis. He thought the divergence of view depended on the amount of evidence which satisfied different persons as to the existence of corporeal endometritis. There were some who seemed to think that any patient with slightly increased menstrual flow and a little leucorrhœa, and in whom nothing could be found to account for it, had corporeal endometritis. If that were sufficient evidence, then endometritis was common. It was matter of opinion, and he did not say that this view was unreasonable; but he did not accept it, and was quite sure that cases requiring the curette and caustic were not common. Some other cases had been described, in which he should absolutely dissent from the diagnosis, namely, cases in which there was "intense agony." If he saw such a case, he should feel sure there was something else than endometritis. Again, if there was amenorrhœa and no discharge, he should think the diagnosis of endometritis was negatived. Dr. Murdoch Cameron's suggestion to use a rifle brush was a practical one. Dr. Doléris, of Paris, had introduced such an instrument, which he called an "*écouvillon*." He (Dr. Herman) had not yet used it. He could not follow Dr. Duke in advising the use of an intrauterine stem. He (Dr. Herman) should think it a most efficient means of exciting and keeping up endometritis. He was sorry that he could not follow so esteemed a leader as Dr. Graily Hewitt in his estimate of the effects of uterine displacement in causing endometritis, excepting as to backward displacements, a small minority of which he thought did do so. In such cases, all that was wanted was to support the uterus, and then the endometritis would spontaneously get well. He did not assert that febrile diseases in infancy led to uterine disease in the adult; but the occurrence of endometritis in the adult in the course of febrile disease he thought could not now be questioned. The discharges which had been referred to as occurring in children he thought due to vulvitis, not endometritis. He agreed with what had fallen from Dr. Walker as to the mischief of over-estimating the influence of uterine disease in the production of nervous symptoms. He agreed also with Dr. Horrocks as to the probable effect of alcohol in causing endometritis, but he had no evidence of it to bring forward.

CLINICAL REMARKS

ON A CASE OF

ABSCESS IN THE LEFT TEMPORO-SPHENOIDAL LOBE FOLLOWING SUPPURATION IN THE MIDDLE EAR.

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ON the morning of September 11th, 1889, I was asked by Dr. Wood, of Enfield, to see a case of old-standing disease of the ear in which acute symptoms had developed a few days previously, and, as the symptoms seemed to point to abscess in the brain, we had the patient removed to King's College Hospital without delay.

The patient was a male, aged 26, a coal porter by trade, who had suffered from a chronic suppurative discharge from the left ear for seven or eight years. The patient had been a healthy man, temperate in his habits and in constant employment. There was no phthisical family history. No clear history could be obtained of the commencement of the ear trouble, but he attributed it to the fact that when at work he always wore a leather arrangement on his head the buckle of which pressed on and hurt his left ear. He had on two previous occasions had severe attacks of pain in the left temporal region which laid him up on each occasion for about a fortnight; one of these attacks occurred three and a half years ago and the other

last spring, but beyond the fact that he had very severe pain in the left ear and temporal region, and that on the last occasion there was some swelling in the neck, he could tell nothing definite. Both attacks passed off without any special local treatment and left him apparently quite well with the exception of the persistent and foul-smelling discharge from his ear.

On the evening of September 7th, 1889, that is, four days before his admission into the hospital, intense pain began in the left temporal region apparently without any definite cause. On the following day, September 8th, he had two rigors. On September 9th he vomited twice, and on September 10th his friends say that he had a fit, though it was impossible to extract from them any intelligible description of it, and the patient himself was not aware of having had one. There certainly were no convulsions. His bowels had been constipated.

The patient's condition on September 11th, was as follows:—He complains of severe and constant pain of a dull aching character which he refers to a small area in the left temporal fossa a little above the zygoma; a circle about an inch and a half in diameter would cover the area of pain. He feels ill, has no desire to leave his bed, and if he gets up he feels giddy. He can see quite well and is perfectly rational; his speech is not slow. Pupils equal and react equally to light; no optic neuritis. No paralysis of ocular or other muscles. Tympanic membrane destroyed and polyp springing from its posterior attachment; sound conducted through the bone is referred to the left ear. With watch, on right side hearing distance considerable, on the left faintly on pressure. The painful area in the temporal region is also tender to pressure; there is no swelling or tenderness over the mastoid region or along the jugular vein. Temperature on admission 99°. Pulse 56. Tongue brown and somewhat dry; lungs, heart, and urine normal; bowels constipated; patient not emaciated.

I had a very strong suspicion that the condition of the patient was due to commencing abscess formation in the temporo-sphenoidal lobe, but as the actual symptoms which warranted such a diagnosis were very slight and as there was a profuse foetid discharge from the ear which would render it a difficult matter to keep the trephine wound aseptic, I determined, on carefully thinking over the case, to delay operation till we saw what course the case followed. Purgatives were ordered and the ear was to be frequently syringed out with boracic lotion.

September 12th. Patient has slept fairly well, but his symptoms remain on the whole unaltered. He thinks the pain is somewhat less and he feels brighter. Dr. Pritchard kindly saw the case with me to-day and removed a polypus, and ordered a blister behind the ear and leeches in front. Temperature, morning 99.6°, evening 98.2°. Pulse 56.

On September 13th and 14th, the patient remained in much the same general condition, but on the 14th he told us that the pain had shifted from the temporal to the occipital region and was more diffuse, but that on the whole he felt rather better. The pulse was still 56 and the temperature normal.

I had to go out of town till the 16th, and consequently did not see the patient again till that day when I received the following report from my house-surgeon. The patient passed a fairly good day on Saturday, the 14th, till the evening. On taking the temperature at 6 p.m. it was found to be 101° (the highest temperature previously was 99.6° on the 12th), and at 7.30 it was 101.8°. At 8.20 he suddenly commenced rolling about and moaning as if in intense pain; he said the pain was all over his head. At 8.30 he began to be delirious. Antipyrin was given and he was quieter till 11 p.m., when he became quite delirious, trying to get out of bed, saying he was going home, and moaning. He remained in this condition all night, dozing however, at short intervals. He vomited twelve ounces of fluid at 12.30 A.M. (the first time he had vomited since admission). During the night there was also twitching of the left eyebrow and left angle of the mouth. Pupils equal, not dilated and react to light; face flushed; tongue furred; mouth and lips dry. On September 15th, pulse was 56 and the temperature remained about 100.4° all day, falling however to 99° at midnight. Bowels emptied by enema and bromide of potassium given at intervals. Patient was more delirious but took two pints of milk, two eggs, and Brand's essence during the day, and in addition a zymised nutrient suppository was administered. During the early morning of September 16th, he continued in much the same condition, constantly trying to get out of bed and very noisy. Face twitched more than on the previous day. In the morning the pulse was 52, feeble and