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Presented by

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THE USE OF THE CURETTE IN THE PRACTICE OF OBSTETRICS.

The importance of the subject of midwifery from a practical point of view grows greater and greater the more one has to do with it. Even where the conditions are absolutely normal it is none the less important for the Medical Attendant to possess a thorough, accurate and practical knowledge of the subject; A want of the practical knowledge often leads to complications which under ordinary circumstances should never arise.

If, therefore, knowledge of the normal is so essential, it stands to reason that knowledge of the abnormal is equally if not still more so.

It is the treatment of two abnormal conditions which I propose to discuss in this paper.-

- e. g. { i. INCOMPLETE ABORTION.
 { ii. FULL TERM DELIVERY COMPLICATED BY THE
 RETENTION OF SOME PORTION OR PORTIONS
 OF THE SECUNDINES.

1. By the term abortion I mean delivery occurring at any time from conception to the period at which the child is viable. This is I believe the generally --



accepted definition of the term.

The method of treating the condition, as recommended by the various authorities, varies somewhat.

During a period of six months - December 1st 1898 to May 31st 1899 - when I held the post of Extern -- Maternity Assistant at the Rotunda Hospital, Dublin, I was afforded ample opportunity for studying practically these various methods and directed my attention especially to the treatment of these cases by curettage.

I wish to point out at once that in no case of - abortion or of retained placenta or membranes do I suggest that a sharp curette should be used, but always the blunt instrument.

. Nor do I suggest that curettage should be adopted as the routine treatment - I wish merely to draw attention to the cases which came under my care and were subjected to this treatment, to mention the facts with regard to these cases and to bring forward the advantages - as they appear to me at present - of the operation as compared with the other methods of treatment.

THE following were thirty seven consecutive cases curetted by me for incomplete abortion and the notes I kept of them:-

NAME.	AGE.	No of PREGNANCY.	PERIOD OF PREGNANCY.	CAUSE.	TREATMENT.	RESULT.
1. M.McD.	32	5	4 months	Endometritis	C. I. E.	Temp.N.up 10th day
2.E.C.	?	3, all abortions at 3rd. month	3 "	Ut. Retrov.	C.I.Ut.Replaced Pessary Introd.	T.N. up 8th day
3. M.M.	24	3, all abortions	6 "	Syphilis	C. I. E.	T.N. up 10th day
4. R.G.	?	3	4 "	Ut Retrov.	C.I.E. Ut replaced	T.N. up 15th day
5. M.K.	36	8	5 "	Ill-treatment	C. I. E.	T.N. up 12th day
6. K.T.	29	14, 10 abortions	5 - 6 wks.	Excessive Parturition.	C. I. E.	T.N. up 10th day
7. N.S.	36	14, 1st. abortion	3 months	Ut Retrof.	C.I.E. Ut replaced Pessary.	T.N. up 8th day
8. M.R.	31	6, 4th. abortion	5 "	Venereal	C. I. E.	T.N. up 4th day
9. K.McD.	30	7	3 "	Ill-treatment	C. I.	Temp. rose to 102 on 3rd day but was N on 4th and continued so up on 8th day, when patient got up.
10. J.P.	36	3rd. all abortions.	3 "	Ut Retrof.	C.I. Ut replaced Pessary.	T.N. up 4th day
11. A.A.	28	7	3 "	Endometritis	C. I. E.	T.N. up 8th day
12.E.McG.	?	4	5 "	Drink	C. I. E.	T.N. up 4th day
13. E.C.	30	6. 4th. abortion	4 "	Drink	C. I. E.	T.N. up 3rd day
14. A.C.	32	6. 2nd abortion	3 "	Ut Retrov.	C.I.Ut replaced	T.N. up 8th day
15. E.K.	28	4	4 "	Ut Retrov.	C.I. Ut replaced	T.N. up 6th day
16. A.R.	32	3	3 "	Endometritis	C. I. E.	T.N. up 10th day
17. M.McC.	22	3	3 "	Ut Retrov.	C.I.E. Ut replaced	T.N.up 6th day
18. E,D.	42	5	2 "	Ut Retrov.	C.I.Ut replaced Pessary.	T.N. up 5th day
19. J.C.	26	3	3 "	Ut.Retrov.Endom	C.I.E.Ut replaced Pessary	T.N. up 4th day

20.A.M.	38	1	4 months	Syphilis	C. I. E.	T.N. up 10th day
21. K.S.	28	4, all abortions	5 "	Syphilis	C. I. E.	T.N. up 10th day
22. E.W.	25	1st	3 "	Endometritis	C. I. E.	T.N. up 10th day
23. M.A.	44	2	3-4 "	Ut Retrov.	C.I.Ut replaced Pessary	T,N, up 8th day
24. E.W.	20	1	3 "	Endometritis	C. I. E.	T.N. up 10th day
25. E.F.	28	4	2-3 "	Ut Retrov.	C.I. Ut replaced	T.N. up 5th day
26. B.M.	30	?	4-5 "	Syphilis	C. I. E.	T.N. up 4th day
27. R.F.	28	3	2 "	?	C. I. E.	T.N. up 4th day
28. B.C.	26	3	3-4 "	Endometritis	C. I.	T.N. up 5th day
29.E.McL.	34	6	4 "	Ill-treatment	C. I. E.	T.N. up 6th day
30. E.K.	38	5	2-3 "	Ut Retrof.	C.I.Ut replaced Pessary	T,N. up 8th day
31. H.W.	31	3	3 "	Endometritis	C, I.	T.N. up 6th day
32. M.K.	21	1	2 "	Induced by patient	C. I. E.	Up next day
33.E.McM.	36	4	4-5 "	Accident	C. I.	T.N. up 15th day
34. M.C.	28	2	2-3 "	Ut Retrov.	C.I.Ut replaced Pessary.	T.N. up 8th day
35. J.R.	42	?	3 "	Endometritis	C. I.	T.N. up 5th day
36. B.F.	34	6	2-3 "	Drink	C. I.	T.N. up 4th day
37. B.G.	34	11	5 "	Phthisis	C. I. E.	Death on 4th day

C = Cured Uterus - l = Uterus douched - E = Ergot given, usually one or two drachms of the liquid extract.

T. N. = Temperature normal throughout convalescence.

NOTES .

Case 2 curetted in January 1899. She came to hospital end of August - during which month I was acting as Assistant Master - to know how far advanced in pregnancy she was, having menstruated only once since the curetting was done. On examination I found the pessary still in position and the uterus enlarged to the size of a 4 months' pregnancy and in good position. The pessary I removed. I saw her 2 months later and she was quite comfortable.

In cases 8,12,16,21,26,30,36, I found the ovum lying in the cervix and easily expressed it bimanually. In addition to this however I curetted and douched the uterus. Some small fragments came away

Case 21. This was a case of marked syphilis. The patient was quite aware that such was the case but refused any anti-syphilitic treatment.

Case 37. This the only case in which there was a rise of temperature after curetting, - was far advanced in phthisis when the abortion occurred. Two days before aborting she had a severe attack of Haemoptysis. Before curetting her, which I was compelled much against my will to do by the severity of the haemorrhage and the marked adhesion of the placenta - her temperature was 103° F. - The haemorrhage was quite controlled by the hot douche, but her condition was hopeless.

It will perhaps be correct that I should here describe the method of procedure.

In no case is an Anaesthetic necessary.

Having diagnosed the case to be one of incomplete Abortion, I tell the patient that there is something there which should come away, the removal of which I can promise her will put an end to the pain and haemorrhage. The latter was in the majority of cases I found, the more alarming symptom to the patient. It is also the one which in adopting this method of treatment one can more easily control.

The patient's consent to do what is thought necessary having been obtained: then prepare an antiseptic douche solution at a temperature of about 100° F. The Antiseptic I used in all these cases was Creolin - the strength of the solution being one tablespoonful of Creolin to a gallon of water. I may mention here that the Creolin should first be thoroughly mixed with a small quantity of cold water and then the hot added, for if the Creolin and hot water are mixed directly a uniform solution is not got, but, instead, one with innumerable globules of pure Creolin floating on the surface. The Douche tube which I used was a Syphon rubber tube, about 5 or 6 feet long.

Having got the solution ready and the Syphon action of the tube working - the instruments are then

got ready. In all cases these must be got ready either in another room from that in which the patient lies, or, if this is not possible, their preparation must be attended with as little evidence of their presence as possible.

The instruments necessary - supposing the Os to be dilated - are:- A Catheter, a Volsellum, a blunt flushing Curette - the one I use being the Rheinstadter's flushing Curette - a Uterine Douche tube - the one I use being the Bozeman's Uterine Douche tube -, and if there be any displacement of the uterus, a Pessary.

These instruments, which are sterilized previous to going out to the case, are placed in a plain solution of boiling water, or a weak solution ^{of Lysol} in hot water.

The hands are then scrubbed, special attention being given to the nails, and then soaked in a solution of Perchloride of Mercury - 1 in 2000 - for a few minutes. The patient is then placed in the "Cross Bed" position, with her hips slightly over the edge of the bed and her feet one on either of my knees as I sit facing her. Under her hips is placed a water-proof sheeting, with a large portion hanging down into a receptacle placed on the ground.

The external genitals and surroundings are then thoroughly washed with soap and the Antiseptic solution.

The Catheter is then passed and the Bladder emptied. The washing and cleansing of the Vagina is next in the same manner carefully done - a glass vaginal nozzle being attached to the tube for this purpose. Special attention is paid to the cleansing of the fornices.

The anterior lip of the cervix is then seized with the Volsellum, and the Uterus drawn down and steadied. The Volsellum is held by an assistant - the only ^{assistant} ~~one~~ ~~that is~~ necessary for the operation.

The glass nozzle is then replaced on the tube by the blunt flushing Curette. With this instrument the walls of the Uterus are carefully scraped. It will be found of great assistance to always start the curetting from the same place, e.g. starting with the anterior wall, and working round, or any other selected spot. The advantage is that there is no danger of leaving any portion of the interior of the Uterus untouched so long as it is done in this methodical manner.

Having scraped the walls - which I always did by drawing the Curette from the Fundus to the cervix - and the Fundus, the Curette is then removed from the tube. The test of when the scraping has been sufficient is a rough grating feeling communicated to the hand by the Curette scraping the muscular fibres of the Uterus. The Bozeman is then attached to the

tube, and at the same time the temperature of the solution is raised to about 110° to 115° F. by the addition of boiling water. The Bozeman is passed into the Uterus and the solution allowed to flow freely until the returning stream is quite unstained by blood.

During the douching I found it gave the patient great comfort if two fingers of the left hand were placed into the Vagina, and the posterior vaginal wall and fourchette pressed on. By adopting this device the hot water is prevented from running over and scalding the woman at this position.

The haemorrhage from the Uterus having completely ceased, which in the majority of cases it does soon after the douching is commenced, the Bozeman is withdrawn. If there is any displacement of the Uterus, this is remedied, and a Pessary put in to retain it in its proper position. In every case the replacing of the Uterus is to be done bi-manually - the sound never being used. When the Uterus is bound down by adhesions, Chloroform should be given, and these broken down - then the Uterus replaced and a Pessary introduced. I have done this in private practice, but in treating the cases I have quoted, the patients were advised - if there were adhesions present - to come into Hospital in two or three weeks, and then the adhesions were broken down under Chloro-

-form. The Volsellum is then taken off and the patient turned back into bed.

The after-treatment consists in keeping the patient in bed for at least ten days. The diet for the first three days should be chiefly Milk or Milk food. From the third day on the diet is gradually extended until she has returned to her normal every day diet, and this she should be having by the eighth day. An aperient is given on the evening of the second day, and from then on the regular daily action of the bowels is carefully to be attended to.

The temperature and pulse are to be taken night and morning for the first three days, then on the fifth, eighth, twelfth and fifteenth days.

During the next period she should lie in bed.

It will be observed that a great many of the patients in my list of cases were out of bed and about before the tenth day. This is due to the fact that they are most of them of the very poorest class and couldn't - and in many cases wouldn't - lie in bed for the length of time mentioned.

The speculum was not found necessary at all for, with the Uterus drawn down and steadied by the Volsellum, it is quite easy to guide the Curette or the Douche tube into the cervix with the fore or middle finger of the left hand.

The "Cross Bed" position is undoubtedly the most convenient, and with the patient in that position

the Assistant is of most use, and least in the way. In Ireland I never had a patient who objected to the "Cross Bed" position, but have had some in England and also in Scotland who objected. In these cases the Left Latero Prone position of Sims was adopted. In this position the Speculum, though not absolutely necessary, is of some assistance.

It will be noted that in seven cases I curetted the Uterus after Bi-manual expression of the ovum. In none of these did I feel quite satisfied that the Uterus was empty. The Curette was passed into the Uterus, its walls gone over and a good douche then given.

Possibly the curetting was not really necessary but as I was endeavoring to discover wherein lay the objection to the Curette, I used it even in these cases. Nor have I had any reason to regret having done so. Further in those cases where Endometritis was present - and I feel sure this is present in a very large proportion of women who abort - the curetting by scraping away the diseased or congested Endometrium must of necessity prove beneficial. Of these cases I mention, 21 come under the heads Endometritis and displacement of the Uterus. From those suffering from displacement of the Uterus I got in nearly every case a history of Endometritis. We may therefore regard all the 21 as cases of Endometritis.

Of these 21 - with the exception of one case - all were cured of their Endometritis, or at all events of the symptoms. This case was subsequently treated in the Gynecological Wards. The persistence of the Endometritis was most probably due to the fact that I did not introduce a Pessary after replacing the Uterus.

The ergot which at first I gave to every case was not always necessary. Latterly I gave it only to those cases in whom the Uterus did not contract satisfactorily under the stimulus of the douche. In a very small percentage of cases the cervix is found on examination to be closed. This closure is usually present at the external Os. Dilators should be used Hegar's Graduated Dilators being the safest, and the case treated in the manner already described.

To sum up shortly the treatment, the steps are as follows:-

- (1) Gain patients consent
- (2) Prepare douche (100° F) and instruments -
Cleanse hands.
- (3) Put patient in "Cross Bed" position.
- (4) Thoroughly cleanse external genitals, surroundings and Vagina with soap and douche solution.
- (5) Methodically curette walls and fundus of Uterus.

- (6) Douche Uterus thoroughly - temperature of solution being raised to 110° - 115° .F.
- (7) Remedy displacement - if any - and introduce pessary to keep Uterus in proper position
- (8) Keep patient in bed for ten days.
- (9) Pay strict attention to daily action of bowels after second day.

The diagnosis of the condition is attended with no great difficulty - Of the symptoms rythmycal pain and haemorrhage are the chief - the haemorrhage being sometimes copious and alarming - Pregnancy in the majority of cases has advanced to about the third month. On P.V. examination the ovum may be found lying loosely in a dilated cervix or thro' a dilated cervix the ovum may be felt lying in the uterine cavity. On the other hand there may be a closure of the external Os and a dilatation of the internal Os. The cervix in such cases has a soft boggy feel and is cone shaped - the apex of the cone being directed towards the vagina. In some few cases the cervix may be quite closed and nothing can be made out by P.V. examination beyond the enlargement of the Uterus and the pregnant condition of the cervix. In these cases the rythmycal pain and haemorrhage - both persisting - may be taken as sufficient evidence

The ovum may have come away leaving the Secundines

behind. In these cases the haemorrhage may be the only symptom.

With regard to the various methods of treatment recommended I regret that I am restricted to those expressed in the English language.

LUSK, page 319, says:-

"If when the patient is first seen by
"the Physician the cervix is not suf-
"ficiently dilated to allow the finger
"to pass without force the vaginal
"tampon should be employed".

Page 320 he says:-

"I prefer therefore after 24 hours of
"vaginal tamponing to resort to sponge
"tents".

Now to the General Practitioner surely it is safer, easier and more expeditious to dilate the cervix and curette the Uterus in the first instance. The introduction of the vaginal tampon, as Lusk points out on page 320, should be carefully done, most strict attention being paid to the thoroughly aseptic or antiseptic condition of the vagina and plugs. The method of their introduction too must be carefully attended to. The majority of men will find it considerably easier to keep a few instruments clean than prepare a proper plug and introduce it properly. The sponge tent too is a source of

danger to the woman if not thoroughly aseptic.

The dangers attendant on curetting the Uterus are practically nil. If a man is incapable of introducing a Curette - a blunt instrument - into the Uterus without driving it through the walls - or is so devoid of tactile sensation that he cannot tell when the instrument has reached the muscular walls and therefore avoid in this way perforating the Uterus, he may safely be left out of consideration and regarded as unfit to perform the simplest operation. From such men it is that the dangers of curetting arise, and from such men dangers of any methods will arise, for they will carry with them the same ignorance or carelessness whatever treatment they adopt.

In speaking of the extraction of the ovum he says, on page 318:-

"Where the Uterus can not be pressed down
"within reach of the index finger by force
"exerted above the Symphesis Pubis it is
"permissible to introduce the hand into the
"vagina; but in such a case the fingers are
"apt to become cramped, and all freedom of
"manipulation destroyed. A better means of
"overcoming the difficulty consists in the
"administration of an anaesthetic."

Contrast this with the use of the Curette. In this method the woman is subjected to no end of pain

and inconvenience and at the end of it may have to be put under an anaesthetic before anything can be done. With the Curette there is practically no pain, an anaesthetic is unnecessary and the operation is far simpler in every respect.

Further, it is a recognised fact that the proper cleansing of the hands is by no means easy, and even with the greatest care they may be the means of introducing sepsis. The instruments used in the curetting are all of them, if not cleaned before going to the case quite easily rendered perfectly sterile by boiling, and this can be done in any house where the patient is.

PARVIN says, p.469:-

"A delay of several hours or even several days may occur in the expulsion of the foetal appendages and during this retention the patient is liable to attacks of haemorrhage, or she may have a bloody or purulent discharge".

In the face of the fact that the leaving of the appendages in the Uterus may produce a purulent discharge he strongly condemns any interference being made to remove them. Surely the purulent discharge is an indication of the presence of decomposition in the Uterus and a distinct indication for the removal of the decomposing fragments in order to avoid the

woman becoming septic. The chief dangers he says (p.469) are "Haemorrhage and Septicemia". Then how does he reconcile the existence of a purulent discharge with his advice that no interference digital or instrumental should be made? On page 474 he modifies this by saying that when the discharge is offensive delay is dangerous, and "in these cases gradual dilatation of the os may be effected by tupelo tents" or a rapid dilatation by Hegar's hard rubber dilators and then the retained portions are removed by the fingers. It would appear that the line of treatment he recommends is to tampon the vagina and if this does not succeed tampon again and then if the ovum is not lying on the tampon to practice expression. Any portions that may be left behind after the expression are to be left to become septic if so inclined. When they do become septic then the cervix is to be dilated and their removal is to be effected with the fingers. Surely the whole course of the treatment would be ever so much simpler if in the first instance the Uterus was thoroughly cleaned out and all chance of subsequent sepsis thus entirely removed.

The indications are two, "Stop the bleeding and "empty the Uterus" (p.471). The tampon stops the bleeding, but its power of emptying the Uterus is uncertain. Even when the ovum does come away the

membranes or portions of them, or the placenta or portions of this, may remain behind in the Uterus, and act as a foreign body keeping up the haemorrhage and possibly the pain and rendering the woman in danger of becoming septic.

On page 475 he quotes a contribution of Prof. Schauta of Vienna, who says:-

"In these cases to which the Practitioner
"is first called, when the Uterus has less-
"ened in size, the neck not dilated, and
"the haemorrhage continues there are frag-
"ments of the membranes retained, and dilata-
"tion is necessary, preferably with Hegar's
"dilators; let the finger be used after this
"dilatation to remove the retained fragments
"and if not thus succeeding, then the Curette
"guiding the instrument by the finger and
"using it only upon those parts where there
"are such adherent fragments; he condemns
"blind general curetting of the Endometrium"

With this treatment he is in perfect accord.

Holding the opinion I do, however, that in -
practically all cases of abortion there is present
Endometritis, to a greater or lesser degree, I en-
tirely disagree with the suggestion that the Curette
should only be used on the parts where there are ad-
herent fragments. Not the "blind" but the

"methodical" curetting of the entire inner surface of the Uterus is productive of undoubtedly good results. If the Curette is used I consider that in failing to scrape the entire inner surface of the Uterus, the subsequent benefit of the operation is greatly minimised.

On the same page he quotes Winckel, who says:-

"I maintain that if in an abortion or immature labour, fragments of foetal membranes or placenta have remained behind, we are justified and obliged to proceed to operative interference only when there are severe haemorrhages from the Uterus, or fear of sloughing occurs".

This is surely extraordinary advice. It is granted that the woman is in danger of haemorrhage, fever, or sloughing, and yet the advice is to do nothing till these arise; to refrain from rendering it impossible as far as one can for these complications to arise.

PLAYFAIR says, p.296:-

"If ovum not sufficiently separated or os undilated here plugging the vagina finds its most useful application".

Here surely the dilatation of the os and the clearing out of the uterine contents would greatly facilitate matters.

"If (the ovum) out of reach, and yet appear
"detached, Chloroform should be administered,
"the whole hand introduced into the Vagina and
"fingers into the Uterine cavity."

As I mentioned before, why not use the Curette
which necessitates no Chloroform, is safer and
easier?

He deprecates any attempts at "forcible removal"
of placenta, and advises plugging or a sponge tent
for the control of the haemorrhage, and goes on to
say:-

"Under such circumstances foetor and decomposi-
of the Secundines
tion may be prevented by intra uterine injec-
tions of diluted Condy's fluid."

Under "forcible removal" curetting I presume is in-
cluded. Far be it from my intention to question
this classification of curettage for incomplete abor-
tion, but I must emphatically state that the experi-
ence I have gained so far distinctly leads me to
exclude curettage, under these circumstances, from
methods forcible. It is just this very element -
force - which destroys the whole operation with the
Curette and renders it distinctly dangerous. The re-
moval of an adherent placenta with the Curette needs
no force and has the advantage of rendering the -
chances of "foetor and decomposition" extremely tri-
vial.

LEISHMAN recommends plugging and to his method of treatment I offer the same arguments as I have already stated.

Turning now to the "British Medical Journal" and "The Lancet":-

In the B. M. J. of 1893, Vol.1, p.357 - R. Pollok, M.B., Pres. Glasgow Obstetric and Gynecological Society, recommends dilatation and curetting After douching he recommends mopping out the Uterus with Perchloride of iron, then the introduction of a strip of gauze into the Uterus and the plugging of the vagina with the same.

As far as the douching I am quite in unison with him, but can see no reason why one should go on to Perchloride of iron and plugging afterwards. The douche, if properly given, will control the haemorrhage in practically every case.

After the removal of the plug he advises a hot douche night and morning. The douching night and morning I consider unnecessary, unless the Perchloride of iron render it so. It seems to me that the three latter steps in his treatment are rendered quite useless by the first, and subject the patient to a deal of unnecessary annoyance and inconvenience

B. M. J., 1895, Vol.1, p.279:- Dr. N. M. Ohdebar, First Indian Congress - recommends curetting in the highest terms after a fair trial has been given

to rest and plugging however.

Of curetting he says it is "quite safe, that it lessens Septicoemia and Endometritis, favours involution and hastens recovery".

I quite agree with Dr. Ohdebar in this opinion of the operation, but fail to see why in view of all these advantages he adopts plugging in the first instance.

B. M. J., 1897, Vol.1, p.275, Traitement de l'avortement incomplet, par le Dr. Chaleix-Vivie et le Dr. Audebert, Chefs de Chimique Obstétricale à la Faculté de Médecine de Bordeaux. - - Some practical points are urged by the authors, and amongst them are: "Vaginal plugging, well done, will for the time stop haemorrhage, but will not bring away the placenta". "The right treatment is to empty the Uterus either with the finger or the Curette. It is often difficult or impossible to do this with the finger; and to try to extract an incompletely detached placenta, either with the finger or forceps, is in the authors' opinion to be condemned. If the finger fail, the Curette almost always succeeds. It only fails in timid, negligent or hasty hands. Like every operation it is dangerous in unskilful or dirty hands Curetting is a delicate surgical operation; no one is obliged to do it; there is always time to obtain the aid of a more

"expert confrère, checking the haemorrhage meanwhile
" by vaginal plugging. Expectant treatment the au-
"thors regard as imprudent."

This opinion of the use of the Curette is ex-
actly that entertained by myself. Vaginal plugging
I have employed more than once as a temporary mea-
sure - controlling the haemorrhage until the necess-
ary instruments for curetting could be fetched.

THE LANCET, 1892, Vol. 1, p359.

William Duncan, M.D., in a series of re-
marks on the treatment of abortion, recommends the
use of the Curette in cases where "the decidua are
"very adherent". The Uterus is to be curetted "care-
"fully and completely with every antiseptic precau-
"tion".

It would appear that it was only in cases where
this adherence of the decidua existed that the Curette
is to be resorted to. If, however, the curetting is
a safe method in these cases, surely in cases where
no adhesions exist, it must be doubly safe. I quite
agree with Dr. Duncan that the curetting should be
"carefully and completely" done.

LANCET, 1893, Vol. 1, p1339 -

J. Leslie Watt, M.D., Abd., reports a
case where haemorrhage persisted from March to May.
He makes no mention of pains or the existence of
anything else to lead him to conclude that it was a
case of incomplete abortion. Nothing, so far as we

are told, had come away but haemorrhage, yet he passes a sound into the uterus. His reason for doing so seems to have been to discover the length of the Uterus. That night a placenta came away.

May this not be taken as a case in which the instrument was used blindly? The haemorrhage is the sign of innumerable conditions, amongst them threatened abortion. Dr. Watt may have omitted to mention some facts which were known to himself, but certainly from his report of the case one is compelled to condemn his treatment - effective though it proved. If he was aware that there was only a placenta left behind, then in my opinion the sound was not the proper instrument to be used - but the Curette, with the object of removing the placenta.

These opinions and methods of treatment I have quoted with the object of strengthening my contention that the Curette is a safe and proper method of treating this unfortunate termination of pregnancy.

What are the objections to the use of the Curette? - First the chances of subsequent full term pregnancy are said to be diminished. With this opinion I entirely disagree. I regard the cause of abortion to be most commonly the existence of Endometritis, and as the curetting done in the manner I suggest, entirely removes the diseased Endometrium, I am of opinion that the chances of subse-

-quent pregnancies going on to a full term are greatly increased. Some women undoubtedly possess the "Habit" of aborting, and to these special care must be given, more especially at the time when the abortion usually occurs. Rest in bed should be advised at those times and at the times when the monthly periods would occur were pregnancy not present. In these cases, however, even with the most careful treatment, the abortions may continue to occur, whatever the methods adopted at the time of abortion or during pregnancy. Often the existence of a displacement which is overlooked is the cause of keeping up the habit. Remedying of this often enabling the woman to go on to a full term. Case 2. I regard as a case of this kind. The abortions came on without any discoverable reason beyond the displacement. The woman was most anxious to have a full term child, and during her pregnancies observed the greatest possible care. The displacement was I feel sure overlooked at her two previous abortions.

The next objection urged is that there is a greater tendency for Sepsis to occur after this method than after others. My experience so far has lead me to hold an opinion the direct opposite of this.

Then again, it is urged that lacerations, and serious wounding of the Uterus may be caused by the

use of the Curette. To this objection, as to the previous one, my reply is that with the proper precautions and the observance of the ordinary rules of Surgical cleanliness and care, there is no possible chance of either occurring. If, as I pointed out in the earlier part of this paper, a man cannot introduce a blunt Curette without damaging the Uterus, he may safely be left out of consideration

The Endometrium it is urged is unnecessarily wounded and damaged. I regard it as necessary that the whole of the Endometrium should be removed from The fresh Endometrium will be supplied ^{from} ~~by~~ the Mucous Membrane which one must of necessity leave behind in the numerous crypts in the uterine walls. A mere wounding and damaging is not the proper method of treatment at all.

Playfair classes it under the "forcible methods", and Parvin regards it as a "radical method". To the former I submit an emphatic denial of the existence of force. With the latter I quite agree. It is certainly a radical method of treatment. But I maintain that the conditions demand some radical method of treatment. It is surely a more satisfactory and safe method than the introduction of Perchloride of iron into the Uterus. Of radical methods the introduction of this drug into the Uterus is the most radical. It is a method which most

men whilst keeping it in their minds postpone adopting except as a very last resource. The subsequent sloughing produced by it is an undoubted indication of the extreme severity of its action. This drug is, however, recommended by R. Pollok, M.B. It is also recommended by Arthur W. Edis, M.D., Lond., &c, in his work on Diseases of Women, p.468.

Another objection to the Curette is that it is unnecessary in the treatment of incomplete abortion.

Though I have so strongly urged the use of the Curette, I do, however, recognise that in some cases it is unnecessary. In cases where the abortion occurs before the third month when there is no placenta and the ovum comes away complete in its sac of membranes, the use of the Curette is rendered absolutely unnecessary. Simple bimanual expression will prove sufficient in many cases to remove the ovum and the secundines completely. Here again the use of the Curette is unnecessary. In many cases the ovum may have come away, and on P.V. examination the secundines are found lying in the cervix and easily removed. In these cases the Curette is not necessary.

There may be haemorrhage persisting after everything has apparently come away. In these the hot douche brings away some fragments and controls the haemorrhage. Here the Curette is unnecessary.

The cervix presents to the finger - when the Uterus is empty - a most characteristic feel. The external os is quite patulous, while the internal os is tightly closed. It is the ~~Cone~~ again, practically, with the apex now pointing upwards towards the Uterus.

If, however, in any of the cases mentioned the abortion was not the first, but the second or more, and occurred at the same time as the previous ones, I would certainly curette the Uterus. Presuming, that is that there was no remediable displacement nor history of Syphilis to be got, nor yet any condition of the appendages present which could be regarded as the cause of the abortion.

Of course I am well aware that the larger majority of cases where Syphilis is the cause, the abortions do not occur at the same time in each pregnancy. What I suggest is that in cases where it would appear that the abortion was the result of habit that even where everything has come away, I would curette the Uterus.

In all cases where the abortion was not complete in my opinion I would curette the Uterus rather than leave anything in the Uterus which may prove a source of danger from haemorrhage or Sepsis to the woman. The tampon I have employed in several cases and have sometimes got excellent results.

There is, however, an element of uncertainty as to

whether it will empty the Uterus which has lead me to discontiane its use and adopt ~~the~~ curettage.

With regard to the use of the Curette, I do not by any means suggest that on the first two or three occasions on which it is used that there is not a good deal of hesitancy and uncertainty about the operation. This must of necessity be felt by any man who attempts the operation for the first time. Nor is this feeling peculiar to the man using the Curette for the first time. Any operation, be it ever so simple, is undertaken by an unpracticed operator with a varying degree of hesitancy and uncertainty. I maintain, however, that the operation is of so simple a nature that any man may undertake to do it, and that after its performance on two or three occasions he will gain the confidence and develop the tactile sense - the latter needing but little development in the majority of men, which will enable him to perform it as well as the most experienced.

I have noticed in instructing men how to perform this operation, that most of them do too little, rather than too much.

I must again lay emphasis on the observance of the ~~strictest~~ Aseptic and Antiseptic precautions, as it is on this that the operation depends chiefly for its safety and success.

The operation is a simple one, but I don't mean by that that it may be lightly undertaken, for though the actual operation itself is of the simplest yet without due regard to the precautions necessary in its performance, it may readily prove the cause of grave results. Indeed, all the objections urged against the operation and many more may be put forward against improperly performed curettage of the Uterus for incomplete abortion, I regard it as the safest, easiest and most expeditious method of emptying the Uterus and thus putting an end to the haemorrhage. I am further of opinion that it is a method calculated to give the patient the least amount of discomfort at the time, and the greatest amount of benefit subsequently.

II.

Full term delivery complicated by the retention of a portion or portions of the Secundines. -

Here the Curette - again the blunt instrument - must of necessity be used with care in view of the condition of the uterine walls at this time.

In the following five cases I used it:-

	Name	Age	No. of Preg.	Cause for which used
<u>1.</u>	E.B.	25	Preg.2.	Adherent portion of placenta causing post partem haemorrhage.
<u>2.</u>	A.T.	28	Preg.7	Portions of membrane retained and Uterus uncontracted post partem haemorrhage.
<u>3.</u>	S.S.	24	Preg.2.	All membranes retained. Post partem haemorrhage.
<u>4.</u>	A.S.	22	Preg.1.	Secondary haemorrhage - 8 hours after confinement - Portions of membrane got away
<u>5.</u>	M.F.	34	Preg.5.	Persistent haemorrhage. Curetted lightly to satisfy myself of emptiness of Uterus. Numerous fragments of membrane got away.

I quote no authorities for or against this use of the Curette, for I am well aware that the operation is condemned by practically all.

My reasons for suggesting the use of the Curette here are the following:-

Take for example Case 1. When called to this case there was profuse haemorrhage every time the student ceased stimulating the Uterus by friction. On examining the Secundines I found the membranes complete, but there was a hole in the placenta about the size of a five shilling piece and retention of this portion I concluded was the cause of the persistent haemorrhage. I endeavoured by expression to get rid of it from the Uterus, but without avail. I therefore with the due precautions - passed the Rheinstadter into the Uterus, and by passing it lightly over the walls, discovered the position of the retained portion of the placenta and curetted it away. It was firmly adherent. The other alternative open to me was the introduction of my fingers into the uterus, and in this way effecting the removal. This entails a great deal of pain and some shock to the woman, besides increasing the risk of sepsis. I have since then had on two occasions in private practice to employ the curette for the retention of adherent portions of the placenta and my results were equally good.

IN the cases where there were portions of Membranes retained I used the Curette, as I did not feel justified in subjecting the patient to the shock and inconvenience necessary to effect removal with the hand.

In not one of the five cases I mention were there any complications - the puerperium in each case being normal throughout.

I am well aware that in a properly managed case the retention of membranes should not occur, but as I was not called to see the cases unless there was some complication, I must refuse to take any responsibility for the retention.

In many cases in which there was retention of portions of the membranes, the removal was effected quite easily, without the Curette, as these were lying in the cervix, and could easily be extracted without entering the Uterus at all. In others a hot douche did all that was necessary - the stream bringing away with it the retained portions. In all cases, however, where the fragments cannot be felt at the cervix, and in which the douche does not remove them, and the haemorrhage still persists, I employ the Curette to effect their removal.

I do not suggest that if there is a retention of the entire placenta that the Curette should be employed for this operation would be an exceedingly protracted one, whereas with the hand it is a very

simple and rapid one if done properly. I maintain, however, that the introduction of the hand is productive of shock, and that the chances of Sepsis are greater than if the Curette is employed.

In the cases which I mention the method of procedure was the same as described under incomplete abortion.

After the curetting the hot douche, which failed to produce any permanent contraction of the Uterus with cessation of the haemorrhage before, almost at once produced a firm contraction and stoppage of the post partem haemorrhage.

I do not urge this use of the Curette as strongly as I do for the treatment of incomplete abortion, except on those who have had experience with the use of the instrument beforehand. The chief and only danger is the perforation of the uterine walls - but from the soft condition of these walls this may very readily occur in timid or unskilled hands.

Finally, I repeat the remarks made early in this paper that I do not urge Curettage as a routine treatment, but to those who undertake it, I can promise, that, with due precautions, it will in every case be productive of the most satisfactory results. It is a safe, easy and sure method of treatment of incomplete abortion, and in the treat-

-ment of the second set of cases, with due precautions and care, no man possessed of some skill in the use of the instrument will ever have any reason to regret having employed the Curette.