CHRONIC ENDOMETRITIS.
ITS IMPORTANCE AND LOCAL TREATMENT.

With Cases.

Being a Thesis for
THE DEGREE OF DOCTOR OF MEDICINE.

Presented by
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A number before a name is the guide to its reference.
The consideration of the treatment of the various pathological conditions of an inflammatory origin, which obtain in the corporeal and cervical mucus membranes of the human uterus, is a subject which rivals in importance the study of the therapeutic measures employed in the cure of many abnormal conditions which appeal more strongly to the eye and hand of the gynaecologist.

I refer to conditions producing such marked pathological changes as occur in the large uterine or ovarian tumours, which, it will readily be granted, have a greater attraction for the operator than have the veiled and hidden morbid phenomena present in endometritis, the existence of which, indeed, is in many cases, only revealed by the symptoms following in its train, and in which the external physical signs are frequently characterised by their paucity.

This may seem to be an exaggerated view to take of the importance of endometritis. Undoubtedly
it is if we only consider the size and extent of the diseased part, forgetting the discomfort the patient suffers and the important consequences which may ensue from the disease. Besides, from our own stand-point, we have a legitimate pride in a successful major operation.

But, from the endometric standpoint, women come to us for treatment whose lives are a veritable burthen to them. Unable to work, or, if successful in so doing, only succeeding in aggravating the already too grievous torture. Some, in whom we have the roots of mental derangement, in others, we may justly say in all, we have evident decline of physical health, in not a few, as a result, we have even the further stage of death.

In spite of this, however, cases of endometritis are, generally speaking, rather at a discount. Given one vacant bed in the ward, the not urgent ovarian will probably be taken and the suffering endometritic left.

So far from despising endometritis, should we not regard the uterine mucosa as the first port of
call for the immigrating germ of disease; there it disembarks and that is its headquarters from which it proceeds to invade the neighbouring territory on all sides. Whether by progressing through the lymphatics of the uterine wall or by travelling through the fallopian tube, it always advances, slowly or quickly, its ultimate goal the cellular tissue or peritoneal lining of the pelvis, in either of which it lights on a soil fertile for growth and an impregnable position from which to commit further depredations. The results of its progress are numerous and serious, embracing as they do tubal mischief, ectopic gestation, ovarian disease, cellulitis and peritonitis.

I would, therefore, on no account detract from the importance of the larger operations, but would rather plead for an increase in our valuation of endometritis. That this is just seems evident. Though to us a poorer case than those referred to, to the patient it is an equal evil. Prevented from following out her life work, her existence a death in life, her disease the seed of future peril, we
ought to consider in relieving such a case that our
gain is in proportion to the woman’s, and our
gratification and pleasure thereat ought to be just
as great as that which we experience when we per-
form a major operation with success.

If we determine to treat our case of endomet-
ritis we must adopt that method which holds out the
strongest possibility of a permanent cure.

Notwithstanding the recognised teaching on
this subject, we continually come across instances
of prejudice against the active treatment of such
cases, among members of the profession. They
fear, and half believe the cure of this class of
disease to be hopeless, and are unwilling to adopt
radical measures, partly on this account, and partly
through fear of an untoward termination to the case.
This dread of unsuccessful termination after operat-
ion is, I believe, entirely due to lack of experi-
ce of radical treatment; that belief in the incur-
dibility of endometritis I would put down to refusal
to undertake active interference.
During the course of the winter of 1893-1894 I had the good fortune to gain considerable experience in the treatment of this class of disease while working as Resident under Dr Stirton in the Glasgow Royal Infirmary, and, with his kind permission, I am enabled to adduce reports of a number of cases of endometritis compiled from private notes and extracts from the ward journals of the time.

From observation of these cases, before and after treatment, I have been led to form certain conclusions as to the management of cases of endometritis which are based on practical experience and may therefore not be without some value.

I propose, in the first place, to give extracts from the history, examination, treatment, result, and progress, of these cases on which these opinions are based.

For the purpose of classification I have followed (1) Skutsch of Jena and divided them into two groups according to the symptoms.

1st. Cases of Catarrhal Endometritis.

2nd. Cases of Haemorrhagic Endometritis.

The Catarrhal I have subdivided into,
(a). Those without pelvic mischief, and
(b). Those with some pelvic inflammation in addition.

I would note that, although I have classed all the cases under "endometritis", in many, if not in all, there has been some endometritis present as well.

1st. Cases of Catarrhal Chronic Endometritis.

(a). Without pelvic mischief in addition, (13 cases).

Case (1). Mrs Brown, aged 40, housekeeper, admitted 18th. October 1893, on account of Menorrhagia, general weakness and pains in back. Had "inflammation of the womb" 10 years ago, after birth of third child.

Sexual History. Menstruation always regular till the last three years, when irregularities in type, duration, and quantity commenced. For last 4-5 months she has suffered considerably from menorrhagia and dysmenorrhoea.

Intermenstrual discharge. Copious, thick, white, and without blood.

Pregnancies. Eight, the last a miscarriage a year ago.
Principal Local Functional Disturbances were difficulty in returning the urine and pains in back which are aggravated by the menstrual periods.

General Functions. Weakness and anaemia.

Physical Examination. Pain on pressing over uterus Whitish discharge in vagina. The lips of cervix patulous. Uterus not much enlarged, but sensitive and freely moveable. No other abnormal condition in pelvis. Uterine cavity 2½" long, interior hard. Uterus and cervix were curetted on the 26th. October, 1893, when the endometrium was found to be very hard. Uterus swabbed out after operation with perchloride of iron. She progressed favourably, menstruated quite normally on the 7th November 1893, and was discharged well on the 16th of the same month.


Case (2). Mrs MacGregor, 34, Housekeeper, admitted 4th November 1893, complaining of pain in the right side, back, and right leg. Duration, off and on for ten years. Treated for "displaced womb"
three years ago. **Menstruation**, normal in type, duration, and quantity. Considerable premenstrual dysmenorrhoea and dysmenorrhoea. Small quantity of white **intermenstrual** discharge. Has always been **sterile** though married for 12 years.


Difficulty in getting it in, when successful, found cavity of uterus 3" long, lining membrane hard.

7th. November. Cervical canal dilated by means of silver bougies to No 14 and uterus and cervix were then curetted thoroughly. Interior of uterus hard. The cavity afterwards swabbed out with perchloride of iron. She made a successful recovery and was discharged on the 9th December 1893 feeling much better, having come through a menstrual period without pain.

17th. March 1895. Been twice to ward since. Dr. Stirton reports improvement.
Case (3). Mrs Jupp, aet 36, Housewife, admitted 4th November 1893. Complains of pain in left side and irritating discharge with bad smell. Duration, two years. Treated for this complaint in hospitals in England, but no operation done. Is no better. Has had ulcerated stomach and rheumatic fever. Menstruation. 21 day type, 8 days duration, quantity large, suffers from premenstrual dysmenorrhoea. Intermenstrual discharge. thick, white, bad smell, sometimes blood after walking. Pregnant twice, last child nine years ago; both labours normal. Local functions. Incontinence of urine and frequency of micturition accompanied by pain.

Physical examination; revealed nothing abnormal except in connection with uterus, which was enlarged, heavy, sensitive, and the interior soft. Uterus and cervix were curetted on the 29th November 1893. She made good progress, and on 13th January 1894 was dismissed. There was still some bladder inconvenience but the uterine condition was much improved. 11th February 1895. Very well. No symptoms.
Case (4). Mrs Wright, aged 40. dressmaker, admitted 10th. December 1893, complaining of pain in her back and left side for many (15?) years. She had rheumatic fever 11-12 years ago. Influenza 3 years ago.

Menstruation. Type 28 days, till 11 years ago, when it became more frequent, every 14 or often 10 days. Duration 4-6 days. Quantity large. Discharge is dark coloured, with clots and has bad smell.

Suffers from dysmenorrhoea. Large quantity intermenstrual discharge, yellow in colour. Pregnant four times, last one 15 years ago. 2nd. and 4th. miscarried at 4½ month. Local Functions except pains normal. General Functions weak.


Patient was weak and very much exhausted, so general treatment was tried first to get her strength up. She improved a good deal in general condition and the local disease was operated on on the 26th Decem-
November 1893, when the cervical canal was dilated by silver bougies and the uterus and cervical canal were both thoroughly curetted. She had considerable pain for a day or two after the operation, which finally subsided. She was dismissed on the 17th January 1894, improved, having menstruated with little discomfort. Both local and general conditions improved.

17th March 1895. Not any better since leaving. There was a suspicion of fundal cancer at time of operation but examination of the debris was negative.

Case (5). Mrs Cairns, aged 36, housekeeper, admitted 2nd December 1893. Suffers from pain in left side, back, and thighs, with frequent micturition. Duration, one year. Menstruation 28 day type, lasts 5-6 days. Quantity normal. Suffers from premenstrual dysmenorrhoea. Intermenstrual discharge very large in quantity and greenish. 
Pregnancies 6, all normal. Local functions. Frequency of micturition accompanied with pain; also
constant pelvic pains aggravated by approach of period. These go down both legs. General functions. She is in very bad health. Physical examination. Greenish discharge in vagina. Cervix hard. Uterus enlarged and sensitive though moveable. With the sound, the cervical canal was found to be narrow in calibre and the uterine cavity 3½ inches long. The lining membrane was hard. Uterus and cervix were curetted on 4th January 1894, treatment being delayed by her general condition being so bad. The uterus and cervix were thoroughly cleared out and nothing in the way of local application was used. She was kept in hospital until the 2nd. February 1894 on account of her general condition, and during that time she menstruated without abnormal symptoms. Discharged on above date well.

17th March 1895. Very well. No return of symptoms.

Duration two years. Menstruation, irregular, type 28 days, longer or shorter. Duration 7-10 days, varies. Quantity excessive. Has had premenstrual dysmenorrhoea. *Intermenstrual discharge* varies in quantity, is often much, yellowish in colour and has foetid smell. *Pregnant* 8 times. 2nd, 6th, & 7th miscarried at third month, others normal except the last, two years ago, after which she had "inflammation of the womb" and was in bed for three months.

**Local Functions.** The pains above noted. Frequency of micturition and pain before the act. *General functions.* Unhealthy. **Physical examination.** Lips of cervix are patulous and soft, yellowish discharge coming from uterus, that organ enlarged, sensitive, and moveable with no evidence of any pelvic mischief. Sound gave length as $3\frac{1}{4}$ inches with hard lining to cavity.

Treatment was general, to improve condition, till the 4th Dec. when the uterus and cervix were the *curetted.* Nothing was applied to uterus otherwise. She improved till the 8th Dec. when a slight return of pain in the left leg took place. This was treat-
ed externally by blisters and liniments to iliac region and went away. She menstruated on the 9th January /94. and was quite free from the usual pain. Discharged well on 19th January 1894.

17th March 1895. No return of symptoms and much improved.

Case (7). Mrs Campbell, aged 39, weaver, admitted on the 11th. January 1894, complaining of pain in lower part of abdomen and legs, much aggravated by menstrual period. Duration, one year. Menstruation always regular in type, duration and quantity, but she suffers from continual pain. This is worse just before her periods and during the menstrual flow. No intermenstrual discharge. Pregnant three times. All normal labours; last one 18 months ago. General functions weak, has been failing since onset of this disease. Physical Examination brought to light no abnormality in pelvis except the condition of the uterus, which was enlarged and slightly retroflexed. A pessary was tried
but failed to procure relief, so, on the 10th Feb. 1894, uterus and cervix were curetted without any intrauterine after-application. She was discharged well on the 24th Feb. /94, having menstruated in the interval without return of pain. (Pessary applied).

17th. March 1895. No pains or other symptoms. Feeling much better.

3 inches long and hard lining membrane. On the 27th January the uterus and cervix were curetted. Uterine mucous membrane in places was quite hard and fibrous, one or two small nodules here and there, and in places, patches of ulcerative endometritis. An application of carbolic acid was made to the interior of the uterus by means of a swab. She made a good recovery and having menstruated was discharged well on the 9th February 1894.

17th. March 1895. No improvement since leaving hospital.

Case (9). Mrs Weldon, aged 23, housewife, admitted on 12th February /94. Complains of pain in lower part of abdomen, excessive menstrual flow and frequency of micturition. Duration 3 years.

Menstruation. Type, regular, 28 day. Duration 7 days. Quantity excessive. Premenstrual dysmenorrhoea very severe, even to fainting. Intermenstrual discharge absent. Pregnancies, none. Sterile, though married six years. Local functions. Irrit-
ability of bladder and pain before the act of micturition. Pains in pelvis chiefly towards left side and down left leg. These are very severe at times. **General functions.** Though no evident lesions, are unhealthy. **Physical examination.** Uterus slightly enlarged, tender, and heavy. Some nodules in uterus and cervix revealed by sound. No other lesions outside uterus can be detected. On the 24th. Feb. 1894, uterus and cervix were **curetted.** The mucous membranes were found to be in a state of very chronic and hard inflammation, especially that of the cervix. She made good recovery and was dismissed well on the 9th. March 1894.

**17th. March 1895.** In much the same condition as she was in previous to operation.

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Case 10. Mrs Arms, aged 37, housekeeper, admitted 24th. February 1894, on account of severe pain in pelvis, worse when menstruating, and a yellow discharge from vagina. Duration, since birth of child, three years ago. **Menstruation Type 28 day.**
Duration 3 days. Quantity varies, often too much or too little. Occasionally premenstrual dysmenorrhoea, at other times dysmenorrhoea. Intermenstrual discharge moderate in quantity, yellowish, no bad smell. Pregnancies 7. 1st 16 years ago, 7th 3½ years ago. No miscarriages, all normal labours.

Local functions. Frequency of micturition but no pain. Pains in pelvis which go down both legs.

Physical examination. All normal except uterus, which is large, heavy, slightly retroverted, mobile and sensitive. Sound gives its length 3½ inches with hard endometrium. On the 5th March uterus and cervix were curetted, without dilating cervix. Some difficulty was experienced in clearing the left cornua thoroughly, on account of the toughness of lining membrane. It was not thought advisable to make any intrauterine application. She made a good recovery and was discharged well on the 22nd. March /94. after having menstruated comfortably.

Case (11). Mrs Stenton, aged 23, housewife, admitted 6th March /94. On account of amenorrhoea until three weeks ago. Has been in poor health for four years. Menstruation. Complete amenorrhoea till she was examined three weeks ago, and to-day, since examination, has passed a little again, (examination was with sound on both occasions) which is dark in colour, with clots, very thick no bad smell. There is no other discharge. No pregnancies. Has severe burning pain in pelvic region which comes and goes. General systems. In poor condition. Physical examination. Nothing abnormal except that uterus is small and badly developed. Cervical canal very narrow. The discharge which followed the examination did not continue, so uterus and cervix were curetted the next day (7th March). She commenced to menstruate on the 17th March 1894. Small in quantity and it lasted only two days; but the pain had gone and she was discharged well on the 21st March 1894. 17th March 1895. Has had one child since operation. Reports herself well.
Case (12). Mrs McFarlane, aged 27, housewife.
Admitted on 12th March /94, complaining of pains in pelvis, and left side, and leg, with amenorrhoea.
Duration, six months. Menstruation was regular in every way till she had a child six months ago, she has never menstruated since then. Intermenstrual discharge, white colour and moderate quantity since child born, none before. Pregnancies 3. All easy labours except the last, which was instrumental.
Local functions normal, except as above.
General systems. Crepitations at apices of lungs, and in poor health. Physical examination. Uterus enlarged, sensitive, heavy and hard. Sound gives length of cavity as 4½ inches. It also reveals presence of two rough nodules on posterior wall of cavity, both very hard. Uterus moveable. Curretted on 15th March and all abnormal conditions were thoroughly removed from uterus and cervix which latter it was not found necessary to dilate. Perchloride of iron was applied to the interior on a swab. Her temperature which had been irregular on admission continued so after operation, but she was doing so
well otherwise that no alarm was felt. It reached 101°F. at night and fell to normal in day time.
Menstruated on the 22nd March normally. She was discharged on the 13th April /94. the temperature still irregular due to lung condition, which had, however, improved while in hospital. Uterine condition normal now.
17th March 1895. Much improved.

Case (13). Mrs Finlay, aged 28, housewife. Admitted on 25th March /94. complaining of pains in pelvis and too frequent menstruation. Duration three years, since last childbirth. Menstruation always regular till three years ago when she had a child, after this she altered. every 14 days or so. Duration 4-10 days. Quantity excessive and she suffers considerably from premenstrual dysmenorrhoea. Intermenstrual discharge is present in large quantity white, with bad smell, and occasionally tinged with blood. Pregnancies 4. 1st. was a miscarriage, and after the last one, three years ago, she was confined to bed for three months. General systems. She
is an invalid constitutionally from this disorder.

Physical examination. Uterus enlarged, heavy, not sensitive. Sound gives length 3" inches and shows interior to be hard and gristly. Uterus moveable. No other lesion in neighbouring parts. The uterus and cervical canal were curetted on the 29th March. There was a suspicion of malignancy in this case; but examination of debris was negative. She made good progress and after one normal menstrual period she was discharged well.

1st. Cases of Catarrhal Chronic Endometritis (contd)

(b). With pelvic mischief in addition. (5 cases).

Case (1). Mrs Mooney, aet 30, housewife,
Admitted on the 9th. February /94. complains of bearing down pains in pelvis, worse before periods;
frequency of micturition and weakness. Duration 7 years. Illness came after having a baby.

Menstruation. Type regular. Duration 1-2 days.
Quantity too little. Suffers from premenstrual
dysmenorrhoea. Intermenstrual discharge, very little.
Pregnant, twice. 1st was miscarriage. 2nd one was 7 years ago and had bleedings from vagina two days before it was born. Since then has been sterile.

Local functions. Bladder is irritable and there are pains in pelvis which go down left leg.

Physical examination. Uterus enlarged and heavy, not freely moveable, sensitive and soft. Fullness can be detected lying to left side of it in the broad ligament. By sound cavity is 3½" inches long, inside roomy and soft. On the 14th February all the interior of uterus and cervix was curedtted and
no intrauterine application made to the mucous membrane. She progressed favourably and having menstruated normally, was discharged on the 2nd March 1894 well. Improved in July /94 but still had some symptoms, so was recurretted then.

17th March 1895. Since July has had no symptoms. Is well.

Case (2). Mrs Aitchison, aet 27, housewife. Admitted on 13th February /94. Complains of pain in left side, yellow discharge from vagina, and weakness. Duration 3 years, since birth of child. Menstruation regular in type, duration and quantity. Has slight increase of pain premenstrually. Has a greenish yellow intermenstrual discharge from vagina, moderate in quantity, with no smell. Pregnancies two, last one three years ago, it was a difficult labour and she had chloroform. Was ill for some time afterward. Physical examination. Uterus enlarged, not freely moveable, sensitive, fundas heavy, slight fullness in left broad ligament. Sound gives length
of uterine cavity as 3" inches. Greenish yellow discharge coming from uterus. **Curetted** on 14th Feb. (both cervix and uterus) and no application was made to uterine cavity nor cervix. Good recovery. Dismissed well on 2nd. March /94.


**Case (3).** Mrs Reid, aet 30, housewife,

Admitted 4th. March /94. Complains of pain in left side and leg and too much blood discharged at periods. Duration, two years. Began after child-birth, with shiverings and sickness. **Menstruation** 21 day type. Duration 7 days or longer. Quantity, excessive, suffers from premenstrual dysmenorrhaea. Pain comes and goes while menstruating and frequently continues after she has stopped. **Intermenstrual discharge** excessive, white, with bad smell, no blood. **Pregnancies**, one two years ago, she was in bed for two months after it. **Local functions.** Frequency of micturition accompanied by pain. Pains in pelvis
and legs. Physical examination. Swelling in left iliac region behind Poupart's ligament 1½" by 1½". Uterus is fixed, she suffers pain on trying to move it. Slight retroposition, cervix soft os wide. Uterine cavity large and hollow, and end of sound can turn round in it. Notwithstanding the pelvic condition, it was decided to operate, and the uterus and cervix were curetted on 10th March, and the interior of both was swabbed with perchloride of iron. After operation there were no bad effects and she was discharged much improved, after having menstruated normally on the 21st March 1894.

17th. March 1895. Very well. No return of symptoms. Has had one child since operation.

Case (4). Mrs McVail, aet 21, tobacccopipe worker. Admitted 4th. March /94. Complains of pain in left side and amenorrhoea. Duration 3 months amenorrhoea, one year of pain. Commenced after birth of child with shivering and sickness, with which she was confined to bed for 3 months.
Menstruation. Always regular till child born. Amenorrhoeic till now, since then, but she had a slight discharge to-day. When she did alter, pain used to be severe before the discharge came. No dysmenorrhoea. No other discharge present.
Pregnancies, one, a year ago. Local functions altered. Frequency of micturition with pain. Also pain in pelvis going down to feet. General systems unhealthy, no gross lesions. Physical examination. Uterus not freely moveable, sensitive, pain on left side on moving uterus to right or pressing it up and some infiltration in left broad ligament. She is not pregnant and sound shows uterus to be ½ inch too long. Treatment. She was given general tonics till 23rd. March, when her general condition being improved, uterus and cervix were curetted. 2nd. April /94. No pains. Temperature quite normal. 4th. April. Menstruated to-day. Was kept in ward till 1st May /94 on account of general condition when she was discharged, well, having no local symptoms and the uterine and pelvic conditions were much improved.
17th. March 1895. Died in a medical ward last autumn from other ailments, not in connection with uterus, the condition of which was much improved.
Case (5). Mrs Law, aet 40, housewife.

Admitted 9th March /94, on account of pains in the back and sided and metrorrhagia. She was curedtted 6 months ago, after the delivery of a fleshy mole. She was a little better after this but symptoms became worse. Menstruation was always regular till the fleshy mole was passed, when it became 14-21 day type, lasted 3-4-7-days. Quantity excessive. Pain in back constant. Intermenstrual discharge copious and yellow. Pregnancies 12. 9th. 10th. 11th. & 12th. were abortions about the third month, previous ones normal. Local functions. Frequency of micturition with pain. Also the pains above noted.

Physical examination. Uterus enlarged slightly, heavy, and sensitive. Broad ligaments are involved to some extent. Curretted on 3rd. April. Uterus not so very large but there was patchy endometritis on the sides, particularly so low down near cervix on left side. She made a good recovery, and was dismissed well, after normal menstruation, on the 14th. April /94.

17th. March 1895. She has been very well since operation and had one child.
2nd. Cases of Haemorrhagic Endometritis. (5 cases).

Case (1). Mrs Cowan, aet 44, housekeeper.
Admitted 15th November /93. on account of menorrhagia
and pains in back and pelvis. Duration two years.
Had rheumatic fever 18 months ago. Menstruation
irregular, lasts about ten days. Quantity large and
discharge is dark in colour. Has premenstrual dysmen-
orrhoea and dysmenorrhoea. Intermenstrual discharge
sometimes green, frequently bloody, always excess-
ive. Pregnancies 12. 10 alive. 11th at fifth month,
12th at third month. All labours difficult, two were
instrumental. Physical examination. Uterus enlarged
heavy sensitive, moveable. By sound 3½ inches long,
interior soft and bleeds easily. Curetted 25th Nov.
Interior of uterus was soft and vascular but a hard
nodule was felt up at fundas which was removed with
difficulty. Perchloride of iron was applied after-
wards. 4th December, complained of pain till to-day
but this is now gone. 23rd. December, pessary applied,
as uterus is low down. 30th December, has menstruat-
ed normally; dismissed to-day well.
17th. March 1895. Returned to ward in June 1894. Improved, but still having symptoms. Recuretted then and she has been well since.


Physical examination. Uterus sensitive, movable, enlarged. By sound 3" long and lining membrane hard. Vascular. 24th January, Curetted to-day, and perchloride of iron applied. She made a good recovery and was dismissed well on 9th February /94.

Menstruated normally.

17th March 1895. Reports herself well.
Case 3. Mrs Munro, aet 37, housekeeper.


Case (4). Mrs Love, aet 32, housekeeper.

Admitted 10th March /94 complaining of flooding at periods, which come too frequently, and pains in pelvis since a miscarriage 2 years ago. Since then
type is nearly every fourteen days. Duration 8 days. Quantity excessive, with dark clots. Premenstrual dysmenorrhoea present. Great deal of white and thick intermenstrual discharge, with bad smell.

Pregnancies 9. First four alive, five last premature

Local functions. Micturition is difficult and accompanied by pain. Pains in pelvis going down left leg. Physical examination proves uterus enlarged, heavy, sensitive, and mobile. Sound gives its length as 3½ inches, mucous membrane is vascular. Pelvic organs otherwise normal. Curretted on 14th March and perchloride of iron applied. Discharged on 6th April 1894, well. Menstruated normally while in ward.

17th March 1895. Changed her residence, cannot be found.

Case (5). Mrs Flynn, age 25, winder.

Admitted 20th February /94. Complains of severe pains in pelvis and flooding at periods. Duration pain six weeks. Menstruation 28 day type. Duration 6 days. Quantity always excessive. At last period, a
type is nearly every fourteen days. Duration 8 days. Quantity excessive, with dark clots. Premenstrual dysmenorrhea present. Great deal of white and thick intermenstrual discharge, with bad smell.
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February 1895. No symptoms now. Has had one child since operation.
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<td>Influenza</td>
<td>Anaemia 3% Long, Cardiac weakness, Anaemia.</td>
</tr>
<tr>
<td>October</td>
<td>33</td>
<td>Anaemia, Anaemia, Fatty Lymphadenopathy</td>
<td>3</td>
<td></td>
<td>Well</td>
<td>29% Mort.</td>
<td>Influenza</td>
<td>Anaemia 3% Long, Heart weakness, Anaemia.</td>
</tr>
<tr>
<td>Clinton</td>
<td>29</td>
<td>Anaemia, Anaemia, Fatty Lymphadenopathy</td>
<td>3</td>
<td></td>
<td>Improved</td>
<td>Anaemia</td>
<td>Influenza</td>
<td>Anaemia 3% Long, Heart weakness, Anaemia.</td>
</tr>
<tr>
<td>St. John</td>
<td>51</td>
<td>Anaemia, Anaemia</td>
<td></td>
<td></td>
<td>Improved</td>
<td>Anaemia</td>
<td>Influenza</td>
<td>Anaemia 4% Long, Cardiac weakness, Anaemia.</td>
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<tr>
<td>Finlay</td>
<td>29</td>
<td>Anaemia, Anaemia, Fatty Lymphadenopathy</td>
<td>3</td>
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<td>Improved</td>
<td>Anaemia</td>
<td>Influenza</td>
<td>Anaemia 3% Long, Fatigue, Anaemia.</td>
</tr>
<tr>
<td>Merry</td>
<td>32</td>
<td>Anaemia</td>
<td></td>
<td></td>
<td>Improved</td>
<td>Anaemia</td>
<td>Influenza</td>
<td>Anaemia 3% Long, Fatigue, Anaemia.</td>
</tr>
<tr>
<td>October</td>
<td>33</td>
<td>Anaemia, Anaemia</td>
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<td>Improved</td>
<td>Anaemia</td>
<td>Influenza</td>
<td>Anaemia 3% Long, Fatigue, Anaemia.</td>
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</tbody>
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Remarks, and points of note in the above cases.

In a careful consideration of the above cases, several points must be noted and one or two inferences may be drawn.

1st. We must note:—

(1). In all, the disease, from its severity was entirely preventing, or seriously interfering with the patient's occupation, and confirmed ill-health was ensuing.

(2). In every case temporary relief was experienced for a longer or shorter time.

(3). In no single instance was the operative interference followed by any undesirable symptoms.

(4). In 16 cases out of the 23 an absolute and seemingly permanent cure, in local condition and general health, has been brought about. 1 other case was discharged very well, cannot be found now, no reason to suspect return, if so, would have come back to ward.

(5). 3 Cases much improved a year afterwards.

In a more detailed analysis:—
(6). 3 cases were discharged improved or well after menstruating normally, but symptoms returned a year afterwards. All these were bad cases for treatment.

(7). In 2 cases included in (4) a slight return of symptoms occurred six months afterwards. These were resected, with no return of symptoms 7 months after that. Case (5) in page 28 was one of resecting also.

(8). 13 cases were resected without any local application to the interior of uterus afterwards, except ordinary antisepsics. In 2 of which symptoms returned.

(9). In 9 cases perchloride of iron was used after resecting. All successful.

(10). In 1 case carbolic acid used after resecting, with return of symptoms.

(11). 4 of the 23 cases had children about a year after the operation; in 2 of which the broad ligaments had been involved. 1 had been a haemorrhagic case.

(12). In 12 of the 23 cases the cause was traceable to child-birth; in 3 to abortion; in 8 probably to gonorrhoea. Probably some of the others may have been primarily gonorrhoeal also.
(13). The treatment in all was radical; through curetting of the uterus and cervix with all antiseptic and aseptic precautions previous to, during, and after operation. All were kept in bed for week at least after operation, and remained in ward till the first menstrual period was over. Then sent to convalescent home for a fortnight or more. Constitutional treatment during the whole time of residence in hospital.

2nd. I would like to draw attention to two points in particular, from each of which inferences may be drawn:—

(a). In two cases return of symptoms, in lesser degree, occurred six months after operation. Recuretting these, there was no return 7 months afterwards. This seems to point to the importance of persevering in our treatment. That, if we improve condition by the first curetting, there is ground for doing the operation a second time and expecting a cure.
(b). That five of the above cases had infiltration in one or other broad ligament and, in many others, there was reason to suspect strongly, some inflammatory condition in the pelvis. That these were operated on with perfect success, and no bad results ensued. Since writing the above, (55) Hart has published a paper in which he gives a similar experience.

This is contrary to the usual teaching.

(1) Playfair says, "Slightest concomitant mischief or irritation, recent or old standing, in neighbourhood of uterus is absolute contra-indication".

(3). Bernard Browne says "Contra indications to it (curette) are cellulitis, pain or tenderness over uterus, or pelvic inflammation." (4) Mann says "Contra-indication when the uterus or peri-uterine tissues tender." Many others of the same opinion.

On the other hand (5) Pryor thinks that in curetting we remove the septic focus which is causing the pelvic mischief. Now, if we remove the septic focus we are removing the cause. This is the proper treatment. (55) Hart also holds this view and says that if mischief arise, it is due to septic infection
by the operator, not from stirring up latent inflammation.

That the endometrium is the septic focus is now fast becoming the prevalent opinion. (6) Dr. C. S. Bacon has a dissertation on this subject. He shows (7) Winter thought there were no active microbes in normal uterine cavity. (8) Brandt found bacteria in 22 out of 25 cases of chronic endometritis. (9) Boulangier states that nearly all cases of chronic endometritis are caused by a microbe. (10) Dr. Laplace, from experiments in Koch's laboratory, proves that there are numbers of micro-organisms in the normal uterus. Most of them are known to us, but some are unknown, and dangerous to guinea pigs. He also proved that the inflamed mucous membranes had the same organisms but, in addition, some were in the superficial cells. In chronic endometritis, besides the secretion having them, the fibrous tissue was hypertrophied as result of their development. (11) Jones gives as causes of the inflammatory process:— (1) Puerperal septic processes by pyogenes and saprophytes; chronic muco purulent discharge by streptococcus and staphylococcus; traumatic inflamm-
ation after wounds and laceration in cervix.


With the above evidence before us we are led to believe that the inflammation of the uterine mucous membrane is caused in nearly all, if not in every case, by organisms from without which arrive there through the vagina. That the pelvic mischief in all cases is due to the spread there-from.

Our point of attack, therefore, even where pelvic mischief is present, should be the endometrium, the cause. In curing this we also prevent the spread of outlying inflammation depending on it. Of course we would not attack indiscriminately every case of endometritis complicated with pelvic mischief, but, selecting those in which the mischief is not severe, the cases above show we may hope for success. This is (55) Hart's opinion also.

Having considered those two points and adduced our conclusions therefrom, the question now arises, how can we best attack the seat of the disease, the endometrium? The diversity of opinion on this is amazing and the amount of literature is enormous. This is because the nature of the disease was not
understood.

If we only regard the diseased uterus as a sinus or discharging abscess, we shall simplify matters much and be pretty near the truth. The indications for treatment will be:—Antiseptics, free opening, thorough evacuation and free drainage. This view is held by (6)Bacon, (12)Waldo, (1)Skutsch, (13)Polk, and (14)Madden. It will probably be more convenient for all parties concerned that chloroform be administered, as it was in all the above cases, unless contra-indicated. (15)Hart and Barbour recommend not, unless the woman is nervous. Latterly (55)Hart advises chloroform. To carry out the treatment properly we must be rigidly aseptic and antiseptic. In all the above cases the vagina was thoroughly douchéd out the day before and morning of the operation. Carbolic acid 1 part in 40 parts water, or corrosive sublimate 1 in 2000 parts water will be found best. (55)Hart shaves the vulva. Patient in dorsal or semi-prone position. Cervix exposed by Sims speculum and uterus pulled down and steadied by vulsellum catching the anterior lip of the
cervix. All instruments and operators' hands to be rendered thoroughly aseptic by antiseptics.

In all cases, now in attacking a septic surface, it is well, and I would lay stress on this point, to cleanse it thoroughly with an antiseptic before operating. Much has been written by (16) Playfair, (17) Barnes, (18) Goodell and others of the dangers of intra-urine injections or irrigations. I find that, granted a free outlet and proper caution, nothing need be feared. This method is advocated by (6) Bacon, (19) Lewers, (9) Boulangier, (1) Skutsch and (12) Waldo. The two latter use a 2% Carbolic or 1 in 5000 Corrosive intrauterine douche. (55) Hart uses corrosive sublimate (1 in 4000.) (14) More Madden prefers irrigation to injection. The colic which has supervened in some cases, (6) Bacon attributes to flakes of tissue lying in uterus from lack of a proper exit. (20) Philips prefers a flushing curette.

To use the intrauterine irrigation, the cervical canal must be quite patent. Dilatation seems to have been the original and entire treatment. (14) Philip Barrow in 1539 recommends the putting "of a dry
sponge which hath a cord hanged to it into the
straight place with the intent to make it wider ---
---Must have many and sundry dry sponges ready -----
lest the mouth of the womb do gather again together"
In some multiparae it is not necessary to dilate, but
in many of them, and in all noniparae it will have
to be done. Many methods have been recommended.

(21)Jones makes lateral incisions on the cervix.
(22)Atthill, (23)Hunde, and (13)Polk (in haemorrhagic
cases), slit the anterior, posterior and lateral lips
\frac{1}{2} inch deep up to internal os. (1)Skutsch dilates the
uterus and cervix with iodoform gauze and a packer.
(14)More Madden uses Hegar's or Godson's dilators,
Barne's bags in multiparae, and laminaria bougies for
12-24 hours, washing out the vagina and uterine cavi-
ty with antiseptics afterwards. The sponge, sea tan-
gle, and tupelo tents he considers unreliable.
(24)Playfair prepares uterus and cervix by using a
tampon of glycerine and cotton wool for some days
previously. He does not believe in dilatation by
other means. (55)Hart uses Hegar's dilators. All
cases above mentioned were dilated, when necessary,
with French three legged expanding dilators or silver bougies. The cervical canal being quite patent, we have to consider the next step.

For long this consisted in applying some intrauterine medicament as injection, ointment, solid, or by swab.

The cautery has been employed by some, (25) Stryk still upholds its use against Schradder, on the ground of its being aseptic. (14 & 26) More Madden condemns it as being unmanageable and hazardous. He has tried every form of cautery and has given them all up. (27) Galabin says a point in its favour is that the cervix does not require to be dilated; but is not this essential to the proper treatment of endometritis, to give exit to the discharges?

In 1880 (28) Hermann published a paper in which he stated that Recamier, Routh, Olshausen, and Bishoff were in favour of curetting, but he himself thought that measure too rough, and that we were more certain of reaching all the diseased parts by nitric acid. In 1884 (29) Byers started a discussion in which he, Reid, Smyly, Kidd, and Godson declared in favour of curetting. (30) Atthill treated most cases
with drugs but curetted in haemorrhagic cases, in chronic endometritis with large uterus, and in epithelioma. In 1892 (31) he retracted what he had said previously of curetting and declared in its favour. At the present day most specialists use the curette. (32)Galabin and Philips say "use it if medication fails". (33)Skene considers it as the "safest operation in Gynaecology". (34)Thomas says in place of intrauterine medicament he would use the curette. It does a greater amount of good with less risk". (35)Hart is strongly in favour of it.

(6)Bacon, (1)Skutsch, (5)Pryor, (9)Boulangier, and numerous others have used it with success. The above 23 cases are illustrations of its safety. Why then the objection to it from among the general Profession? Possibly fear, from lack of experience of it. But, granted the local disease, it is most speedily, most thoroughly, and in the safest manner, cleared away by the curette.

Are we to apply some substance locally, after curetting, or no? (35)Barnes and (3)Bernard Browne thought it unnecessary, but, by most gynaecologists
and in most of the text books, some intrauterine application, afterwards, is recommended. In the above list of cases there was practically no application used. Perchloride of iron was applied in 9 cases. Carbolic acid was used in one case which ended unsuccessfully. In all, however, the treatment was antiseptic. It thus seems likely, that curetting, combined with strict antiseptic douching before and afterwards, may suffice. We remove the exciting cause which weakens the tissue resistance and ensure the defeat of the remaining causes of disease by the rallying tissues. Our treatment of all and sundry discharging sores, sinuses, and suppurating cavities does not consist, as a rule, in applying strong caustics, corrosives, and irritants to the diseased part, but in the free use of comparatively mild antiseptics, and by establishing free drainage. Still, these intra-uterine medicaments are strongly advocated by many. (36) Dr. Grey, in a letter, quoting a quaintly worded article, shows that sulphuric acid was used as early as 1653. (22) Atthill recommends carbolic acid and nitric acid; again nitric and carbolic
acids and iodised phenol; (30) again he states he used carboxylic acid in 70% cases, iodised phenol in 15%, and nitric acid in 3%, and rather demurs to nitrate of silver, which has, however, the advantage of requiring only one application. He speaks highly of iodised phenol in haemorrhagic cases; (31) again recommends nitric acid some days after curetting, and speaks well of iodised phenol injections. (38) Battey speaks strongly of iodised phenol and gives a list of 18 benefits to be derived from its use, which would almost make a woman wish to have the disease in order that she might experience the cure. (39) Tilt recommended nitrate of silver, but expressed a desire for a less dangerous substance. (40) Barnes believed in nitric acid. (24) Playfair does not believe in solids, he uses what is practically iodised phenol; again (45) carboxylic acid. (28) Hermann holds up nitric acid. (4) More Madden says nitric acid is efficacious, nitrate silver bad, and carboxylic acid or iodised phenol the most useful; and (42) again iodised phenol and after that a tampon of saturated solution of tannic acid in rectified turpentine.
(29) Byers and (19) Lewers for nearly all cases use carbolic acid, iodised phenol, and iodine; for more severe cases nitric acid. (29) W. L. Reid likes iodised phenol and carbolic acid. (29) Smyly preferred iodised phenol. (29) Godson liked nitric acid. (43) Bell found iodised phenol useful. (44) Braithwaite says chloride zinc good in intractable menorrhagia after removal of ovaries and tubes, and in delayed menopause with metrorrhagia. He gives two cases in which uterus became occluded afterwards, and suggests its use only when this result is desired. (21) Jones says that nitric acid is by far the most efficient. He thinks that ichthyol is overrated, but chromic acid good. (45) Galabin recommends carbolic acid, iodised phenol, strong tincture of iron, and nitric acid in severe cases. (46) Philip says carbolic acid, or linament of iodine. (23) Munde believes in nitric acid. He gives times of separation of sloughs, viz:— nitric acid 5-7 days, Iodised phenol 3-4 days, carbolic acid 3-4 days, tinct. iodine 2 days. (47) says carbolic acid in metrorrhagia may increase the haemorrhagia. (48) Stratz has an article on chloride
of zinc and shows from experiments that it has a superficial effect but stimulates the deep tissues to growth and protects glandular tissue. (18) Goodell recommends (1) Iodised chloral phenol, (2) Carbolic acid once a week. (3) Nitrate of silver 3j to Glycerine 7j, (4) Alcoholic tinct. iodine. (5) Fuming nitric acid. (55) Hart uses carbolic acid.

On the other hand, the cause of antiseptic irrigation is taken up by (49) More Madden, who, in 1893, declares that swabbing is an antiquated method and recommends intra-uterine irrigation with hot water. (33) Skene likewise thinks swabbing is very unsatisfactory. (50) Galliard Thomas has become sceptical as to its (intra-uterine medication) utility, as (1) it generally fails to cure the disease, (2) is by no means void of danger. "I have given up their general use". (6) Bacon, (1) Skutsch, (12) Waldo and (9) Boulanger all advocate the intrauterine antiseptic douche from scientific principle as well as from practical experience of its utility.

The choice seems to lie therefore between intrauterine irrigation or injection and the swabbing out of the uterus with iodised phenol, nitric acid,
or carbolic acid. Good results have evidently been obtained from both methods, but irrigation seems the tend to more scientific of the two, the above 23 cases show that intrauterine medication can be done without. We may however employ both.

Drainage has been insisted on by (6) Bacon, who following (51) Gersung and (52) Chrobak, recommends wicking in preference to any other method and at the same time he urges the necessity of having an antiseptic tampon in the vagina to prevent the updrain of organisms. In any case, after curetting, it is advisable to have a tampon of vaseline and iodoform lint in the vagina. This to be renewed night and morning, at the same time douching the vagina with 1-40 carbolic or 1-2000 corrosive lotion.

After treatment should secure the patient rest in bed for a week, and residence in the ward or house till after the next menstrual epoch.

(53) Keiffer recommends a pessary in (1) Endometritis with prolapse, (2) Endometritis without pelvic adhesions, (3) Subinvolution, (4) After curetting, especially after abortion. (54) Galabin also ad-
vises its use. This was tried in cases 7 (page 14) and 1 (page 29) successfully, (after curetting).

(55) Hart recommends use of intrauterine astringents at least on 3rd. and 10th. day after operation.

The value of constitutional treatment all the time the patient is under our care need not be urged. Its importance and nature has been fully treated of by nearly all the writers on this subject and it is beyond the sphere of this article.

In conclusion, therefore, from consideration of the above cases and the experience of others I would urge:-

1st. That the importance of endometritis should not be minimised, and that its radical treatment should be undertaken at as early a stage as possible.

2nd. That we need not fear bad results if our methods are thoroughly aseptic and if the operation is performed with all care.

3rd. That, in both catarrhal and haemorrhagic types, the radical treatment holds out the best chance of a permanent cure.
4th. That an improvement after one curettage, may, after a second operation become a cure.

5th. That many cases in which there is some concomitant pelvic inflammation may be operated on with success.

6th. That the best results will follow an operation in which the parts are first rendered as aseptic as possible. The cervical canal then dilated if necessary. The uterus doused out with carbolic lotion 2%, or corrosive sublimate lotion 1 in 5000. The uterus and cervical canal thoroughly curetted and doused afterwards. If thought necessary, iodised phenol, nitric acid, carbolic acid or chloride of zinc may be applied to the interior of uterus. A free drain maintained from uterus to vagina by aseptic wicking or by keeping cervical canal dilated. Astringent applications to interior of uterus every 3 or 4 days after operation. An antiseptic tampon in vagina, to be renewed night and morning, the vagina at the same time to be doused out with an antiseptic. Patient to be kept in bed for a week, and in the house till after next menstrual period, and
to undergo proper constitutional treatment all the time she is under our supervision.
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