University of Glasgow.

THESIS FOR THE DEGREE OF M.D.

CHRONIC METRITIS:

ITS FREQUENCY, NATURE, AND TREATMENT.

 $\mathbf{B}\mathbf{Y}$

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ON THE

FREQUENCY, NATURE, AND TREATMENT OF CHRONIC METRITIS.

§ 1. By Chronic Metritis I mean that inflammatory affection of the uterus succinctly described by Schröder 1 as "eine mit Empfindlichkeit verbundene Hyperplasie." Exception has been taken to the name mainly on the ground that the inflammatory nature of the condition is open to doubt. Klob,2 as is well known, referred it to the class of new formations. The various names, too, under which it has been described, such as "areolar hyperplasia," "diffuse interstitial hypertrophy," "sclerosis uteri," "infarct," &c., display the earlier tendency to adopt a purely descriptive term, and traces of a similar tendency are not wanting even in recent text-books. "Sous le nom de métrite chronique parenchymateuse," write Bonnet and Petit,3 "il faut entendre, faute d'un meilleur terme, l'inflammation chronique de toute l'épaisseur de la paroi uterine. Mais . . . les lésions attribuées á l'inflammation interstitielle peuvent fort bien correspondre aussi á de simples troubles névro-vasculaires." The clinical arguments of Schröder and Martin suffice, in my opinion, to justify the use of the term chronic metritis, and its place in the class of inflammatory diseases of the uterus. But if corroborative evidence is needed, it is furnished by recent investigations 4 into particular forms of the affection under

^{1 &}quot;Handbuch" (tenth edition), p. 140.

² "Pathologische Anatomie der Weiblichen Sexualorgane," p. 124.

^{3 &}quot;Traité pratique de Gynécologie," 1894, p. 186; f. also Schauta, "Diegesammte Gynäkologie," p. 326.

⁴ Vide infra, Madlener.

consideration, and indirectly by modern views of the nature of chronic inflammation in general, and by our constantly increasing knowledge of the dependence of morbid changes in the uterus upon the action of various recognised micro-organisms.

- § 2. I have been led to choose chronic metritis as the subject of my thesis mainly because I have found that it occurs much more frequently, and is more amenable to treatment, than is commonly supposed.
- § 3. The majority of writers seem to regard uncomplicated metritis as on the whole rare. Winckel,¹ basing his opinion on some six hundred autopsies, estimates it at 4 per cent of all gynæcological cases, and Martin² is disposed to agree with him. Dührssen³ finds it "ungemein selten." Fehling,⁴ who gives a very good account of the malady, says nothing of its frequency apart from perimetritic and other complications. Fritsch,⁵ also, is of opinion that metritis seldom occurs without other and graver lesions. Of English writers, West, Churchill, and Barnes attest the relative frequency of inflammation of the substance of the womb. Pozzi,⁶ on the other hand, uses metritis as a general term, and does not dwell to any extent on chronic metritis as a well defined clinical form.

The opinion which I entertain of the relative frequency of the affection is based on the fact that, during the last three years, I have examined under chloroform all cases of pelvic disease in women coming under my observation whenever unable by an ordinary bimanual examination to exclude all phases of disease except endometritis. It is obvious that such a course is necessary to ensure correctness, and the conclusions to be drawn from observations so obtained are, I think, more likely to yield a true view of the frequency of chronic metritis, and indeed of pelvic disease in general, than those based on *post-mortem* examinations. I believe that 12 per cent of all gynæcological cases is not too high a computation for chronic metritis.

^{1 &}quot;Lehrbuch" (second edition), p. 550.

² "Pathologie und Therapie der Frauenkrankheiten" (second edition), p. 232.

^{3 &}quot;Vade Mecum" (third edition), p. 67.

^{4 &}quot;Lehrbuch," p. 226.

^{5 &}quot;Die Krankheiten der Frauen" (sixth edition), p. 144.

^{6 &}quot;Gynæcology," Syd. Soc., vol. i, s. "Metritis."

§ 4. Clinical Forms, Ætiology, and Pathological Anatomy,— Admitting that the "lésion initiale obligatoire" is an endometritis, we find that in the cases which we have in view the changes in the substance of the uterus predominate to such an extent that, as regards diagnosis, the condition of the endometrium may be disregarded. The justness of this attitude becomes more evident when note is taken of the constantly varying menstrual phenomena observed in these cases, and the occasional occurrence of wellmarked examples in which the endometrium is free from any The main pathological change consists appreciable alteration. of hyperplasia of the connective tissue, accompanied in the earlier stages of the disease by a notable increase in the volume of the uterus, but later by induration, and it may be by atrophy, of the It is needless now to refer to the old controversy as to whether the process is wholly confined to the connective tissue. or whether there is not also a true hypertrophy of the muscular The latter might conceivably be found in cases entitled to be called chronic metritis if abortion or parturition had taken place within a recent period, but I know of no modern evidence on this point. Interesting light is, however, thrown on the process in a recent paper by Madlener 1 on gonorrheal metritis. This writer has found the gonococcus in the substance of the uterus, and has described the morbid anatomy of the myometrium under such conditions. The uterus is enlarged, and its walls are thickened by an cedematous exudation. Round cells are present in large numbers in the connective tissue, but also, and this is the important point, in the very substance of the muscular fibres. It is clear from this last observation that in this, and probably in all forms of metritis, the muscular substance is directly attacked by inflammatory products, so that the process which results in chronic metritis involves not only proliferation of connective tissue cells, but active disintegration of muscular fibres. interesting is the account given by Pichevin and Petit 2 of a case of chronic metritis where repeated hæmorrhage necessitated hysterectomy. The mucosa was found to be little affected, but the uterine walls were much thickened. Blood-vessels were more numerous and larger than normal, and thickening of their walls and of the perivascular tissue had occurred. The capillaries and lymphatic vessels were distended. The alterations were

^{1 &}quot;Centralblatt f. Gynäk.," 1895, p. 1313.

² "Gaz. Méd. de Paris," 1895, No. 48.

most marked in the middle layer of the uterus, and consisted there of great increase of the connective tissue and partial disappearance of the muscular fibres. The bearing of all this on prognosis is obvious.

An increase, then, in the volume of the uterus is the chief characteristic of ordinary cases of chronic metritis. This increase may affect the whole organ, or be restricted to parts of the same, to cervix or corpus, or even to definite areas of these. Still more localised thickenings at some point of the cavum uteri, which can only be regarded as due to inflammation of the substance of the womb, are not infrequently recognised by the sound; but in such cases the endometritic element predominates.

Of metritis colli I have given examples in Cases I, II, and XIII. In each of these there was great enlargement and induration of the cervix, and the body of the uterus was in comparison small.

An example of *metritis corporis* is furnished by Case V. Here the cervix was normal both in form and appearance. There was not the slightest trace of erosion nor of distended follicles. The corpus uteri, on the other hand, was greatly augmented in volume and increased in breadth. The cavity was $4\frac{1}{2}$ inches long. It is hardly necessary to point out that careful examination under chloroform is absolutely necessary for the recognition of such a condition.

When the whole organ is equably affected the form assumed by the uterus varies. Sometimes it is globular, as in early pregnancy. In other cases, as in the one just referred to, it is markedly flattened from before backwards, and this flattening may cause such an increase in the breadth of the organ that it is difficult to avoid the suspicion of the presence of tumours of the adnexe. There is always considerable thickening of the uterine walls.

The question might here be raised of the true interpretation of the by no means uncommon cases of so-called conical cervix. From actual examination of the tissue of the cervix in the few cases of this kind where I have been led to amputate part of the portio vaginalis, I am inclined to think that the condition should not be described independently (as is done in most text-books, where alterations of the cervix are treated apart), but that it deserves to be recognised as one of the commonest forms of metritis colli (cf. Case III). Whether it always calls for operative interference is another question. I have seen pregnancy occur without further treatment than was necessary to bestow on the

endometrium. On the other hand, it is well known that dilatation and curettage of the uterus do not always suffice to remove it. In intractable cases amputation of the cervix gives the best results.

Frequently associated with the enlargement is one or other of the usual displacements, and some degree of prolapse is not uncommon. I have instanced cases with anteflexion, anteversion, retroversion, and retroflexion respectively. This variety seems to show that a displacement, while it may favour the development of metritis, is in the first instance a result of the initial lesion. Or, it may be, the form finally assumed by the uterus is the result of the equal or unequal development of the inflammatory process.

I have further observed not a few cases of chronic metritis accompanied by actual ulceration of the cervix, and occasionally with such destruction of tissue that, along with the surrounding induration, it was impossible at first to avoid the suspicion of malignant disease. Bearing in mind the anatomical relation of the mucosa to the uterine parenchyma, and the absence of a submucous connective tissue layer, it is obvious that ulceration, apart from malignant disease, involves *metritis*.

It is usually stated in text-books that whatever favours prolonged hyperæmia of the uterus tends to produce chronic metritis. Modern views of the nature of inflammation, and its dependence on the action of micro-organisms, will recognise in such factors, at best, predisposing causes. Hence the frequency with which we find the affection to date back to parturition or abortion from which convalescence has never been complete. however, must be placed in the front rank as probably the most frequent, and certainly the most pernicious, of all the direct causes of metritis. The observations of Madlener are of great importance in this respect, both as regards diagnosis and prognosis. The previously ascertained fact that the gonococcus may remain for an indefinite period in the folds of the endometrium cervicis after all symptoms of disease have disappeared, and from there exercise a constant irritation and evil influence on the whole organ, deserves also to be borne in mind.

§ 5. Symptomatology.—The symptoms of chronic metritis are by no means invariable. Bearing down pains, often interpreted by patients as a falling of the womb, frequently occur in the earlier stages of the disease, and are apt to be accompanied by

frequent and painful micturition. As in most pelvic disorders, pain is a prominent symptom, varying in intensity from simple discomfort to almost intolerable agony demanding constant rest and frequent use of narcotics. (I may be allowed to observe that suffering of this kind sometimes drives women to find refuge in alcohol.) I have mentioned two cases (V and XI) in which patients asked that their ovaries might be removed!

Menstruation occurs as a rule with undue frequency, and is profuse, scanty, or interrupted according to the degree of the metritis. It is generally painful, but dysmenorrhwa may be absent as in Case II (metritis colli). Dyspareunia is not infrequent, and was the only symptom in the case just referred to. Hamorrhage post coitum is seldom absent where there is actual ulceration of the cervix or portio vaginalis. I have seen no cases attended by severe metrorrhagia. Leucorrhwa, varying from a thin mucous or even watery exudation to a profuse purulent discharge, is often troublesome, but may be wholly absent. Cover-glass preparations of the discharge treated by the usual reagents show large numbers of diplococci, which are often difficult to distinguish from gonococci, and the latter are occasionally observed.

In not a few instances of metritis in young married women I have found that for several years previous to marriage leucorrhœa had been profuse, and menstruation exceedingly painful. In such cases the occurrence of abortion soon after marriage is apt to cause the subsequent illness to be referred to the abortion. I am inclined to believe, however, that the latter itself is, in some cases at least, the result of a metritis which, while insufficient to preclude conception, existed at the time of marriage, and was indicated by the leucorrhœa and menstrual disorders of earlier years.

Constipation is invariably found in the subjects of metritis, and is not always easily corrected.

Sterility is inevitable in advanced, and frequent even in minor forms, of the disease. Should conception occur, the tendency to abortion is great, and if pregnancy be uninterrupted it is apt to be accompanied by severe suffering. Strangely enough, parturition is not always followed by a restitutio ad integrum, as in Case V. It will also be noticed that metritis is confined to no one period of life, but is found in the young and unmarried, in nulliparæ and those who have borne children, and even after the menopause is the source of much discomfort.

The general health of those affected with metritis frequently

causes much anxiety. They look ill, and are incapable of any exertion. It is not unreasonable to suppose that this is partly due to dyspepsia and constipation; but I venture to think that a veritable septicæmia, having its source in the changes which are taking place in the uterus, is the true cause of the debility and depression.

§ 6. Diagnosis.—The fact which I wish to emphasise is that a large number of cases, for the most part loosely characterised as endometritis, are in reality cases of chronic metritis; in other words, that the latter is a comparatively frequent affection. As no doubt is entertained of the frequency of metritis in association with inflammatory affections of the adnexæ, it is obvious, as I have already remarked, that these latter must be excluded in any case that is to be correctly designated chronic metritis. It is for this reason that I have insisted on the necessity of examining under chloroform all suspected cases; and I am in a position to affirm that the one feature common to the subjoined illustrative cases is freedom from any pathological condition of the Fallopian tubes, ovaries, pelvic peritoneum, and connective tissue.

The chief physical signs of chronic metritis are enlargement and induration of the uterus. At first, it is true, the enlargement is accompanied by an appreciable softening of the uterine tissue, in all respects like that which characterises early pregnancy, and time alone may enable one to distinguish between the two conditions. The greatest diagnostic difficulty, however, is experienced in determining between chronic metritis and enlargement of the uterus due to small interstitial fibroids. These latter may be wholly beyond recognition, and as they are apt to be accompanied by a chain of symptoms practically identical with those of metritis, one is sometimes forced to rely on the effect of treatment, or it may be on the slow but constant enlargement which attends the evolution of fibromata.

Another source of difficulty lies in distinguishing between incipient carcinoma and metritis of the cervix, especially if ulceration of the latter is present. In such cases nothing remains but to excise a portion, and be guided by the results of microscopic examination. I have had to do this in several cases.

§ 7. Prognosis.—From the time of Scanzoni the prognosis in cases of chronic metritis has been bad. It must certainly be

admitted that sometimes all ordinary therapeutic measures fail to afford relief, and recourse must be had to profound surgical interference And this need not cause wonder when the pathological anatomy of severe forms is borne in mind. But speaking generally, nothing is more remarkable than the speedy relief which results from the treatment I am about to describe. To bring about a complete cure in inveterate cases is a more difficult task, and demands a prolonged course of treatment. Subacute exacerbations, too, from causes over which we have no control, are very apt to interfere with our endeavours. But such an example as is furnished by Case XIV shows what may be expected even in extreme forms of the disease. Further, as regards sterility, it will be found that the prognosis is decidedly brighter than is commonly supposed. Pregnancy has occurred in five of the sixteen cases which I have selected as typical instances of chronic metritis.

§ 8. It does not fall within the limits of this paper to pass under review the various prophylactic and general therapeutic measures that have been adopted by those who have written on the subject of chronic metritis. My object is simply to give an account of the line of treatment which has yielded me the best results, and which was carried out in the subjoined illustrative cases.

By way of preparation, suitable remedies are exhibited to correct intestinal and gastric disorders. The patient is enjoined to rest as much as possible in bed, and to make daily use of the vaginal douche. Soon after a menstrual period, local treatment begins by free depletion of the cervix and puncture of all distended follicles. The cavity of the uterus is carefully cleansed with a solution of carbonate of soda; the vagina is thoroughly irrigated, and a glycerine and iodoform tampon is introduced. The treatment for the next three or four days consists of rest in bed and daily use of the hot vaginal douche, with subsequent insertion of a glycerine tampon. To avoid the repeated administration of chloroform, one must be content up to this stage with a presumptive diagnosis—in the absence, of course, of pressing indications—or, if need be, all local therapeutic interference may be omitted till the absolute diagnosis is made.

The uterus is now dilated so as to allow the free passage of a large sized curette, and the cavity is thoroughly curetted. All inequalities of the surface, and more particularly those cicatricial

bands which are very commonly found just above and below the os internum, are removed. Where there is much induration at the fundus and adjoining angles, variously shaped Volkmann's spoons are to be preferred to the ordinary curette. Ulcerated conditions of the cervix are treated on ordinary surgical principles. Finally, the whole internal surface is carefully examined with the point of the sound, and any remaining irregularities are erased.

If there is well-marked metritis colli, I now amputate the cervix, making use of the Kegel-mantelförmige Excision of Simon-The cavity of the uterus having been well irrigated, Marckwald. it is tightly packed with iodoform gauze, which, in the absence of indications for its removal, such as elevation of temperature and severe pain, is allowed to remain for forty-eight hours. It is then removed and reapplied after careful cleansing of the cavity. After another period of forty-eight hours, the gauze is withdrawn, the uterus irrigated, and a solution of chloride of zinc, varying in strength from 10 to 50 per cent, is applied to the Iodoform gauze is again introduced. whole internal surface. Any projecting follicles are punctured, and hyperæmia of the cervix, if present, is lessened by free depletion. For the next five or six days the gauze is removed and reinserted daily. Thereafter, till the next menstrual period, which is liable to be postponed a little beyond the expected time, nothing is done beyond the daily use of the vaginal douche, and the introduction of glycerine tampons.

Where possible, the patient remains in bed till the menstrual period is over. Sometimes, though seldom, menstruation then occurs quite painlessly. Usually there is some degree of suffering, but invariably less than before treatment. As a rule, the discharge is profuse. If now there is little appreciable alteration in the size and condition of the uterus, it is necessary to have further recourse to cauterisation of the endometrium and the introduction of gauze. In a few cases I have been compelled to continue this treatment for some weeks after the first menstrual period, but the second period has almost invariably been in all respects normal.

Where amputation of the cervix has been performed, little is done beyond keeping the parts clean till union of the surfaces has taken place. The subsequent treatment is as above.

Retroflexion, if present, is easily corrected by packing the uterus with gauze, and by placing a tampon in the posterior fornix. It is seldom necessary, even at a later stage, to introduce a pessary.

The gauze thus inserted into the uterine cavity acts, I believe, in several ways. As a foreign body it stimulates the uterus to contract, and so favours unloading of the distended lymphatics and improvement of tissue nutrition. To a certain extent it serves as a drain. At a later period it acts beneficially by keeping the surfaces of the cavity apart, so that after curettage and cauterisation, regeneration of the mucosa takes place under the most favourable conditions.

The drugs which I have found most useful are ergot and hydrastis canadensis. These are prescribed immediately after curettage, and are administered for a shorter or longer period. To correct constipation, I usually employ enemata, cascara sagrada, euonymin, and belladonna; at a later stage, magnes. sulph.

Under this treatment and regimen speedy improvement occurs. Pelvic and abdominal pain first disappears; an appreciable diminution in the volume and length of the cavity of the uterus next falls to be noticed; and, finally, menstruation ceases to be painful. When pregnancy follows, a complete cure may be assumed.

The following cases of chronic metritis have been selected to illustrate the foregoing statements. It will be understood that only the salient points are noted. Details of treatment are omitted, as they are fully described in the foregoing section.

§ 9. ILLUSTRATIVE CASES.

CASE I. Mrs. R., æt. 32, ii-para.

October, 1893.—Pelvic pain, leucorrhea; frequent, scanty, and painful menstruation of three years' duration; latterly, dyspareunia and hæmorrhage post coitum. Metritis colli, endometritis corporis.

No improvement under ordinary treatment till February 1894, when dilatation, curettage, amputatio colli infravaginalis; iodoform gauze ut sup.

June, 1894.—Menstruation regular and painless; no pelvic anomaly.

At beginning of 1896, still well.

CASE II. Mrs. C., æt. 27, nullipara.

March, 1895.—Pain in left iliac region, leucorrhœa, dyspareunia, and difficulty in retaining urine since marriage two years ago; sterility. Metritis colli; corpus unaffected; no dysmenorrhœa. Dilatation, curettage, amputatio colli infravaginalis; gauze.

June, 1895.—Patient well, no pain.

Early in 1896, patient again came under observation with kolpitis and salpingitis catarrhalis sinistra. Gonococcus in discharge.

Case III. Mrs. P., æt. 23, nullipara.

June, 1894.—Pain in left groin, swelling in right hypochondrium, dysmenorrhea, leucorrhea, sterility. Two years married, miscarriage three months after marriage; ill thereafter. Metritis chronica cum antestexione uteri; conical portio; movable right kidney.

13th June.—Dilatation, curettage, amputatio colli infravaginalis; gauze, &c.

27th July.—Menstruation painless; symptoms of phthisis pulmonalis. General treatment for some months.

August, 1895.—Patient pregnant.

Case IV. Mrs. L., æt. 32, v-para.

October, 1894.—Bearing-down pains, and hæmorrhage which began eight months ago when patient stopped nursing. *Metritis;* actual ulceration of cervix; suspicion of malignant disease. Examination of excised portion showed chronic interstitial inflammation. Curettage, &c.

January, 1895.—Patient well.

CASE V. Mrs. G., æt. 44, multipara.

March, 1896.—Long-standing pain in left iliac region; frequent and very painful menstruation; leucorrhæa. Pain so severe that patient wanted her ovaries removed! Metritis corporis; body twice mormal volume, and much indurated; portio unaltered; length of cavity, 4½ inches. Endometritis corporis.

17th March.—Dilatation, curettage, iodoform gauze ut sup.

1st April.—Pain much less; menstruation painful.

2nd May.—Menstruation almost painless.

In this case it is to be noted that four years ago patient was under treatment, and the uterus was curetted. Pregnancy occurred later, but was in turn followed by much more severe suffering.

CASE VI. Mrs. C., æt. 29, nullipara.

March, 1896.—Pain in right groin, dysmenorrhea, menstruation every two weeks, slight leucorrhea. Metritis chronica; cavity,

3½ inches; walls hard and thickened; portio conical. Miscarriage shortly after marriage seven years ago.

23rd March.—Dilatation, curettage, gauze ut sup. Subsequent menstrual period painless. In April, well and free from pain.

CASE VII. E. F., æt. 25.

May, 1894.—Dysmenorrhoea since onset of menstruation; leucorrhoea; pain in left iliac region. Metritis; uterus not much enlarged, but very hard; conical portio; erosion. Treatment by dilatation, curettage, iodoform gauze, &c. Patient married a few months later, and in January, 1895, became pregnant.

CASE VIII. Mrs. A., æt. 33, v-para.

May, 1895. — Dysmenorrhæa, leucorrhæa, dysuria. Three miscarriages since birth of youngest child now aged 5. Metritis.

3rd June.—Dilatation, curettage, gauze, &c.

29th June.—Menstruation painful.

10th July.—Uterus normal. Subsequent periods painless.

CASE IX. Mrs. J., æt. 30, ii-para.

May, 1894.—Pain over sacrum and in left iliac region. Menstruation scanty, and preceded by severe pain. Last child born at seventh month two years ago. Not well since.

20th May.—Dilatation, curettage, &c. Slight dysmenorrhæa for two months.

September.—Menstruation painless, and uterus quite normal.

CASE X. Mrs. B., æt. 38, ii-para.

September, 1894.—Hypogastric pain, dysmenorrhœa, leucorrhœa, much increased in severity since remarriage two years ago. Metritis, uterus slightly enlarged.

27th October, 1894.—Dilatation, curettage, &c.; under treatment till December.

February, 1895.—Menstruation painless, and patient well.

May, 1895.—Patient three months pregnant.

CASE XI. Mrs. W., æt. 40, nullipara.

February, 1896.—Pelvic and abdominal pain for many years, necessitating constant use of narcotics; menstruation irregular and very painful. Wanted ovaries removed! Metritis chronica; cavum uteri, $3\frac{1}{2}$ inches; globular enlargement of uterus; large hæmorrhagic erosion, and ulceration of cervix.

4th March, 1896.—Dilatation, curettage, &c.; ergot and hydrastis.

10th March, 1896.—Sol. zinc, 25 per cent, to endometrium; gauze.

13th March, 1896.—Uterus under 3 inches.

A month later, patient free from pain, and menstruation painless.

CASE XII. Mrs. M., æt. 35, ix-para.

4th November, 1894.—Dysmenorrhæa, leucorrhæa, frequent and painful micturition; last child born two years ago, illness since then. Metritis cum anteversione uteri. Cavity, 3½ inches; walls thick, hard, tender on pressure. Portio hyperæmic, and studded with follicles. Puncture and free depletion; iodoform gauze in cavum uteri; ergot.

16th November, 1894.—Uterus measures 23 inches.

December, 1894.—Curettage, &c.

February, 1895.—Menstruation painless.

June, 1895.—Uterus in all respects normal.

CASE XIII.—Mrs. D., æt. 23, nullipara.

May, 1894.—Pain in abdomen and right groin; menstruation irregular, three to eight weeks, painful (pain preceding and accompanying discharge), leucorrhœa, sterility. Patient three years married, no children, no miscarriages. Menstruation began at 18, and was normal till marriage; later, a severe illness of indefinite nature. Metritis colli cum atrophia et anteflexione uteri. No stenosis; corpus uteri a mere appendage to cervix.

3rd June, 1894.—Dilatation, curettage, gauze ut sup.

19th June, 1894.—Menstruation painless, four days.

29th June, 1894.—Disappearance of flexion, use of gauze having been resumed after menstrual period.

July, 1894—July, 1895.—Menstruation normal; then patient became pregnant.

CASE XIV. Mrs. S., æt. 29, nullipara.

December, 1895.—Severe bearing-down pains, dysmenorrhæa, dyspareunia; general condition very poor. Metritis chronica cum retroflexione uteri; length of cavity, $3\frac{1}{2}$ inches; walls, especially posterior, much thickened. Patient had been treated in 1892, in Victoria Infirmary, for retroflexion; round ligaments then shortened. Three months later, suffering as before.

December, 1895.—After four weeks' general treatment, dilatation, curettage, gauze ut sup. Subsequent menstruation painful, otherwise much better.

10th January, 1896.—Reposition of uterus and pessary.

18th January, 1896.—Uterus measured $2\frac{1}{2}$ inches, and lay in normal anteflexion. Later periods without pain.

March, 1896.—Nothing abnormal to be detected, and great improvement in general condition.

Case XV. Mrs. J., æt. 26, iv-para.

October, 1893.—Last child born fifteen months ago; menstruation returned in July, 1893, and again in October, prolonged and exceedingly painful on each occasion. Abdominal pain severe for many months, and leucorrhoea very profuse. Metritis chronica cum retroflexione uteri; uterus, 3½ inches; walls much thickened; papillary erosion.

October, 1893.—Dilatation, curettage, gauze ut sup. Reposition of uterus and pessary.

December, 1893.—Amenorrhœa.

January, 1894.—Influenza and abortion.

May, 1894.—Patient again pregnant; delivered at term.

CASE XVI. Mrs. S., æt. 28, v-para.

February, 1895.—Pain, dysmenorrhœa, dyspareunia, leucorrhœa, of twelve months' duration. Metritis chronica cum retroversione uteri. From February till November palliative treatment, local and general, without much effect.

4th November, 1895.—Dilatation, curettage, iodoform gauze ut sup. Later, lin. iodi to endometrium. Pil. aloin, ergot, hydrast. canad.

26th November, 1895.— Uterus anteverted; no discharge. Following menstrual period profuse, but almost painless.

February, 1896.—Patient well, and free from all suffering.