REMARKS

ON

THE TREATMENT OF CHRONIC UTERINE CATARRH.*

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AMONG morbid conditions of the uterus, there are few or none which give rise to so much distress, and prove so little amenable to the methods of treatment generally employed, as that which is variously described by writers on gynecology by some such name as chronic uterine catarrh, uterine leucorrhœa, chronic endometritis, and the like.

Commencing often insidiously with symptoms which at first do not give rise to much suffering, the patients are apt to postpone the disagreeable necessity of putting themselves under a course of treatment involving local examinations from which women naturally shrink. Even when the symptoms become more marked, effective treatment is seldom adopted sufficiently early, patient and practitioner too often contenting themselves with general measures which are of comparatively little use.

Soon, the whole train of phenomena so common in old standing uterine disease become established, such as pain in the body and back, profuse and irregular menstruation, abundant and intractable leucorrhœal discharge, reflex disorders of various distant organs, and eventually serious derangement of the general health. When the sufferings of the patient compel her to submit to local treatment, it too often happens that but little benefit is obtained; and, in the worst forms of the disease, months or years are passed in fruitless endeavours at cure; one doctor after another is consulted in vain; until at last she resigns herself to being a confirmed and hopeless invalid.

This may perhaps be considered an overdrawn picture; and undoubtedly it is only in long neglected and severe forms of the malady that some benefit is not derived from the ordinary methods of treatment adopted, such as rest, occasional leeching, the use of sedatives, vaginal injections, the application of various substances to superficial erosions of the cervix. The experience of all who see much of female disease will remind them, however, of numerous instances in which the improvement has been only temporary, and in which the symptoms have invariably recurred when the patient returned to her ordinary mode of life. There can be no higher authority on such a point than Scanzoni, who says, with regard to it, "We may esteem ourselves fortunate if we can but moderate somewhat the hypersecretion of the mucous membrane, and moderate its consequences. As for ourselves, we do not remember a single case where we have been able completely to cure an abundant uterine leucorrhœa of several years' standing. Many women, whom we have been called upon to treat, had to attribute to a neglect of the disease a bodily and mental debility which they would keep for the rest of their days, or hysterical attacks which deprived them of all enjoyment of life." (Scanzoni's *Diseases of the Sexual Organs of Women*, translated by A. K. Gardner, M.D., p. 202.)

It can scarcely be said that the want of success in treating old standing cases of this kind is the result of ignorance of the nature or seat of the disease. Of late years, so much attention has been paid to morbid conditions of the uterus, that we are able to speak with more confidence than formerly as to the state of the parts concerned. No doubt, all uterine pathologists are not agreed as to the exact morbid alterations. There are those who believe with Dr. Henry Bennet, that the chief seat of the disease is in the cervix itself; and that it consists either in inflammation of its exterior, or of the lining of its cavity; and who contend that, generally speaking, the interior of the uterus is little, if at all, implicated. There are others, prominent among whom in this country may be mentioned Dr. West, who maintain that the lining membrane of the body of the uterus is itself at fault, as well as that of the cervix—an opinion that is shared by a large majority of the best and most recent writers, such as Scanzoni, Courty, Thomas, Graily Hewitt, and others, and one that is rapidly gaining ground.

While accurate views of the seat of disease in these aggravated forms of the complaint are taught in our standard works, it is undoubtedly the case that English writers seem to deprecate any persistent endeavours at treatment by such local applications as they would undoubtedly employ, were they dealing with similar conditions of the mucous

membrane in other and more readily accessible parts of the body. Thus Dr. West refers to only one such mode of treatment—that of intra-uterine injections, the use of which he unqualifiedly condemns. Dr. Graily Hewitt, in whose elaborate work we have a complete *résumé* of the most recent English opinion, thus writes: "Whether topical applications, caustics, etc., may have a good effect in curing this very troublesome affection, remains to be seen. On the whole, I believe that the best treatment of disordered conditions of the uterus consists in the application of those remedies having an action on the whole organ, which have been already described; and that, when local treatment is necessary, it may be, unless in some very rare and exceptional cases, limited to the application of remedies to the os and cervix uteri, douches, lotions, caustics, etc."

On the Continent and in America, intrauterine treatment in obstinate cases, either by injections or by some means by which the disadvantages of such injections are sought to be obviated, is much more frequently and systematically used.

It is because I believe that, in neglecting such means, we deprive ourselves of the benefits to be derived from one of the most valuable—I may say *the* most valuable of the curative agents at our disposal, that I have written these observations.

Before proceeding farther, and discussing the methods by which such applications are to be made, and the cases suitable for their use, I would wish to guard myself from a possible misconception. I wish strongly to insist that I do not recommend them indiscriminately in all cases of uterine catarrh, but only in those obstinate and long-standing cases of disease which either resist other treatment, or in which it seems probable that such a plan may assist in effecting a more speedy cure. But more particularly I would wish not to be considered as taking too one-sided a view of their management. No one can lay greater stress on general and constitutional treatment in uterine disease than I do. By all means, let us do our very best to improve the general health of our patients by proper diet, regimen, and such a medicinal course as in the special case may seem advisable. Other local remedies, such as rest, leeching, vaginal douches, and the like, I consider of the greatest importance, when properly selected and applied. It is only in addition to, or as supplementary to these, that I advocate a method of treatment which I believe to have been too much neglected in this country.

It is of importance, in considering this subject, to bear in mind the pathological alterations which exist in the mucous membrane lining both the cervical canal and the cavity of the uterus. There can be no doubt that, when a profuse muco-purulent discharge issues from the os uteri, there must be a morbid condition of the interior lining membrane. Whether the discharge comes from the cavity of the uterus strictly so called, or from the elaborate glandular apparatus lining the cervical canal, is a question which has been hotly contested, and which seems to me to be of secondary practical importance. My reason for saying this is, that, in any attempts to apply our remedies to parts beyond the os uteri, either by intrauterine injections or other means, it is impossible to limit the application strictly to one or other portion. It is on the whole mucous membrane that our remedies act; and, indeed, the probability is, that the entire mucous lining is implicated in the more aggravated forms of the disease. The real error that is generally committed, is limiting our treatment to the superficial erosions or ulcerations that exist around the os and on the exterior of the cervix. No doubt, these form an important part of the malady; and, from the facility with which they are inspected by means of the speculum, one can understand why they have acquired an undue prominence in the eyes of practitioners. But the disease is more deeply seated. The inflammatory condition of the mucous membrane, which has given rise to destruction of the epithelium and to hypertrophy of the subjacent papillæ on the exterior of the cervix, extends up the cervical canal, and, by continuity of structure, even as far as the fundus; so that the lining membrane of the entire uterus undergoes profound alterations. Nor are the changes limited to the mucous membrane. The underlying tissues are necessarily implicated. The cavity of the uterus and cervix become enlarged and patulous (an important point with reference to treatment), and engorgement and hypertrophy from plastic effusion are seldom absent. Hence the well known alterations which so constantly accompany obstinate cases of uterine catarrh, such as thickening, induration, and enlargement, both of the cervix and body of the uterus, and a patulous condition of the os, through which a sound can be passed with facility.

If, then, in attempting the cure of such a case, we deal only with those lesions which are more readily accessible, if we content ourselves with general hygienic means and the cure of superficial erosions, we shall probably produce considerable amelioration of the patient's sufferings, but we shall fail to effect a lasting cure. By rest, occasional leechings, and the more ordinary topical remedies, the weight and bearing down will be greatly relieved, and the discharge temporarily diminished; but, as

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soon as the patient returns to her ordinary avocations, all her old troubles will come back. As long as there is any considerable amount of muco-pus issuing from the os uteri, there must be a morbid condition of the structures beyond the os; and no case can be considered cured until this has completely stopped. To do this, as I contend, the disease must be attacked at its seat; and the question for us to consider is, how this may be most effectually and easily accomplished.

The means by which this has been generally attempted is by the injection of fluids, such as we would apply to external erosions, into the interior of the uterine cavity. No doubt, by this means a powerful influence can be exerted on the uterine mucous membrane; but, although such injections have found many zealous supporters, they have always been regarded with suspicion by the majority of the profession, for fear of the serious consequences which have been occasionally attributed to them. Dr. West objects to them on two grounds—the fear of exciting active uterine inflammation, a fear which he himself believes to be overrated; and the risk of the escape of some of the fluid through the Fallopian tubes into the peritoneum, and of consequent peritonitis. Either of these objections, if valid, would of course be fatal; but it is very doubtful if they are of much importance. The former would apply equally to the introduction of any powerful agent into the uterine cavity, by whatever means this was done; but the experience of all who have practised this method of treatment goes to show that this fear is groundless. At first, no doubt, the application of any caustic to the interior of the uterus appears to be a somewhat formidable procedure; but, on reflection, there seems to be no reason why agents which act beneficially on those parts of the uterine mucous membrane external to the os should not have an equally good effect on the more deeply seated parts of the same membrane. But this is a question that can be settled far more satisfactorily by practical experience than by *à priori* reasoning; and we have the united testimony in favour of the practice of a number of physicians whose veracity is unimpeachable, and who are constantly in the habit of passing even powerful caustics into the cavity of the uterus, without ever witnessing any untoward results. Thus, in France, intrauterine cauterisation is, or has been, practised by such men as Recamier, Maisonneuve, Ricord, Velpeau, Trouseau, Nonat, Avard, Courty; in Germany, an equally large list of names might be mentioned; while in America the treatment receives the sanction of some of the most distinguished practitioners; and, in the most recent works on female diseases published in that country, such as those by Thomas and Byford, it is strongly advocated. All sorts of remedies have been used, including a strong solution of nitrate of silver, or the same in substance, tincture of iodine, acid nitrate of mercury, etc. Courty, the author of one of the latest and best works on female diseases, is in the habit of introducing into the interior of the uterus a piece of solid lunar caustic, which he leaves to melt and gradually run over its lining membrane. Nor does he seem to have ever met with any bad results from this apparently heroic practice. It is evident, therefore, that the fear of intrauterine applications setting up severe inflammation need not deter us from the practice. The danger of injected fluids passing through the Fallopian tubes into the peritoneal cavity seems also to be exaggerated. In 1840, Vidal de Cassis made an elaborate series of experiments on the dead body in reference to this point, which have been recently carefully repeated by Hennig of Leipsic. The result is to show that, even when the cervix is tightly tied round the nozzle of the syringe, and excessive force is used in injecting, the fluid does not pass along the oviducts, although it may enter the blood-vessels. In every instance in which the os was left open, the injected liquid flowed back through it, and never entered the peritoneal cavity.

There can be no question, however, that very unpleasant, if not dangerous, symptoms are apt to follow the use of intrauterine injections. These are chiefly intense uterine colics, with fainting and severe nervous disturbance. These phenomena have been witnessed and described by a large number of observers. Thus Courty, himself a strong advocate of intrauterine treatment, tells us that he has seen such distressing results follow the use of injections, that he discountenances them entirely. The probability is, that the colics are the consequence of the injection of too large a quantity of fluid; the body of the uterus becoming distended, and contracting on its contents. It is, therefore, the amount of the injection, and not its nature, that is at fault; and, if we were to take the precaution of using a very small quantity of fluid, or of dilating the cervix by a laminaria tent previous to the injection, all unpleasant results might be avoided.

Personally, I do not feel qualified to speak on the subject. I have used intrauterine injections in a few cases, but in too few to speak with confidence as to their effects; and in these I have taken care to see that the os was unusually patulous, and I have injected a very minute quantity of fluid. One objection to them is, that the excess of fluid is apt to

run out of the os on to the vaginal walls, where the application is not wanted, and where it may produce considerable pain. I believe, too, that their good effects can be obtained quite as effectually, and far more safely, by other means.

What we require is, that our remedy, whatever it may be, should be evenly applied to the whole of the intrauterine surface; and any amount of fluid in excess of this is clearly superfluous. For these reasons, I am inclined to think that this method of treatment should not be resorted to under ordinary circumstances.

Several other modes of intrauterine cauterisation have been practised. Thus various *porte-caustiques* have been invented, by which solid nitrate of silver is introduced. The objection to all such instruments is their size and clumsiness, and the consequent risk of their irritating the uterus unduly in their passage.

The use of medicated tents, in which various substances, such as iodine, chromic acid, etc., are incorporated, has been especially advocated by Professor Thomas of New York. These are introduced into the uterine cavity, and allowed to remain several hours, during which their active ingredients are in contact with the uterine mucous membrane. Of this plan I have no practical experience; but it seems to me that there are grave objections to leaving a foreign body so long in the interior of the uterus, and repeating the application as often as once a week. It is only fair to say, however, that the elastic dilating pressure of sponge-tents has been strongly recommended by Dr. Emmett and others as of itself one of the most efficient means of diminishing hypertrophied conditions of the cervix, and of curing granular erosions of its surface and cavity.

The plan which I have myself invariably employed is much more simple in its mode of application, and answers every purpose. I use several small probes, made of flexible metal, attached to a wooden handle;* or fine probes of flexible whalebone. Round these I wrap a thin film of cotton-wool, which, by a little practice, can be so arranged as not materially to increase the bulk of the probe. Having ascertained by examination the position of the uterus as accurately as possible, I pass an ordinary speculum. The peculiar glairy and tenacious mucus, which is characteristic in these cases, will probably be seen issuing from the os; and, before making any alternative application to the more deeply seated parts, it is necessary that this should be wiped away. Were we to introduce our remedies without doing this, we would probably fail to touch the diseased mucous membrane, which is covered and protected by the abundant discharge. For this purpose, therefore, I first introduce one of the probes, bent as nearly as possible to the direction of the uterus, covered with cotton as described, and swab out the cavity of the cervix and uterus as completely as I can. A fresh probe, the cotton on which is saturated with the fluid which we wish to use, is then introduced; and, on being gently moved about, our remedy is applied smoothly and evenly, but not in excess, to every part of the mucous membrane. As a rule, there is no difficulty experienced in passing the instrument. As I have already observed, it is one of the peculiarities of these cases, that the whole of the cervical canal is in an enlarged and patulous state. The consequence is, that our probes, which should be as little bulky as possible, enter without the least difficulty, and without the employment of any force or roughness, which is to be scrupulously avoided. It is, indeed, curious to observe how, as the case improves under treatment, the patulous state of the cervical canal diminishes, and more and more difficulty is experienced in passing the instrument; and I have learnt to look upon this as one of the most reliable signs of improvement.

Dr. Thomas recommends the use of a tangle-tent before making any intrauterine applications. This I cannot but consider as objectionable, not only as rendering the treatment much more complicated and difficult, but as being in itself likely to provoke considerable irritation; and I believe it to be unnecessary in the large majority of cases requiring intrauterine applications. Still it occasionally happens that there is a profuse muco-purulent discharge, without any external erosion, and without a patulous condition of the os. In such cases, it would be impossible to make any topical application without previously opening the cervix.

Various remedies have been used for the purpose—the same, indeed, as are applied to external erosions on the cervix; such as a strong solution of nitrate of silver, tincture of iodine, or even the acid nitrate of mercury, each of which has its advocates. The two former I have myself frequently employed; but for a considerable time I have used one application only, which has given me the best results, and which I believe to be infinitely superior to all others. This is carbolic acid, which I use nearly concentrated, just sufficient water being added to the pure crystalline acid as will keep it in a fluid state—*i. e.*, about 20

* These may be had of Matthews, Portugal Street, Lincoln's Inn Fields.

parts in 100. It would be difficult to exaggerate the good effects of this application in the treatment of uterine disease. When applied to superficial granular erosions on the cervix, it often heals them in a marvellously short space of time; one or two applications sometimes effecting a cure. In a recent paper by Dr. Lloyd Roberts of Manchester, published in the *Practitioner*, its value is dwelt upon; and I can fully corroborate what he says upon this point. It is also much used by my colleague Dr. Priestley. For application to the interior of the uterine cavity, it has some special advantages. Neumann of Vienna has pointed out that, when applied in a concentrated form, it causes the tissues to shrink and mummify, but that they do not swell; nor does it seem to produce an eschar, as do the stronger caustics, such as potassa fusa, acid nitrate of mercury, and even nitrate of silver. We can thus use it freely, without fear of inducing contraction of the cervical canal—a result which has occasionally followed the use of other agents. Nor does it give rise to pain. I have occasionally heard patients complain of a sense of discomfort for a time, which was probably due to the passage of the probe. As a matter of precaution, I always recommend patients to remain in bed or on the sofa for the rest of the day on which it has been used. In obstinate cases, I use it once a week, applying it freely not only to the interior of the cervical and uterine cavity, but also over any superficial erosions that may exist. The latter always soon begin to heal and skin over; but the true uterine catarrh generally requires a somewhat protracted treatment. I can say, however, with regard to this plan, what Courty also says with regard to his own favourite treatment of leaving a piece of solid nitrate of silver within the uterine cavity—that I have not yet met with a case of uterine leucorrhœa, even though of many years' standing, which has not either been entirely cured or very greatly ameliorated. Nor have I ever seen any bad consequences follow a plan which some may be inclined to consider hazardous. That it requires some caution in its application, I not only willingly admit, but even insist on. If forcible attempts be made to pass any instrument through the os uteri, especially if the operator is not accustomed to uterine manipulations, very unpleasant consequences are likely enough to follow. But, if due gentleness be used, and the cases be properly selected, I believe the treatment to be perfectly safe.

When the uterus itself, or the cervix, is enlarged and hypertrophied, which is very frequently the case when the disease is of old standing, much benefit is to be obtained from the use of pledgets of iodised cotton, placed next the cervix through the speculum, and maintained in position by another pledget of cotton soaked in glycerine. This I use, when necessary, in conjunction with carbolic acid; and in this way even considerable thickening and hypertrophy is rapidly absorbed. In one or two cases, in which there has been an excessive amount of granular erosion on the exterior of the cervix—the hypertrophied papillæ projecting in a fungous or cockscomb-like growth—I have derived much advantage, and considerably hastened the cure, by making a few superficial incisions before applying the carbolic acid. This is the plan advocated by Huguier in his *Lectures on Uterine Catarrh*, and approved by West; and, although seldom necessary, it does undoubtedly prove of occasional service. It acts by allowing the caustic to reach the deeper seated follicles, which might otherwise escape its influence.

My object has been to advocate the systematic use of a method of treatment too much neglected in this country, and regarded with unfounded dread; and my end will have been fully attained, if I induce any member of this Association to try a plan which will, I feel convinced, give them material aid in dealing with some of the most obstinate cases that come under our observation.

ON ATROPHY INDUCED BY CICATRIX, AND ITS SURGICAL VALUE.

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IN the following paper I propose to link together a series of facts which show that such tissues as derive their nutrition by vessels passing through cicatrices have a tendency to waste—a tendency which does not become evident until some time has elapsed from the completion of cicatrization, and continues for months, or even years, until, in some instances, the dependent tissue fades away completely. My attention was first clearly fixed upon this interesting process by the following case, described in my paper "On the Relief of Symblepharon by Transplantation of Conjunctiva" (*Ophthalmic Hospital Reports*, vol. iii, Oct. 1861).

CASE I.—Joseph Jessop, a puddler, was struck in the right eye by a hot cinder, which produced a slough of conjunctiva and cornea, ending in symblepharon. The middle portion of the lower eyelid (about one-third of an inch in breadth) was adherent to the eyeball, and encroached

upon the cornea to which it was cicatrised, so as to conceal the lower margin of the pupil, and slightly to interfere with vision.

In April 1860, twelve months after the accident, the following operation was performed, in order to release the eyeball from the adherent lid. The eyelid having been freely dissected from the globe, so as to set the eye at liberty, two flaps of conjunctiva from the uninjured upper part of the eyeball were dovetailed into the site of the symblepharon, but the portion of skin forming the apex of the symblepharon was left adherent and undisturbed on the cornea.

Shortly after the operation, the isolated skin left on the cornea began to waste, becoming more flat and translucent, and in eighteen months it had vanished, leaving the cornea transparent, and flattened from the loss of substance sustained at the time of the injury. The site of the adherent skin could only be detected by oblique illumination; sight had improved; and the movements of the eyeball were restored by the interpolated conjunctiva.

Here we have the clear and unmistakable fact, that a portion of skin became atrophied and disappeared, after its isolation by cicatrix had been rendered complete by operation. Let us first inquire into the nature of the process by which these changes are brought about, and then ascertain whether the same principles may not be applied in many departments of surgery.

We are familiar with the fact that cicatrix, visible on the surface of the body, both during its formation and for months or years after its completion, contracts. This process of contraction, going on over the whole cicatricial surface, not only draws parts together, but narrows and strangles the channels which pass through the cicatrix, lessening the calibre of arteries, strangling veins at their exit, and thereby rendering them visible on the surface of the scar. Under this same process, a rectum may be strictured after too free destruction of its circumference for cure of piles; or the urethra may be strictured after amputation of the penis where the surgeon fails to provide against such a result. All these characters of visible cicatrix are familiar to us on the surface of the body. Are they less true for unseen—subsurface cicatrix, that layer of new material by which, for instance, a transplanted flap of skin grows to the raw surface made by the surgeon? Such a flap, on its transplantation, is at once glued to its new bed by a material in which vessels are rapidly formed, which aid in maintaining in life and vigour the skin thus suddenly deprived of a great portion of its blood-supply. These newly formed, numerous, and vitally important vessels, traversing as they do cicatrix, are doomed, after a time, to be one by one reduced or cut off. Does the flap, then, become atrophied? Certainly not. The gradual lessening of the blood-supply traversing the treacherous cicatrix is balanced by the compensating enlargement of the unembarrassed vessels of the sound pedicle, whereby the flap is enabled to maintain its normal nutrition—in fact, to "keep up to the mark." Sever the pedicle, however, and isolate thereby the transplanted portion of the skin completely by cicatrix, and the intruded flap, like the island of skin on the cornea in the case of symblepharon, must lose condition, and undergo atrophy with a completeness proportioned to the curtailment of its blood-supply.

It will now be my endeavour to show that the principles here worked out in one case of symblepharon are neither exceptional nor limited to a single class of cases, but that additional illustrations may be drawn from—*a*, Symblepharon; *b*, Cutaneous Nævus; *c*, Subcutaneous Nævus; *d*, Rhinoplastic Surgery; *e*, Growths encroaching upon the Cornea; *f*, Syndactomy. Finally, I shall deduce suggestions for the treatment of tumours not amenable to extirpation by the ordinary methods.

a. SYMBLEPHARON.—Case I.—Joseph Jessop (quoted above).

CASE II.—James Spence (*Ophthalmic Hospital Reports*, loc. cit.); inner third of lower lid adherent to eyeball, and extending over the cornea as far as the pupil.—March 30th, 1861. Transplantation of conjunctiva, and isolation of skin adherent to cornea.—August 19th, 1861. The apex of skin left on the cornea was becoming atrophied, being transparent at its margin, and shrunk to the level of the surface of the cornea, on which originally it formed a considerable prominence. I have recently seen Spence, and find that two-thirds of the skin which covered the cornea has disappeared, leaving the cornea transparent.

CASE III.—Joseph Wood; extensive conjunctival symblepharon, concealing the lower half of the cornea and greater part of the pupil. Reading, with face to light, No. 20 Jäger; with back to light, barely No. 19.—January 1864. Transplantation of conjunctiva.—April 2nd, 1864. The opacity was nearly level with the cornea. He read letters of 16.—April 30th. He read words of 16.—August 13th. He read 16 easily with his back to the light; words of 16 with face to the light. About one-eighth of an inch of the margin of the opacity was nearly transparent. In this case of very extensive adhesions of lid and conjunctiva to cornea, we have an improvement of vision carefully gauged by test-type, an improvement directly and intentionally brought about by