THE TREATMENT OF CHRONIC CERVICITIS.*

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THE greater part of pelvic pathology takes its origin in childbirth and this is especially true of chronic infection of the cervix, which is characteristically seen in the multiparous patient with a history dating from a previous confinement. It has been shown that some degree of cervical laceration is a common accompaniment of labour, whether spontaneous or instrumental, and through the exposed damaged tissues the cervix falls an easy prey to acute infection. In time, the deeper structures become involved and the condition passes into a chronic state. The number of women suffering from infection of the cervix following pregnancy has been variously estimated. Barrett [1] found that 50 per cent. of all women examined at the eighth week showed unhealed cervical damage, while Miller and others [2] estimated that 80 per cent. of all women who have borne children show damaged or diseased cervices. While the great majority of cases arise in this way, other cases of cervicitis may follow abortion, instrumental trauma or direct gonococcal spread from the male. No other single condition met with in gynæcological practice gives rise to so much suffering, discomfort and general ill-health in women, especially during the child-bearing period, as chronic infection of the cervix.

Vaginal discharge is an almost universal complaint and this varies from slight to profuse in amount, the latter often causing secondary superficial infection of the vulva with chronic irritation and pruritus. The colour of the discharge may be creamy, yellow or green and purulent, and at times is blood-stained and foul-smelling. In some cases leucorrhœa is the only complaint but the majority of patients exhibit a variety of other symptoms. Pain is a distressing feature, amounting, in some instances, to a low dragging backache, indicating

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utero-sacral involvement, and in others to a deep-seated chronic pain in either iliac fossa, denoting that infection has spread to the cellular tissues in the base of the broad ligaments. In most cases this pain is aggravated by menstruation, and thus dysmenorrhœa is a common complaint. Irregular menstruation and menorrhagia are forms of menstrual upset met with, and less common findings are dyspareunia, bleeding after coitus and post-menopausal hæmorrhage. On account of its spermicidal action, excessive alkaline cervical discharge is a cause of sterility in some cases.

Many writers have drawn attention to the association of bladder symptoms with cervicitis. Ainsworth-Davis [3] found trigonitis and urethritis with ureter and kidney inflammation to be present in cases of chronic cervicitis and considered these complications to be due to lymphatic spread to the bladder and direct lymphatic spread from the cervix to the kidneys. Herrold, Ewert and Maryan [4] attributed symptoms of the so-called irritable bladder, frequency and dysuria, to cervical infection, and they found that the bladder symptoms cleared up after coagulation of the cervix. They concluded that infection spread either directly or by lymphatics into the utero-cervical cellular tissue with subsequent irritation of the base of the bladder. That the cervix acts as a focus of infection in some cases of co-existent systemic disease, such as arthritis, is now generally admitted. Experimental support for this contention was furnished by Moench [5]; and Professor Young,[6] in a paper read before this Society in 1930, referred to marked improvement in cases of articular disease following treatment of the cervix.

According to Blair Bell,[7] 95 per cent. of cases of carcinoma of the cervix occur in women who have borne children. Laborious histological study of 850 specimens of the cervix by Bailey [8] proved that there is a definite relationship between cervicitis and cancer. He concluded that the constant intermediate causal factor was the presence of inflammatory exudate in continuous contact with the epithelium. From the study of 1200 cervices, Davis [9] concluded that with prompt repair of injuries and treatment of infection the chance of malignant change in the cervix occurring would not be more than 1 in 5000. Of the 669 patients with carcinoma of the cervix examined by Pemberton and Smith [10] none had ever had cauterisation, and of the 400 cauterisations none were known

to have developed carcinoma: Tompkins [11] recorded two cases of carcinoma developing out of 611 patients treated by various methods for chronic cervicitis. From the prophylactic point of view, therefore, it is of the utmost importance that all cases of chronic infection of the cervix should receive careful and adequate treatment, no matter how mild the symptoms may be. Treatment must necessarily be of a type which will cure the condition and not merely temporarily alleviate symptoms. As would be expected from the widespread incidence of this condition, countless methods of treatment have been advocated and used with varying success.

It is with the object of determining whether we are employing the best methods at our disposal for each individual case that I bring this subject to your notice once again. This paper is based upon the observation of over 200 cases of chronic cervicitis which have come under the care of Professor Johnstone in the Wards of the Royal Infirmary during the last two years, and I wish to thank Professor Johnstone for permission to use the records of those cases and also for the opportunity given to me of treating many of those patients personally. Although numerous papers dealing with the treatment of cervicitis are to be found in the literature, but few authors have made any attempt to classify cases according to the degree or site of infection. As the method of treatment to be adopted will depend on these points, I have attempted to group cases according to the clinical appearance of the affected cervix. It is realised, however, that no hard-and-fast lines can be drawn and that one group will naturally merge into another; but it is felt that some sort of classification will be of assistance in the problem of selecting the optimum method of treatment for each individual case.

Type I.—Superficial Cervicitis.

Usually the only symptom of this group is leucorrhœa and examination of the cervix reveals a simple erosion characterised by a bright red smooth area surrounding the external os. The cervix is not enlarged and on wiping away the superficial secretion no purulent discharge is to be seen exuding from the canal. Palpation reveals no obvious involvement of the surrounding tissues but in some cases movement of the cervix causes slight pelvic pain indicating a mild spread of infection.

This type of case is not commonly met with in the gynæcological out-patient clinic except in the few cases seen within a short period following confinement or in the comparatively rare nulliparous patient. It is, however, this type of cervicitis which is so frequently seen in post-natal clinics and on account of its superficial nature it is particularly suited to treatment at that time.

This type of cervicitis accounted for 15 per cent. of the series.

Type II.—Endocervicitis with Erosion.

With purulent discharge as the invariable feature of this type, these patients almost always complain of some of the other symptoms already enumerated. On examination, inflammation of the vulva with some vaginitis may be found. Inspection of the cervix reveals moderate enlargement with a papillary or follicular erosion with or without polypi protruding from the external os. Some degree of laceration of the cervix is to be noted with eversion of the lips; and the vaginal portion and endocervix are covered by purulent discharge. Palpation discovers tender thickening in the lateral fornices and tense tender utero-sacral ligaments. Movement of the cervix will elicit pain either in the sacral region or in the iliac fossæ. This is the commonest type of cervicitis which the gynæcologist has to treat and amounted to 57 per cent. of the cases of the present series.

Type III.—Endocervicitis.

Discharge is again the characteristic feature of this group of cases, although lymphatic spread will account for the additional symptoms of backache and pelvic pain. Examination shows the cervix to be healthy in its vaginal aspect but purulent discharge is to be seen exuding from the canal. Again we may find thickening in the fornices in the presence of lymphatic spread. This type of case is not common and accounted for only 4 per cent. of the series.

Type IV.—Diffuse Cervicitis.

Patients suffering from this type of cervicitis give a history extending over many years of leucorrhœa, vulvar irritation,

backache and pelvic pain, together with any of the other symptoms which we have seen are associated with chronic cervicitis. Inspection shows vulvitis and vaginitis, and pelvic examination reveals a bulky, hard, irregular cervix. Hypertrophy and hardness are due to connective tissue proliferation following inflammatory changes in the deeper structures. Thickening leading to partial fixation of the cervix may be felt in the lateral fornices or in the region of the utero-sacral ligaments, and movement of the cervix causes pain referable to those sites. Inspection shows the irregularity of the cervix to be due to deep unilateral or bilateral laceration. In some cases a bright red papillary erosion is present, while in others such an erosion is healed over, leaving many cystic follicles protruding on the vaginal aspect of the cervix. Eversion of the lips exposes the cervical canal, from which exudes a muco-purulent discharge.

Twenty-three per cent. of the cases observed were considered to be of this type.

Simple, papillary or follicular erosion was present in over 80 per cent. of all cases, while 22 per cent. showed deep unilateral or bilateral laceration of the cervix. In 12 per cent. of cases some co-existent pelvic pathology, such as genital prolapse or fibroids of the uterus, was present.

Treatment.

The object of treatment in any type of chronic cervicitis is to eradicate completely all infection whether comparatively superficial or in the endocervical glands and deeper structures. In addition, lacerations must be dealt with, cystic follicles removed or destroyed, and hypertrophied or everted lips excised. Finally, the cervix must be repaired in such a way that healing will take place without scar tissue formation so that the final result will be a smooth, regular and supple cervix with patent canal.

As already stated, countless methods of treatment have been advocated from time to time and some of the more rational methods will now be considered.

1. Conservative Treatment.

(a) *Vaginal Douching.*—The effect of this therapy is almost entirely mechanical in clearing away discharge and preventing

the accumulation of infected debris around the cervix. Mild hyperæmia is produced if the douche employed is of sufficient heat. Antiseptic douches must necessarily be sufficiently weak in strength in order not to damage normal tissues ; therefore, their bactericidal power is low. As only the vaginal aspect of the cervix is exposed to this treatment, it is obvious that it is valueless in the majority of cases of chronic cervical infection. In superficial infections acid douching is of use by virtue of its neutralising effect upon the excessive alkaline cervical secretion. Combined with tamponage, however, hot vaginal douching may play a part in pre-operative treatment by reducing para-cervicitis and thus localising infection to the cervix itself.

(b) *Local Application of Antiseptics.*—Painting the cervix with such antiseptics as iodine, mercurochrome and picric acid has been recommended but again the effect of such treatment is purely superficial and quite useless where infection involves the cervical glands.

(c) *Local Application of Antiseptic Powder.*—Repeated application of powders such as kaolin, fuller's earth and dermatol to the cervix and vagina has the effect of drying up secretion and separating infected surfaces. Here again success can only be expected in the most superficial of infections.

(d) *Local Application of Caustics.*—Superficial cauterisation by the use of chemicals such as caustic potash, carbolic acid and silver nitrate may be carried out in the out-patient department and, after frequent repetition, may ultimately be successful in curing a mild and superficial cervicitis.

Ross [12] has recently reported the follow-up of a series of 250 cases treated by the endocervical application of chromic acid with no complications. Chromic acid acts by antagonising the alkaline cervical secretion, coagulation and penetration due to its oxidising property.

(e) *Insulin Therapy.*—Good results from the local application of insulin to cases of cervical erosion have been reported by Klaften.[13] In his opinion the effect of this treatment is due to the local and not the absorbed action of the insulin.

(f) *Ionization.*—Copper ionization obtains its effect through a mild coagulating property causing shrivelling and obliteration of the affected glands. In addition, copper oxychloride has a marked bactericidal effect. Forman [14] records 71 cures out of 93 patients treated by this method. Repeated treatment keeps

the cervix dilated and, therefore, adequate drainage is provided. Cases exhibiting large erosions are not suitable for this type of treatment.

More recently, Bourne, Bond and McGarrity [15] have introduced a new method of treating chronic leucorrhœa by zinc chloride ionization. Zinc chloride is applied to the endocervical wall through the vehicle of a clay pencil inserted into the canal without dilatation. This type of treatment is recommended where there is little laceration of the cervix. Where a large erosion is present, additional treatment by cauterisation is essential. Necrosis of the tissues to a depth of 2 to 4 mm. is produced. Following up 100 cases thus treated, Bourne [16] found that re-epithelialisation is complete at the end of two months. No serious complications followed treatment by this method.

2. Thermal Treatment.

(a) *Cauterisation.*—Cautery to the cervix was first employed by Byrne [17] in 1892 in the treatment of carcinoma, while Hunner [18] made use of the Paquelin cautery for the treatment of endocervicitis in 1906, and in the same year Dickinson [19] introduced the Nasal Tip cautery for the same purpose. Cautery causes a burning of the tissues with superficial necrosis and destroys deeper infection by heat. In treating cases by this method linear radiating strokes from the external os outwards are made on both cervical lips. The endocervix is seared by four longitudinal strokes and follicles present are punctured and their walls cauterised. If this treatment is carried out under anæsthesia wide dilatation of the cervix is performed as a preliminary measure in order to ensure adequate drainage. If, however, the treatment is undertaken in the out-patient clinic dilatation of the cervix is not practicable and cauterisation usually has to be repeated on several occasions before all areas of infection have been dealt with. It is doubtful if the actual cautery is effective to a depth sufficient to destroy deep infection in some cases. An objection to the use of the Post and Paquelin cauteries is that heat is not restricted to the tip so that it is difficult to prevent unnecessary burning and cauterisation by the remainder of the terminal. Furthermore, cauterisation by the actual cautery leads to carbonisation of the tissues, resulting in scar formation.

(b) *Coagulation.*—Treatment of chronic cervicitis by means of electrical coagulation has become increasingly popular during recent years. Using coagulation current from the diathermy machine, special electrodes have been devised by several gynæcologists, including Ende, Cherry and Hyams. In the former two instances the infected tissues are coagulated to a depth of 2 mm. between two terminals, whereas in Hyams' method a single wire loop electrode is used to core out the endocervix. These methods are widely used in America and in the majority of instances cases are treated as out-patients. Hyams [20] records the follow-up of 779 cases of cervicitis treated by the Hyams electrode as out-patients. Ninety per cent. were relieved of their symptoms and presented a healed and normal cervix. More recently, Stadiem [21] followed up 202 cases treated by the same method with relief of symptoms and preservation of function in 95 per cent. Using electro-coagulation, Frost [22] noted that healing without scar formation occurred in four weeks.

(c) *Diathermy Excision.*—Within the last few years several gynæcologists have employed the diathermy cutting current as a means of excising infected tissues in the cervix. Using a loop electrode with cutting current as a scalpel, Stadiem [21] carried out trachelorrhaphy in several cases with deep lacerations. This was followed by suture of the cervical lips in the usual way. I have treated one case only in this manner. A deep unilateral laceration and extensive erosion were completely excised by the cutting current diathermy loop and the cervix repaired with sutures. At the end of four weeks healing was complete and the cervix presented a normal contour. There has been no recurrence of discharge four months after treatment. With the diathermy cutting current curette Ainsworth-Davis [3] removed strips of the endocervix and excised the erosion in 80 cases. Following up those cases he found complete healing at the end of two months with a supple scar and no distortion or contraction of the canal. Crossen [23] records 80 cases treated by coneisation of the cervix with a cutting current. If extensive eversion was present this treatment was combined with anterior and posterior sutures. I have used a modification of those methods in the treatment of 12 cases. A cone-shaped area of tissue to a depth of about a quarter of an inch, including the erosion and lower half of the endocervix, was excised and the remainder

of the canal treated by the coagulation current. In some instances this treatment was supplemented by anterior and/or posterior sutures. Healing was complete in from four to seven weeks and the results of the follow-up of these cases are so satisfactory that further use of this method is indicated. The first case thus treated was in May, 1936. This patient gave a long history of discharge, pain and poor health, and repeated cautery with silver nitrate had been ineffective. Since treatment there has been no recurrence of discharge; pain has entirely disappeared and the general health improved considerably.

It is to be noted that the cutting current eliminates bleeding which may be a serious complication of other forms of treatment.

3. Radium Treatment.

In view of the precancerous nature of chronic infection in the cervix some authors have advocated the use of radium. This method of treatment gives a high percentage of cures, but the high incidence of stenosis following treatment has led to this method being abandoned.

4. Surgical Treatment.

For over 100 years surgery has played a part in the treatment of chronic infections and laceration of the cervix. Of the various procedures which have been recommended from time to time those now in general use are the methods of Bonney, Sturmdorff, Schroeder and Emmett. In selected cases amputation of the cervix is the operation of choice.

In a detailed follow-up of 261 patients operated upon for chronic cervicitis, Bullard [24] found that as a cure of leucorrhœa high amputation was perfect, Sturmdorff excellent, low amputation good and trachelorrhaphy disappointing. However, cervical stenosis was found in 54 per cent. of the high amputations, 18 per cent. of the low amputations, 12 per cent. of the trachelorrhaphys and only 1·8 per cent. of the Sturmdorffs. Following up 611 patients treated by cauterisation, trachelorrhaphy, Sturmdorff and amputation, Tompkins [11] found that trachelorrhaphy gave a lower percentage of complete cure of leucorrhœa and effected cure more slowly than the other methods. Using the Sturmdorff conical excision method, Wolfe [25] recorded 79·2 cures. He considered the failures to

be due to (i) operative contamination and (ii) the failure to excise an infected segment of the endocervix at the upper limit of the canal.

Complications of Treatment.

Complications following cautery, diathermy or surgery may be classified as immediate or remote. Of the former, hæmorrhage and aggravation of a co-existent pelvic infection are the most important. Hæmorrhage may either be immediate or delayed, the latter occurring at the time of separation of slough or stitches. In order to avoid the catastrophe of an acute flare-up of infection within the pelvis care should be taken to avoid treatment in the presence of acute infection. Cannell and Douglass [26] have reported three cases demonstrating this complication following the actual cautery, and concluded that the occurrence of widespread pelvic infections following cauterisation is probably much more frequent than is commonly supposed. Hiller [27] recorded two cases of peritonitis, one of which ended in death, following cauterisation. In both cases there was a history of pelvic peritonitis following septic abortion some years previously.

The remote complications are due to stenosis of the cervix. This unfortunate sequel may have its effect upon the non-pregnant or pregnant patient. Thus, Henkin [28] records a case of hæmatometra following cauterisation. So vigorous had been the treatment in this case that only a small dimple in the vault of the vagina indicated the site of the former cervix. According to Hesseltine [29] obstetric complications may be of three types : (i) Sterility ; (ii) Abortion or premature termination of pregnancy ; and (iii) Dystocia. He records a case of non-dilatation of the cervix, necessitating Cæsarean section, due to stenosis following cervical amputation.

After reviewing some of the methods advocated for the treatment of chronic cervicitis, several of which I have used myself, I will now refer to the four types of cervicitis described and select for each group which, in my opinion, would be the best form of therapy.

Type I.—Superficial Cervicitis.

With only the surface of the cervix involved in the infective process it is probable that in many cases conservative treatment

in one or other of its appropriate forms would be sufficient to produce a cure eventually. Success with these measures, however, is by no means certain, and I would suggest that the best and surest method of dealing with those cases is by superficial electric coagulation. As dilatation of the cervix is not essential, this group may be treated as out-patients.

Type II.—Endocervicitis with Erosion.

This is the most common form of chronic cervicitis and, owing to the deep-seated nature of the infection, more radical measures are necessary for its eradication than in Type I. In spite of the success of American gynæcologists in treating these cases as out-patients, I am of the opinion that full dilatation of the cervix is an essential step in whatever treatment is to be adopted in order that free drainage may be ensured. The choice of treatment in this group lies between the Sturmdorff operation and excision by the cutting current diathermy curette, either procedure to be carried out under anæsthesia. In view of the difficulty of being certain that all infected tissue is removed by the surgical method, I would recommend excision of infected tissues by the cutting current diathermy, with or without suture of the cervical lips, as the best treatment for this type of case. Curettage of the uterus should not be carried out without definite indication and packing is unnecessary. After-treatment should consist of a gentle daily douche in order to remove debris and thus lessen the risk of reinfection. In the presence of deep laceration, repair of the cervix by surgery or, in practised hands, by cutting diathermy should be carried out.

Type III.—Endocervicitis.

With infection localised to the endocervical glands and periglandular tissues dilatation of the cervix is an essential step in the treatment of those cases if diathermy coagulation or excision is to be employed. We have used Bourne's method in the treatment of several cases of this type and the results to date are sufficiently encouraging to indicate that this may be the ideal treatment in cases of pure endocervicitis.

Type IV.—Diffuse Cervicitis.

In addition to eradicating infection, deep lacerations and hypertrophied cervical lips have to be dealt with in this type of case. In the younger patient with the possibility of a future pregnancy surgical excision and repair of the cervix is indicated, but in the older patient, where further pregnancy is unlikely, amputation of the cervix is probably the wiser course to adopt.

Treatment of cervicitis may require modification in the presence of some associated pelvic pathology. Thus, in the case of multiple fibroids panhysterectomy may be the wisest course; whereas, when treatment of the cervix is incidental to operation for prolapse, low or high amputation should be carried out.

Post-Natal Treatment of Cervicitis.

As the great majority of cases follow childbirth, the opportunity is provided of diagnosing and treating cervicitis in its earliest stages of chronicity during routine post-natal examination of patients. Already many reports have appeared in the literature recording excellent results from electrical treatment between six and eight weeks after delivery. I believe that at the Royal Maternity Hospital electro-cauterisation is giving excellent results in the treatment of those early cases of chronic cervicitis, and it is certain that, as this treatment becomes more universally adopted, the number of patients presenting themselves at the gynæcological out-patient clinics with symptoms of chronic infection of the cervix will gradually diminish in number.

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Discussion.

Dr Haultain said that in his experience the majority of cases of cervical discharges due to endocervicitis could be cured by the simple cautery. He was in agreement that the cervix should be dilated in the first instance and he did not think that cauterisation without an anæsthetic and without the cervix being dilated was nearly so satisfactory. The majority were cured by this method and only a very few really required further operative treatment. If one could cure the case by an easy, simple and safe operation which allowed the patient to go home in a very short time, he did not think a more extensive operation was necessary. A point he emphasised strongly was that treatment by trachelorrhaphy or Bonney's amputation for cervicitis was not satisfactory because a large area of the endocervix was untreated and thus the discharge and other symptoms were not cured unless the remaining endocervix was cauterised afterwards.

Dr Haultain was disappointed that Dr Matthew did not go a little bit further. He had talked about the complications or result of endocervicitis such as utero-sacral cellulitis and parametritis, but he did not say how his treatment had affected these troublesome conditions. Dr Matthew said that the discharge was cleared up by

his treatment but did not tell in how many cases he had cured the backache or lower abdominal pain. These complications were often very difficult to deal with and an indication of Dr Matthew's results with regard to these would have enhanced the value of his observations.

Dr Fahmy said that for some months greater experience had been gained by the use of the diathermy machine as opposed to the electric cautery, and his impression to date was that the results from the diathermy were, on the whole, better. A point of practical interest lay in the fact that the small cautery could be readily carried from place to place, whereas the constant transportation of a diathermy instrument was somewhat of a handicap to treating every patient with the machine. Dr Fahmy was in complete agreement with the views of Dr Matthew in regard to the inefficiency of the silver nitrate stick in dealing with cervicitis. He was of the opinion that Bourne's method would prove more and more acceptable when employed in the suitable case of endocervicitis.

Professor Johnstone congratulated Dr Matthew most cordially on an admirable paper which covered the subject fully and clearly. The conclusions which Dr Matthew had summarised were largely those which were agreed upon by the members of the staff in his own charge.

Professor Johnstone was inclined to think that while there was no very great difference between the results with the Pacquelin cautery and those with the surgical diathermy cautery, yet the latter probably left a smoother and also a more pliable cervix. It was therefore the better method in women in the child-bearing period. He hoped that the old methods of treatment—douching, the application of carbolic acid, silver nitrate, etc., were gone for ever, except possibly in the case of the most trivial superficial erosions.

Dr Robertson referred to the electric cautery treatment of cervicitis carried out in the Post-Natal Department of the Maternity Hospital. At short notice he had looked out the records of the last twenty cases so treated, and examined the results. Cauterisation was usually carried out about eight weeks after the termination of pregnancy. Five of these cases were still under treatment; eleven were healed. In some cases several treatments had to be given. As a rule very little pain was caused by the cautery, and in recent cases the cautery was used only hot enough to coagulate the tissue when left in contact for some time. In a fortnight, or less, the slough separated and, if necessary, a further treatment was given two weeks later. Cases of superficial cervicitis had done very well and he considered that, for this type of case, cauterisation was the ideal treatment. Treatment with chemical applications meant that the patient had to report time and time again without any real benefit, whereas those treated by cautery were soon cured.

The President congratulated Dr Matthew not only on the content of his paper, but also on the way he had communicated it to the Society. They were all living in changing days and Professor Johnstone and he could remember a time when they saw many more cases of severe pelvic inflammatory lesions and of fistulæ than were seen now. In the future they were likely to see fewer cases of hypertrophy and laceration of the cervix, because of the greater care given during labour, and the post-natal examination of patients within a few weeks of labour. Under the Maternity Services (Scotland) Act such an examination was made obligatory on the doctor taking service under the Act. Early treatment of these cases on the lines suggested by Dr Matthew would certainly prevent the extensive changes in tissue which were found in late cases. In former days the methods of treatment used for cervical lesions did bring the patient to visit her medical adviser repeatedly. Nowadays the patients themselves wanted a more expeditious form of treatment. He well remembered the electrical treatment of those cases by what was called Apostoli's method, as practised by Dr Sam Sloan in Glasgow.

In the Gynæcological Department at Glasgow Royal Infirmary, the electrocautery has been most used for such cases. The first treatment was always carried out under general anæsthesia, and the cervix thoroughly cauterised. The patient's stay in the wards for this treatment was under a week, but she was required to report back at intervals for re-examination. There were a few cases which required a subsequent light cauterisation to clear up an odd missed area, but that treatment was carried out without any anæsthetic and caused no serious discomfort to the patient: she was able to go home immediately afterwards. His own experience of diathermy in those cases was limited, but in view of the excellent results obtained by Dr Matthew and other workers, one would be well justified in including that method in one's armamentarium. Each case required individual consideration, and no hard-and-fast lines could be laid down for the treatment of endocervicitis. There were still cases which almost certainly required surgical amputation, but in the future this type of case was likely to be very much less frequent.

Dr Matthew, dealing with Dr Haultain's remarks regarding cauterisation, said he considered it to be a clumsy method in comparison with the clean excision of surgical diathermy. In the case of cautery, as both Professor Hendry and Dr Haultain had stated, repeated treatment was necessary. As far as diathermy was concerned one treatment only was sufficient to cure the patient of her cervicitis. It was found that five to seven days hospitalisation was sufficient as there was apparently no risk of hæmorrhage following this treatment.

In reply to Dr Haultain's question as to whether pain cleared up with treatment by diathermy, Dr Matthew said that in the one case of which he gave a short account, pain had cleared up entirely following treatment. This was the finding in all cases except one where backache proved to be of an orthopædic nature. Another case from whom he had heard that morning, had had a bad discharge and backache for many years. She was treated in April 1937 by diathermy excision of a large erosion and coagulation of the endocervix. She wrote to say that she now had no discharge; pain had disappeared and the menstrual irregularity from which she suffered was now cured, due, no doubt, to the fact that she was now six months pregnant. It would be of interest to follow up this pregnancy.