normal. Uterine Haemorrhage.

This is a symptom that is being constantly met with in practice and to the general practitioner & specialist alike, a knowledge of the many and varied causes of the symptom and the treatment appropriate to each is imperative

The bleeding varies much in different cases, in some being very trifling and in others the amount lost is so enormous that speedy & energetic measures have to be had resource to in order to save the patients life The quality of the bleeding also varies, in some cases the discharge consisting of pure blood whilst in others, blood may form only a small part of the discharge

The haemorrhage may take various forms - it may be excessive menstrual discharge - or the menstrual periods may occur too frequently or these conditions may be combined, the periods being too frequent, & the flow on each occasion too copious. The haemorrhage may occur at other than the menstrual period constituting metrorrhagia

Uterine haemorrhage may be considered from two stand-points viz. whether it is connected with Pregnancy or exquite distinct from it

When Haemorrhage occurs in a pregnant woman a rather unusual cause, and one that is apt to be overlooked is malignant disease of the cervix. This disease is unfortunately rare to conception, and thus a woman may be deceived as to her condition, and unless a very careful examination is made by the physician, in a case where haemorrhage has been taking place, the fact of the presence of pregnancy may be overlooked, the symptoms of the cervical disease obscuring those due to the pregnancy. In this unfortunate combination there is a great tendency to rupture of the part involved when labour sets in. The haemorrhage in such a case usually takes place irregularly, and along with the blood there is usually a foul watery discharge.

Here Haemorrhage occurs in a pregnant woman, the most common cause is threatened - or actual abortion or miscarriage, and the bleeding in such cases is accompanied by irregular pains, more or less closely resembling labour pains. In some cases of pregnancy bleeding occurs at monthly intervals and thus the patient may be deceived as to her condition. These periodic monthly losses are usually associated with pains, or at least a feeling of uneasiness in the hypogastrium or lumbar region, and should I think be considered as threatened

abortions. and strict rest in bed should be enjoined in all such cases. It must not be forgotten that such losses are also present in cases of placenta praevia but they occur also where there is every reason to believe that the placenta is normally situated, and where a normal condition is found at labour. It is impossible to be certain in some cases whether the haemorrhage is due to abortion or to excessive menstruation. This is of course the case only where pregnancy is not far advanced. In very early abortions the foetus & membranes are so small that they may come away enclosed in clots or may be mistaken for them. Unless then the ovum is seen by the doctor, it is difficult to say whether the haemorrhage may be due to an early abortion, or to excessive menstruation which has been delayed by some cause — cold excitement worry hard work &c. — acting at the menstrual period Pain is common to both conditions & may be as severe in the one case as in the other, while the size of the uterus and the patency of the os uteri may give little information.

When the foetus and membranes are expelled the haemorrhage usually ceases, but parts of the foetus or membranes may be left in utero and while the patient may seem to recover completely at the

time, subsequent bleeding ensues. which is not checked until the remaining part of the ovum has been expelled or removed.

When the foetus dies it is usually expelled shortly after but occasionally the dead foetus remains in utero causing haemorrhage (with a foul discharge) from time to time until its final expulsion Budin at the Obstetrical Society of Paris mentioned a case where the patient had carried the dead foetus for eleven months slight Haemorrhages occuring almost constantly. Such a condition is called "Missed Abortion".

ase illustrative of Incomplete Abortion

Mrs W., multipara, two months and a half pregnant; began to loose a little blood and shortly after slight and periodic pains set in. On examination the uterus was found enlarged and the os slightly softened but not very patent. She was ordered to stay in bed and Pulv Opii gr i. given every four hours. The pains however became more severe, and twenty four hours after I first saw her, and three day after the first appearance of haemorrhage I made an examination and found the os more patent than before but not so much so as to admit of the entrance of the finger. As the haemorrhage continued I ordered Ext. Ergot. Liq 3p.

every three hours and this was continued for 36 hours. No evidence of the ovum having been expelled I inserted my finger through the now patent os and I removed as much of the ovum as I could feel. The cavity seemed quite clear and vaginal douches of Hydrarg Perchlor gr 1 to ℥xx water were given morning and evening for two days. The bowels were kept clear by enemata, and in six day the Haemorrhage had ceased, and the patient got up went about her household duties. Haemorrhage set in a few days later and continued in moderate quantity until she again came to consult me, three weeks after apparent recovery. I gave another vaginal douche inserted a sea-tangle tent and let it remain over-night. After its removal the finger could detect little prominences on the surface of the endometrium. I cautiously scraped out the cavity with a hollow stemmed curette, using meanwhile as a douche Tinct Iodi (℥iv to ℥xx). After the whole surface of the endometrium had been scraped, I cautiously allowed a small quantity of Tinct Iodi to flow in. Vaginal douches were given morning and evening for 3 days, and the patient got out of bed at the end of six days and has since remained well.

In the treatment of a case of threatened abortion we must first consider whether the ovum can be saved or not If the haemorrhage has not been very severe, if the os is not dilated, the liquor amnii not escaped, and the pains not very severe, and in the case of abortion in the later months of pregnancy, the cervix not obliterated, then we may hope to check the threatening abortion. Rest in bed in a cool room with the hips slightly raised is imperative, while all sources of reflex irritation eg. threadworms sucking &c. which might have induced the uterine contractions should be removed if possible. For arrest uterine action, opium given in the form of Liquor Opii Sedativus, is best given in large and frequently repeated doses. Viburnum Prunifolium is also recommended in the form of the Extract in five grain doses The food should be of the lightest & cool, and no stimulants given.

If the pains are severe, the haemorrhage severe, the liquor amnii escaped, and the os gaping then abortion is inevitable and our efforts must be directed to as speedy an expulsion of the ovum as possible. Ergot should be given in large doses and it is usually well borne. The effect of this drug is less marked in cases of early abortion than in abortion in the later months of pregnancy when the uterus has more

ed considerably in size. Ergot helps to arrest the haemorrhage and at the same time expell the foetus & membranes If the Haemorrhage is alarming, plugging of the vagina by lint sponges, or some antiseptic gauze. be. should be done. Every manipulation to arrest any form of uterine haemorrhage should be carried out with every antiseptic precaution, and this is pre-eminently the case where abortions are in progress. Before and after any manipulation the v-agina should have an antiseptic douche (eg. Izal Zolli 2ii to ℥xx) and any thing, instruments fingers hands introduced into the vagina should be previously made antiseptic. During the first three months it is not advisable to interfere much with the case unless there is some urgent indication for interferance as in abortions. at this time the Ovum & membranes are often expelled entire but if it is necessary to plug, a new source of reflex irritation is introduced and thus expulsion is retarded. After the foetus has been expelled it often happens that the membranes or placenta are retained and so the haemorrhage will continue. If this should continue to an excessive amount, plugging may have again to be resorted to. but if not. and the pains are good, and the os dilated, the case may

be left to nature for a time If after a short time the retained parts are not expelled, the finger or curette should be introduced and the endometrium cleared. If the os does not dilate, it should be dilated with Hegars dilators or some of the other instruments designed for that purpose and the retained part of the ovum removed with finger or by the curette.

Haemorrhage due to Placenta Praevia.

This occurs usually late in the frequent condition — in the last three months. If earlier it is not likely to be recognized as such and the treatment will be that of an ordinary case of abortion at that time.

The haemorrhage may occur at any time during pregnancy, but it is more apt to be severe during the later months when the cervix is being gradually obliterated with the result that the bloodvessels connecting the ovum and the placenta are torn. During the earlier months the diagnosis will probably not be made, the case will be treated as one of threatened or inevitable abortion The haemorrhage is apt to recur frequently, and it shews a special tendency to occur at the time corresponding to the menstrual period. The haemorrhage may be continuous or only at intervals but in a

case of Placenta Praevia a severe or fatal haemorrhage may occur at any time. Sometimes haemorrhage does not set in until the commencement of labour, the uterine contractions tearing the utero-placental blood-vessels and every pain being accompanied by a gush of blood. Haemorrhage in placenta praevia is not usually so alarming when the placenta is situated laterally as where the situation is central. Haemorrhage during pregnancy should always lead to a suspicion of the presence of this condition and if, on examination, a diagnosis is made then there is indeed cause for anxiety. In the earlier months a diagnosis is difficult or impossible but in the later months the boggy feeling of the cervix may confirm our fears while if the os is patent we may feel the external surface of the placenta or its edge, according to its situation.

If the haemorrhage occurs in a case where pregnancy is not yet far enough advanced to admit of a chance of the child living apart from the mother; then an attempt should be made, if the haemorrhage is not too severe, to arrest the flow and allow the case to go on until such a time has arrived as will allow of a fair chance of separate existence for the child.

But if this is done, the patient ought to be warned of her danger, and to let the surgeon know immediately any recurrence of bleeding ensues. If the patient however lives at a great distance from medical assistance I think it is advisable in the interests of the mother to induce abortion or premature labour as the case may be, and all the more certainly if the haemorrhage has been at all alarming or the placenta can be made out to be situated centrally.

In a favourable case, and where the child is not viable, the patient must be kept strictly at rest in bed whilst any haemorrhage is going on; freely allowed on her couch at other times. The room should be kept cool, the bed clothing light, diet unstimulating, and the bowels kept regulated by mild aperients.

The haemorrhage is at all severe in any case, if the child is viable and haemorrhage has appeared to any extent and in this case especially if the placenta can be diagnosed to be situated centrally, and if the patient is living in an inaccessible place as regards speedy medical assistance, then abortion or premature labour should be induced, and if haemorrhage is at all alarming, no time should be lost in bringing this about. It should be remembered that if the patient has been

loosing blood almost continuously, altho never in great quantity at one time, during the pregnancy, that she is not in a favourable condition to resist the effects of much haemorrhage when labour should come on. Tessier of Paris[1] mentions a case where haemorrhage occurred in the first month of the twelth pregnancy and continued at intervals until the delivery at the eighth month. The haemorrhage was always accompanied by painful uterine contractions, and the case was one of lateral placenta praevia. The final haemorrhage altho not severe was sufficient to kill the patient.

In suitable cases there are various methods of restraining the haemorrhage and inducing uterine contractions. If the os is not dilated the vagina should be plugged either by a tube full tampon of lint tow or gauze tissue rendered antiseptic, and introduced through a speculum, or by a vaginal water or air-bag. If the os may be dilated by fingers or other dilators.

Ergot should be given in large doses, frequently repeated and the uterus compressed by the hand or by a tight body bandage.

If the os is partly open then the haemorrhage may be arrested by the introduction of one of Barnes'

I Nouveau Archaeog. de obstetrice. et de la Gynecolog. May. 92

fiddle-shaped bags or one of Steele's expanding bags.

At the British Medical Association meeting[1] in 1893, Dr Ernest Herman & Dr Herbert Spencer advocated the use of Champetier's De Ribe's bag for dilating the os and controlling the haemorrhage in this condition, and for the induction of premature labour generally.

When the os is widely dilated enough to allow of the introduction of the finger many authorities advise separation of the placenta from the uterus as far as can be reached.

If the placenta is situated laterally, and the haemorrhage is slight and the pains are coming on fairly well the membranes should be ruptured and the case should be left to nature but carefully watched for any symptom which would indicate interference But where haemorrhage is present to any extent labour should be hastened by massage of the uterus & by ergot and the child delivered either by the forceps or by turning. If the foetus has not yet arrived at the time when the forceps can be applied, then the introduction of the hand into the uterus is necessary to extract the foetus. If the placenta is situated centrally, the better method is

[1] B. M. Journal Jan 7th 1894.

Treatment

The general treatment of this condition is that of uterine haemorrhage generally

The following case is a good illustration of the danger of delay in vigorous treatment and of the great risk run by the patient if the medical attendant is not alive to the gravity of the condition.

At eight o'clock on the morning of August 29th I was called to the neighbouring town by the locum tenens of a medical man residing there. On my arrival I found that he wished some assistance in the following case. The patient - a multipara aet 28. eight months pregnant, was suffering from alarming uterine haemorrhage She was very anaemic, collapsed, and almost pulseless. I got the following history. Her medical attendant had been called to see her about two weeks previously on account of a rather severe attack of haemorrhage. After the examination made he informed the patient that the afterbirth was not at the right part of the womb. The haemorrhage ceased and the practitioner left for his holidays, but without warning the locum of the presence of such a condition of matters. At one o'clock of the morning of August 29th the locum tenens was called on account of another attack of haemorrhage. The patient

was then very anaemic and faint. She did not make an examination at the time but ordered her to put two pillows under her hips and to take 3ß whisky every hour. She then left and saw her five hours later and found the haemorrhage continuing, undiminished in quantity. The patient was complaining of slight intermittent pains. and the haemorrhage was worse at these times. The doctor then made a per vaginal examination but without any definite result as regards diagnosis. but suspecting placenta praevia he sent an urgent message for me. On examination I found placenta praevia centralis and the os wide by enough dilated to admit of two fingers being introduced, although the pains had been very few and slight. I administered 3ij of brandy together with 3ß Tinct opii and 3iij Ext Ergot liq, and inserted my hand into the vagina and dilated the os with my fingers. On introducing my hand into the uterus I found the breech presenting. The chord and placenta were easily delivered and the haemorrhage ceased. The child was alive when born, but all efforts to induce respiratory movements failed after delivery the hips of the patient were further raised and the head lowered An enema of hot water was given but the sphincter ani was so relaxed that the water was not retained The

uterus was kept contracted by kneading and pressure. Brandy was given by the mouth in large quantity. Hot bottles were put around the patient, but she sank rapidly & died half-an-hour after delivery.

Accidental Haemorrhage

Like haemorrhage due to placenta praevia, accidental haemorrhage occurs chiefly during the last three months of pregnancy when the connection between the uterus and the foetal membranes is not so firm as in the earlier stages. They have also this in common that both are very dangerous to the lives of the mother and child.

In this condition the placenta is situated at its normal site and the cause of the haemorrhage is separation of the placenta and uterus but the cause of this separation is often very obscure, probably a sudden shock, a fall, injury, or a blow: straining in lifting a weight, and it occurs relatively with more frequency in the debilitated than in the strong. The haemorrhage may be severe or slight.

As regards the cause of the haemorrhage Maygrier[1] reports a case where fatal bleeding occurred in a patient who was cleansing the vulvar region over a bidet, and on examination (post mortem) the

[1] British Medical Journal Epitome of medical Literature

placenta was found situated normally but partially detached. Guenot says that accidental haemorrhage is common in workwomen while he has found apoplexy of the placenta with haemorrhage in well-to-do people and in some of these cases syphilis was present.

The blood is often concealed, being either effused between the placenta and uterine surface, the placenta remaining attached at its margins, or it may be between the membranes and the uterine surface. In such a case all the symptoms of serious haemorrhage will be present - sickness loss of sight ringing in the ears pallor and faintness with coldness of the body-surface - without escape of blood escaping externally. A large quantity of blood may thus accumulate internally from the ruptured vessels, and in this way rupture of the uterus has rarely occurred.

In other cases the blood makes its way downwards from its source, between the membranes and the uterine surface and escapes externally. The haemorrhage is between the intervals of uterine contraction showed labour have commenced, the presenting part of the child being pressed down, at each pain, tightly against the os and so effectually pre-

I British medical Journal - Epitome of current medical Literature

venting any blood escaping externally while at this time the bleeding will be at least partially check ed at one of the sources - the uterine surface. altho bleeding may go on from the placenta there however the placenta is subjected to considerable pressure between the foetus and uterus. at those times and this gives a clue to the proper treatment of this serious condition. This form of haemorrhage is very fatal to the child hence we find that very frequently movements cease after an attack Labour pains are also usually associated with this condition. The effect on the mother is very alarming, frequently fatal.

The treatment of this condition is quite as urgent as in the previous condition with the patient lying in bed with the hips raised. the first thing to do is to increase or excite uterine contraction. Ergot should be given in large doses and the membranes ruptured as this stimulates uterine action and at the same time allows of better compression of the placenta between the uterus and the child. Blood however may collect internally and to prevent this, the uterus should be kneaded vigorously or a tight abdominal bandage applied. If the haemorrhage is not severe and the pains good the case may be left to nature, but where bleeding goes on profusely the os should be plugged by some.

of the aw bags. or if the os is not wide enough for this the vagina should be plugged by water or air bags or by lint soaked in Ext Ergot liq. If the os is quite dilated, the child should be delivered by turning or by forceps. After delivery there is a liability to post partum haemorrhage. so ergot should be continued in large doses every 3 hours or so, the uterus well kneaded and a body bandage firmly applied.

Where the haemorrhage is very trifling and the pains completely or almost absent and the child not viable, it may be advisable to order complete rest with a firm bandage applied with the object of giving the foetus a chance of coming forward. Of course patience of the continued existence of the foetus must be present to allow of such a course being followed.

Park multipara 8½ months pregnant walked in the course of a day 28 miles and on arriving at her destination exhausted, suddenly blanched, became giddy & faint. This was soon followed by a gush of blood from the vagina and an aching dull labour pains set in. Haemorrhage ceased during the pains but continued during the intervals Movements ceased. On examination, os was found dilated and the breech presenting a firm bandage was applied. 3i doses of Ext Ergot liq. given every 2 hours. Pains came on rapidly and in five hours the child was born – dead. The uterine surface of the placenta was partially covered by old clots. The patient recovered completely

Post Partem Haemorrhage.

After delivery of the child Haemorrhage may occur before extraction or expulsion of the placenta. If the placenta is not quickly expelled after the birth of the child this is usually due to weak or irregular contractions of the uterus but it may be due to abnormal adhesion of the placenta to the interior of the uterus. The placenta lying in the cavity of the uterus prevents efficient contractions which are the best safeguard against Haemorrhage. If bleeding should occur at this period the uterus should be excited to contractions. The best means to this end are kneading the uterine tumour through the abdominal wall and the internal administration of ergot (liquid extract. 3ī to 3ss ii). Cold may also, if desired, be applied to the hypogastrium. If these means fail the hand must be inserted into the interior of the uterus and the placenta caught into the palm or if adherent gently stroked from its attachment with the fingers. The hand should not be withdrawn until the uterus is felt to contract on it and this can be greatly facilitated by external massage or compression of the uterus.

Post Partem Haemorrhage proper is one of the most serious complications of labour and often comes on quite unexpectedly. The most usual cause is uterine inertia and

thus it is most frequent after very protracted labours, where the uterine muscular fibres get exhausted, and occurring also in those subject to chronic wasting disease, especially the subjects of chronic Bright's disease. Insufficient or irregular contraction is always to follow rapid delivery accomplished either naturally or by mechanical means, the muscular fibres not being able to accomodate themselves sufficiently quickly to the altered condition of the uterus.

One of the surest ways to produce post partem haemorrhage is to deliver the child during complete rest of the uterus, or before pains have come on. and this has special bearing in reference to cases of Placenta Praevia, and Accidental Haemorrhage. In these cases as Dr Lauvel Herman has said[I] the woman is not safe until the child is delivered but if the delivery takes place before uterine contraction has taken place, then such delivery will be followed in all probability by Post Partem Haemorrhage, and all the more certainly if the patient has previously lost a considerable quantity of blood. This applied also to cases where delivery is effected when all pains have ceased To prevent Post Partem Haemorrhage then, the first thing previous to mechanical delivery is to have uterine contractions. "Nature prevents bleeding after delivery by the retract-

I British Medical Journal December 24. 1892.

ion & contraction of the uterus" Great care also should be exercised in regard to the treatment of the placenta. It should not be extracted where all uterine contraction is in abeyance. It is wise to allow ten or fifteen minutes to elapse after delivery of the child, before applying compression to the uterus.

Considerable difference of opinion has existed as to the influence of chloroform in causing post-partum bleeding, but most authorities agree that the administration of chloroform during labour does not tend to produce imperfect contraction of the uterus subsequently. Of course it is just those cases which require chloroform during labour, that are most likely to be followed by Haemorrhage.

This serious complication is apt to occur in those cases where uterine myomata are present, & will almost certainly occur should post-partum inversion take place.

The haemorrhagic diathesis has some influence in inducing this complication and according to Dr Playfair this is more frequent in London amongst the wealthier classes, whilst D-J. More Madden declares that in Dublin it occurs more frequently amongst the inhabitants of the low-lying ill-drained slums of that city.

lacerations of the cervix by forceps &c. are apt to be followed by post-partem Haemorrhage.

Dr J. Rose Bradford[1] says "A permanently quickened pulse during labour, that is, a pulse not subsiding to its normal rate during the interval between the pains, is always followed by post-partem haemorrhage, unless proper anticipatory treatment was adopted."

The symptoms & signs of this complication vary considerably in different cases. In most cases external evidence of the bleeding going on in the interior of the uterus is present but in other cases the blood simply fills the cavity of the uterus & is thus "concealed". The haemorrhage may occur immediately after the birth of the child or may be delayed for some time. The quantity of blood lost varies, and a given quantity of blood lost produces very different degrees of collapse in different patients:

Usually the fundal tumour in the hypogastrium disappears, or becomes less defined in outline. If the uterine contraction is complete and the haemorrhage is appearing externally, we may feel with our fingers through the flaccid uterine walls the sacrum & vertebrae. In those cases where the blood is confined chiefly or entirely to the cavity of the uterus, instead of the fundal hypogastric tumour felt normally, a large soft & increasing

[1] British Medical Journal Dec 24 1892

abdominal swelling will be present. This is most apt to occur if the uterine walls are very flaccid, or the os, especially if contracted, should get blocked up with a part of the placenta or membranes which have not been expelled. or by a clot of blood. Over-distension of the womb very often leads to great agony

The following case is illustrative of post-partum haemorrhage occurring without any external evidence of bleeding

I was called early one morning to attend the confinement of Mrs L. a multipara. on my arrival I found the presentation first cranial & the labour in the second stage. After waiting for two hours & the pains being good, I found that no progress had been made; I therefore delivered with the forceps The placenta was expelled about ten minutes after the birth of the child. I left about fifteen minutes later & just before my departure I found the uterus well contracted I saw her again three hours later and found her very anaemic, tossing about, complaining of not seeing well, & of great pain over the abdomen. The discharge of blood had not been more profuse than is usual after confinement. On supporting the body bandage I found the firm hypogastric tumour gone and the abdomen distended with a soft swelling. After kneading this swelling gently for a short time, contractions commenced & eventually a very large

blood clot was expelled together with a quantity of liquid blood The uterus was kneaded for a time. a body bandage & pad firmly applied and ergot ad ministered ʒj every hour for four hours.. The patient made a protracted but uninterrupted recovery.

The general symptoms vary according to the quantity of the blood lost. and are those common to all cases where a large quantity of blood has been lost. Pallor sickness vomiting faintness loss of vision coldness & clamminess. of the body surface generally, and especially of the extremities, a rapid soft pulse. are present in all cases where the bleeding has been at all free. while in the worst cases fatal syncope will soon set in unless the haemorrhage is immediately checked.

The treatment of this condition must be energetic and the end in view is always contraction of the uterus.

The first method of endeavouring to produce this, and is the most easily applied, is kneading the uterus through the abdominal walls. and this may be combined with other methods noticed below

Ergot ʒii - ʒiv or turpentine ʒj may be given by the mouth but this is too slow in its effects to be productive of much benefit while their administration is often followed by vomiting which however is not

always a bad thing. as contractions have been not
need to follow vomiting. Ergotine may be given hypo-
dermically, but even this is not speedy enough to pro-
ducing any appreciable effect.
Ice may be applied to the hypogastrium but this is
superior to kneading of the uterus.
Where the uterus does not respond to the stimuli
mentioned above the hand should be introduced
into the cavity of the uterus and the clots gath-
ered into the palm of the hand. The uterus will
generally be felt to contract on the hand & it should
not be withdrawn until such contraction is felt.
This method together with external manipulation
will generally secure efficient contraction & this will
probably be made permanent by a firm pad & band-
age & by the child being encouraged to suckle
the breast
But if the contractions are not permanent; it will
be necessary to have resort to intra-uterine in-
jections as repeated introductions of the hand are
not advisable. Injections of iced water sometimes
does good but ice is not always at hand so cold
water may be tried. Water at a temperature of 110°F
has proved useful causing clotting of the blood,
while the alternate use of hot & cold water may

prove more useful than either. These injections wash out the clots which are sometimes the cause of the bleeding.

In his address to the section of obstetrics at the annual meeting of the British Medical Association held in July 1893 Dr A. H. Galabin speaks very favourably of the use of hot water

Dr J. More Madden recommends the vulva uterine injection of pure turpentine (B. Medical Journal July 93)

Styptics have been used applied directly to the interior of the womb. The best is Liquor Ferri Perchloride Fortior B.P. 3iv - to water 3xvi This may be used as an injection through a syringe with a long nozzle, or a piece of cotton, lint, or sponge, may be dipped in it passed through the os & used to swab out the endometrium If injection is determined on great care must be taken to see that room is allowed at the os for the escape of clots as these are formed in large quantity where liq. Ferri Perchlor. is used. This is a dangerous method and should only be used in cases of great emergency The dangers consist in the liability to cause of venous thrombosis of the uterine sinuses which when it is necessary to use this substance as an injection are in a dilated state and from these thrombi, emboli may escape & block up the pulmonary artery so-

cause death. Another danger is, the fluid injected may be prevented from escaping by the os getting blocked up by clots & so some of the fluid may be forced through the Fallopian tubes & cause peritonitis. These accidents have not as yet occured from the injection of iron for post partum haemorrhage but have occurred from its use in haemorrhages from other causes. Another danger to be reckoned with, is the liability to decomposition of the clots.

Compression of the aorta has been tried but as blood regurgitates from the vena cava superior, it is little wonder that no brilliant results have followed this practice

From Germany has lately come the practice of plugging the uterine cavity with Iodoform gauze. The blood coagulates in the meshes of the gauze & its presence is supposed to act as a constant stimulant to contract ion This practice is open to many objections. Complete Contraction cannot occur if the interior of the uterus is packed with this gauze. While it may be found impossible to properly pack an atonic uterus. Vanni[I] relates a case where sudden death occurred from the entrance of air into a uterine vein while the gauze was being introduced. Several deaths from haemorrhage have occurred even where the uterus was packed.

I Centr: fur. Gynak. 1880

Where all the ordinary Stimulants to Contraction fail the only means left is continuous compression of the uterus Various modes have been used but the best; according to Dr Herman is with the left hand introduced into the vagina with the fingers bent into the palm, pressure being meanwhile applied to the hypogastrium, so that the uterus is compressed between the two hands. Steady & continuous pressure is to be maintained until time is given for clotting of the blood in the veins to have taken place By this method the clots escape from the interior of the uterus which is not the case in Duncan's method This procedure should not be too long delayed but should be performed assoon as it is found out that the ordinary Stimuli to Contraction fail to produce a response

Dr Herman[I] says "Early & maintained compression of the uterus is the safest and best treatment of post partum haemorrhage" and should be used in preference to such methods as injections of cold water, of Liq Ferri Perchlor or packing the uterus with gauge.

Dr Murdoch Cameron[I] speaks favourably of packing the vagina to arrest the bleeding, and the removal of all clot & membranes.

I British Medical Journal Dec 24 1892

after the haemorrhage has been arrested by some of the methods described above. the next point of importance is the treatment of the collapse, which is a direct result of the haemorrhage. In this complication the head of the patient should be placed low and the pelvis raised To temporarily rouse the patient nothing is better than a large quantity of brandy combined with Tincture opii 3p. Brandy can be given in large doses in collapse induced by haemorrhage, but it must only be given during the collapse and not during the reaction which will set in later.

In cases of extreme collapse something must be done to replace the large quantity of blood lost: Transfusion of blood has been practised either by the mediate or immediate process But where human blood is not available saline injections may be tried such as the following. Ry Sodae Bicarb grxo
Sodae Chlorid grxo
Aquae ℥xx ft.
Sig. The intra venous injection

Instead of intra venous injections a large enema of warm water may be given with the hope that it may be absorbed by the bowel, but in my experience the sphincter ani in those cases is so relaxed that considerable difficulty is experienced

in having the enema retained
as a general stimulant. Dr Moore Madden[1] recommends
the hypodermic injection of sulphuric ether 3ii.
Perfect rest during the haemorrhage and for some
time after is imperative and during the convalescence
tonics old wine & nourishing diet will be required
Electricity would probably be of some service as a stim-
ulant to uterine contraction, but unfortunately it
seldom happens that a battery is at hand during
the time that it would be of service, and the time re-
quired in preparing it are a further drawback.
As to the use of ergot in this complication, experience
shews that it is of service chiefly as a prophylactic,
and as an aid in making the uterine contractions
permanent when they have once been induced.

[1] British Medical Journal Dec 24 1892

Secondary Haemorrhage

This occurs in some puerpal cases and has been described as haemorrhage occurring from six hours to a month after delivery. It depends on a great variety of causes and it is analogous in many respects to the bleeding which occurs in a case of incomplete abortion. and its treatment depends for the most part in the removal of the cause In many cases it depends on the retention of a part of the placenta or membranes Boisnel of Lisieux[1] relates a case where a doctor extracted a child piecemeal but left the head inside the uterus. This caused repeated bleedings until the head was removed three months later by Boisnel. If such a case be left to nature repeated and alarming or even fatal haemorrhages will result. The retained part undergoes decomposition and is gradually expelled, though at the risk of causing septicaemia, in the form of a very septic discharge

In other cases it depends on displacement of the womb - probably the result of too early rising - retroflexion or retroversion rarely inversion In other cases it depends on constitutional causes. which are often difficult to recognize, or on the presence of a uterine polypus and rarely on the rupture

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of a uterine haematocele.

In making an examination in a case of secondary haemorrhage the cause may be at once apparent, eg. displacement and the treatment will be the remedying of the cause. In many cases, however it is impossible without dilating the os and exploring the uterine cavity - to be certain of what we are dealing with. In the majority of such cases it will be found that curetting the endometrium or, if there is nothing left which ought to have been taken away at the time of labour, the application of styptics, will effect a cure.

Secondary haemorrhage is closely allied to haemorrhage occurring in a case of Subinvolution Indeed the retention of pieces of membrane placenta or clots. and the various displacements to which the uterus is liable after labour are very common causes of subinvolution.

In this district subinvolution is very common owing to the patients getting up too soon after confinement and commencing heavy work. Here it is common to find puerpal women at work on the third or fourth day after confinement with the result that proper involution does not take place and haemorrhage sets in. Subinvolution occurs in puerpal cases where

pelvic peritonitis or cellulitis has followed delivery or abortion frequent pregnancies and lowering of the standard of health by prolonged lactation or chronic diseases, are apt to cause subinvolution while displacements after confinement are almost always associated with more or less interference with the process of involution.

But it is not only in child-bearing patients that this condition exists, although the most marked examples are to be found in women who have borne children. It is found also in unmarried girls who suffer from endo-cervicitis or endometritis, the congestion in these parts being extended to the rest of the uterine wall. and in these conditions displacement is a not infrequent accompaniment. Of course endometritis and endo-cervicitis in women who have borne children are also associated with subinvolution

The haemorrhage from a uterus in this condition is usually not very severe and may take the form of menorrhagia or of menorrhagia, and sometimes occurs after sexual connection, and the haemorrhage is more severe if the fundus is the part affected with subinvolution.

In diagnosing bleeding as due to subinvolution

the chief difficulty is to differentiate it from that occurring in a myomatous uterus and in this the chief point is the history of the case. But myomata may occur along with subinvolution and may even be the cause of it.

The treatment of Haemorrhage in subinvolution resolves itself into the treatment of its causes. In all cases the general health should be maintained as far as possible. In cases occurring shortly after confinement or abortion and where the cause seems to be too early rising, or heavy work undertaken too early, strict rest in bed should be enjoined with the vaginal douche and glycerine tampons employed as often as may seem necessary. But in other cases prolonged confinement is not advisable as tending to lower the standard of health. Sexual intercourse should be forbidden.

If the cause is pelvic peritonitis or cellulitis treatment will be directed to these conditions rather than to the subinvolution.

Displacements must be rectified.

Where there is no very apparent cause curettement of the cervix is recommended, or free hypodermic depletion by incisions in the cervix.

If along with the bleeding there is a septic discharge

the cause is probably some retained membranes or clots which are decomposing, and the treatment is of course dilatation of the os and thorough scraping of the endometrium. The same course is indicated when the cause is endometritis unless uterine medication produces a good effect
If the patient is able to afford it, sea air is beneficial. or arsenical or ferruginous waters may be employed with residence at the spa if necessary. And the spas that may be used with advantage are numerous, — Ems - Spa Kissingen Royat or Bourboule.

Mrs P. confined ten weeks previously came to consult me about a slight degree of haemorrhage with which she had been troubled at times since delivery. On enquiry I found that the labour had been normal, that she had kept bed for seven days and that she had then got up and engaged in some rather heavy work. Since that time she had felt a weight in the pelvis, difficulty in walking, with backache, pain in the temples, and some difficulty in micturition. She had complete anorexia the bowels were very costive and dyspareunia was present. The discharge of blood commenced afresh and continued at intervals

until I saw her. It was never very great in quantity, and occurred once after connection. She was rather anaemic and suffered from sleeplessness.
On examination I found the os low down in the pelvis - rather open, and the cervix enlarged hard and tender. There was some retroflexion and on bimanual examination the uterus was found enlarged.
I advised rest as far as possible in the recumbent posture, cessation of sexual intercourse, with vaginal douches of warm water and alum ʒi to ʒiv, night and morning. I used the glycerine tampon occasionally and after a few weeks inserted a Hodge's pessary. I prescribed Ferri et Quin. Citrat. ʒiss Aq. ad ʒviii ʒss Dil. with a pill containing Ac. Arsenios gr. 1/60. Ferri Sulph gr. 1/4 Pil. Ferri et Aloes. gr. 3/4 Ext. Taraxaci 2.8; daily. The patient improved rapidly and soon recovered her usual health.

Haemorrhage in Extra Uterine Pregnancy.

When bleeding occurs in this condition, it is characterised by its irregularity rather than by its abundance. Amenorrhoea is sometimes the case rather than otherwise. The diagnosis of the cause of the haemorrhage depends much on the history. The patient usually does not menstruate for six weeks or so and irregular bleedings then occur in conjunction with what

are known as the bleeding symptoms, - changes in the breasts, morning sickness, vomiting &c. The uterus is found enlarged on bimanual examination - and pain is felt in either groin. As the case goes on a growing tumour is felt situated in either groin. Some times along with the irregular bleedings there is a discharge of membrane, - the decidua vera, and this should give rise to the gravest suspicion of the presence of this formidable condition. Such a case usually ends in rupture in the fourth or fifth month and the patient dies of shock or of internal haemorrhage. But some patients survive the shock, and in other cases rupture does not take place for some months longer, and in these cases foetal movements may be felt, and foetal heart sounds may be heard by the physician.

The bleeding in such cases does not require any special treatment but where suspicion amounting almost to certainty exists of such a condition, it is certainly wise to operate as soon as possible with the object of extracting the foetus from its abnormal position.

Haemorrhage due to Molar Pregnancy

The patient who has a fleshy or blood mole

may be said to be in a state of "missed abortion". Such a patient is not always the subject of severe haemorrhages. Indeed in some cases bleeding is entirely absent, but usually irregular haemorrhages are present, and sometimes if the mole should happen to be decomposing, a foetid discharge accompanies them. The mole usually does not remain in utero longer than what would have been full term had the foetus developed normally. Sometimes haemorrhage occurs just before the mole is expelled like an ordinary case of abortion. The diagnosis depends partly on the history of the case, and partly on the uterine condition of the uterus, as regards size which is less than at a corresponding period in a normal pregnancy. The diagnosis is difficult, and probably will not be made until the mass is expelled, but if the haemorrhage is profuse, ergot should be administered and if this is not sufficient the os should be dilated & the mass removed

In the case of the hydatiform mole haemorrhage is usually a more marked symptom. The bleeding in this condition may be slight or it may be severe, and may be continuous or coming on at intervals. The haemorrhage

is usually absent for the first month or two of pregnancy and may not occur until the mass is about to be expelled. Along with the bleeding there is often a watery discharge caused by the rupture of the vesicles, and sometimes there are some vesicles expelled in the discharge.

The diagnosis of the cause of the haemorrhage is not always easy at first there are the ordinary signs of pregnancy with cessation of menses but after two or three months bleeding set in. The uterus is then found to increase much more rapidly in size than usual. At the time that we would expect to find them, ballotment foetal heart sounds and movements are absent. The late Professor Leishman[I] calls attention to one sign which he considered characteristic. — a "boggy" feeling of the cervical region with the absence of any of the hard presenting parts of the child. Of course escape of vesicles is characteristic of this interesting condition.

Moles of this description are not usually retained longer than six months, when the over distension of the uterus causes uterine contractions, which usually succeed in severing the connection between the uterus and the mole with the result that bleeding is arrested and the mole expelled. It

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sometimes happens however that the connection between the two is closer than usual and a part of the ovule may thus be left in utero. In this case, as in incomplete abortion the patient is subject to repeated and often alarming haemorrhages until the retained part is either expelled or removed.

The treatment of the haemorrhage is usually expectant. Vaginal douches of warm water may be found to act well enough in controlling the bleeding, but if it is seen that the health is being affected by the bleeding, uterine contraction should be set up and for this purpose a large dose of ergot should be tried. If this is not successfull, the os should be dilated by the hand or Hegars dilators, and the mass cleared out with the hand.

Mrs G. had an abortion two months previously to my seeing her. The abortion was at the third month, and in the opinion of the medical attendant had been complete. She had previously had a child at full term two years before the abortion had come on. About six weeks after the abortion was evidently recovered from, she began to notice a slightly coloured discharge, which was never profuse and at times entirely disappeared. I saw her 2 weeks after the return of the haemorrhage

She was very thin and anaemic and complained of being sick at times, not markedly in the morning. She had complete loss of appetite The bowels were very costive. On examination per vaginam the uterus was found slightly enlarged and blood was seen trickling from the os. The history would have led me to believe that the case was one of sub-involution of the uterus or of retention of part of the ovum

She was ordered to rest in bed or on the couch as much as possible. Wine (old Port) was ordered, and nourishing diet given in small quantities every two hours. The following pills were given three daily. Ry Ergotinin gr 2.

Ferri Sulphat - gr 1

Ext Hamamelis. M. ut fac pil

Vaginal douches of warm water were given morning and evening.

Under this treatment the patient improved somewhat but the haemorrhage always shewed itself afresh when she attempted to rise. On bimanual examinations at intervals of a week, the uterus was found to be rapidly increasing in size, and at the end of six weeks from the onset of the haemorrhage, a very hard tumour was felt in the hypogastrium. There

Consulted with my Chief Dr Evan Jones about the case he was of opinion that the case was one of hydatiform mole, with the possibility of extra-uterine pregnancy or acute sarcoma of the uterus. I was of opinion that the os should be dilated, but he wished to wait developments. The tumour continued to increase rapidly, and by the end of another month had reached the umbilicus. At this time severe pains came on with repeated vomiting and great tenderness over the abdomen. On vaginal examination the os was found dilating. I gave a hypodermic injection of morphia B.P. 1/6. and the case was seen again in five hours. The os was now patulous and on inserting a finger a few vesicles came away. The nature of the case being now quite clear, I inserted my hand into the uterus and brought away the whole vesicular mass. The patient made a complete but very protracted recovery.

Reasonably Haemorrhage after abortion or confinement is due to placental polypus. The cases may be looked upon as of the nature of incomplete abortion, or if after confinement the foreign body will cause secondary haemorrhage. In those cases the placenta has been retained, partially or in toto, in the uterus and the connection between them not being severed. Its vitality has been maintained. Its bulk may be increased

by the deposit of fibrine on its surface. The placenta, or the part of it left in utero is usually attached to the endometrium by a small part which forms a sort of pedicle to the polypus so formed. The foreign body may be found presenting at the os. It is sometimes called a fibrinous polypus, but this form of polypus may arise apart from pregnancy, and sometimes forms on the stumps left after the removal of a fibroid by the deposition on it of fibrine.

The treatment of this condition is of course dilatation of the os and removal of the mass with the finger or ecrazeur.

Haemorrhage due to Inversion of the Uterus

This is a rare accident and occurs mostly after confinement and is indeed one of the causes of post-partem haemorrhage, but as it is an accident of great and grave importance, post partem haemorrhage from this cause deserves special consideration. Altho it occurs usually immediately after the birth of the child, it has been known to occur apart from pregnancy

As to the cause of this accident after confinement, the most usual alleged causes are traction on the cord by the attendant, or tension of a funis naturally short, or one rendered so by its being

twisted round parts of the foetus. Though this may at time cause it, it will not do so, so frequently as would at first sight seem probable, as uterine contraction usually follows any traction applied to the cord. Should however the uterus be relaxed at the time of the traction, and especially if the place ente is situated at the fundus, inversion may be produced. Rokitansky[I] believes that inversion is due to uterine inertia or paralysis over the seat of the placenta, and Dr Tyler Smith[I] to the same condition of the upper part of the uterus, the lower part being firmly contracted, and the upper part being drawn in by the contraction of the surrounding tissue, and caught by the contracted lower portion. Uterine inertia then either partial or complete is indeed by the cause of this accident after delivery.
Dr Weil[I] and Dr Matthews Duncan[I] contended that inversion of the unimpregnated uterus was impossible. Dr Tyler Smith contends that this accident does occur, while the late Professor Leishman[I] was of opinion that it did occur, and especially if there is anything in the interior of the uterus, eg. a clot or a polypus which will excite uterine contraction.
When the accident occurs after confinement the patient suffers very severely from shock, with pallor, faint-

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ness, loss of vision and vomiting The haemorrhage varies very considerably and this depends very much on whether the placenta has been separated from the uterus or not. If the placenta is yet completely adherent the haemorrhage may be trifling, although shock will be present to a considerable degree. But if the placenta has been separated, partially or in toto, the haemorrhage will be extremely severe and may, unless means are promptly taken to arrest it, prove rapidly fatal. although the contraction of the os at the upper end of the inverted organ will tend to control it, to a greater or less degree.

Inversion of the unimpregnated uterus is so rare that the symptoms of its occurence are not well known, shock will be present to a greater or less degree while the patients feelings will direct attention to the genital organs. Haemorrhage has not been a marked symptom in reported cases of this rare condition. J. Schauta[I] relates a case where a patient aged 78. consulted him about a tumour in the vagina which had been present for one year & was the cause of frequent haemorrhages and dysuria. He found this to be the uterus inverted, and the cause of the inversion was a small myomatous growth protruding from the inner surface of the

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uterus The patient was emphysematous and had bronchitis The myoma was removed and as sloughing appeared imminent in the uterus it was taken away by the cervix. The patient recovered in spite of many adverse circumstances.

occasionally inversion of a gravid uterus has remained unreplaced or its occurrence has not been recognized at the time, and in all those cases where the organ has not be replaced and the patient has recovered from the immediate effects of the inversion, haemorrhage will occur continuously or at intervals, and especially at the menstrual period and after exertion, and this recurring haemorrhage will call for treatment.

The diagnosis of the cause of the haemorrhage is usually easy. When the inversion follows soon after delivery the shock, with the absence of the hypogastric tumour, and the presence in the vagina of a bleeding mass will make the nature of the case plain. Confusion may arise between this and a polypoid myoma. If the inversion is complete the breadth of attachment may aid us considerably. Any contraction occurring in the tumour or any pain in manipulation will aid us in diagnosis. Bimanual examination, or examination with one finger in the rectum and the

hand on the pubes or with the uterine sound in the bladder will shew absence of the uterus from its usual site in a case of inversion. It is chiefly the partial inversion or an inversion that has not been reduced and has been present for some time, or an inversion in the unimpregnated uterus that is most apt to be confused with a polypoid myoma.

The treatment of the haemorrhage in this condition of the uterus resolves itself into the reduction of the inversion, and the method of doing this will depend on the time which has elapsed since the accident occurred, and also on the condition of the uterus whether impregnated or unimpregnated. The os contracts firmly so soon after inversion has occurred that reduction is rendered very difficult unless immediately effected. If the os is quite relaxed then the placenta should not be stripped from the uterus but returned into the cavity. This prevents haemorrhage But unfortunately the os is usually so contracted that if the placenta is still adherent, we have no option but to remove it before attempting reduction, so as to lessen the bulk of the organ to be returned.

The patient should be placed with the hips raised and the head low so as to get rid of pressure from the surrounding organs and tissues. If the in-

version has just immediately occurred, the fingers should be introduced into the vagina and the fundus pressed upon gently but continuously. or the uterus may be grasped in the hand and pressed upward. This will usually effect our purpose But if some time has elapsed since inversion took place the uterus gets so congested and swollen by the constriction exercised by the contracted os, that reduction is rendered much more difficult. The organ may be grasped in the hand and pressed firmly for a time before pressing it upwards. After the organ has been replaced to a certain extent, the contractions of the uterus itself often bring the uterus into its proper position. Unless the uterus is contracting firmly the hand should follow it, as reduction takes place, and not be withdrawn until it is expelled by the uterus itself. This will prevent haemorrhage from a relaxed uterus. A full dose of ergot should be given after reduction has been effected. If the case has not been reduced for a long time after inversion has taken place, the difficulties are much more serious. Continuous and steady pressure must be applied to the fundus and as this obviously is impossible, by manual pressure, air or water bags have been used, introduced into the vagina

In a case of Dr. Tyler Smith's[I] this was used for a week, with the result that inversion of ten years standing was successfully reduced. In long standing cases a number of superficial radiating incisions may be made around the os, and this along with continuous pressure from a vaginal air or water bag, may ultimately effect reduction.

Professor Thomas[I] in such cases has successfully opened the abdomen and mechanically stretched the os while the uterus was pressed upon by the fingers in the vagina.

Where reduction is impossible and the patient is continually subject to repeated floodings, the organ should be removed with the ecraseur.

As shewing the effect on the circulation in an inverted uterus, exercised by a firmly contracted os. Hutchin[II] relates a case where a mulatto woman was attended during confinement by a negro midwife. Inversion occurred and Dr Hutchin was called in three days late and found the uterus sloughing being strangled by a firmly contracted os. After removal of the sloughy organ the vagina was packed and the patient recovered.

Haemorrhage from an inverted uterus must be considered as in some degree beneficial it relieves the

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II Archives of Gynaecology. New York June 1893.

venous congestion in the inverted organ, and so lessens the liability to sloughing. So far then as it is not excessive, it is beneficial and it is only when it is excessive and is evidently draining away the strength of the patient that interference is called for. In such a case, where reduction is impossible, amputation is the only means of saving the patients life.

The only cases which may be considered absolutely irreducible, are those where adhesions have formed between the inverted uterus and the surrounding tissues.

Haemorrhage due to Rupture of the Uterus

In this condition the haemorrhage may be entirely internal, or may be external, or both according to the site of the rupture, and may be very severe or slight according to the extent of the laceration. Slight lacerations of the cervix are very frequent in labour, and occur in all primipara at that time. Hence a small quantity of blood is usually present in the uterine discharge during the earlier part of labour. The lacerations are permanent and the remains constitute a distinguishing feature between the os of a patient who has had children and one who has not.

In some cases the haemorrhage is entirely internal, and this will occur if the peritoneal aspect of the uterus has been ruptured. In other cases where the peritoneum has not been ruptured, the blood may escape externally, especially as the presenting part recedes on the occurrence of rupture, but in such a condition, the blood may collect under the peritoneal aspect of the uterus, and form a sub-peritoneal haematocele.

At the time of rupture occurring, along with the signs of severe haemorrhage - there is very marked shock, and recession of the presenting part of the child, with cessation of the labour pains.

If the child be still in utero it should be delivered at once by the forceps, but as the pelvis is often deformed in this condition - craniotomy, if necessary should be performed. If the placenta has passed through the rent into the peritoneal cavity, it may be pulled back by means of the cord, but if the child has passed into the abdominal cavity it is safer to open the abdomen and extract the child thus. Many patients have been saved by this means.

Rupture usually occurs during labour, but cases are reported where it has occurred much earlier in

pregnancy and the shock and symptoms of internal haemorrhage in such a condition could not be distinguished from that due to rupture of eclopic pregnancy.

Drs Humphry and Collins[1] explain the cause of obscure severe & sometimes fatal haemorrhage which at times takes place from the uterus some days after the labour is over. according to these authorities a partial rupture of the uterus has taken place during labour The rupture is in the thickness of the uterine wall, and so a cavity is formed which is filled with blood. The cavity ruptures sooner or later, with evacuation of the haemorrhagic contents; and with a free discharge of blood from the communicating uterine veins and which, if unchecked may prove rapidly fatal

Slight haemorrhages sometimes occur during pregnancy where the placenta is soft & pulpy and where anything which causes increase of blood-pressure causes oozing of blood from the placental vessels. This blood sometimes only reaches the amniotic cavity and colours the amniotic fluid In other cases it escapes externally. The cause of the haemorrhage is difficult of diagnosis, and rest should be enjoined so far as possible, with opium and [illegible]

[1] British Medical Journal 1892

small quantities of ergot administered, if that is not sufficient to allay the haemorrhage, and the patient is evidently sinking under the drain on her system, abortion should be induced.

Haemorrhage in the form of pelvic haematocele.

The haemorrhage in this condition is usually effused into the pouch of Douglas but sometimes between the uterus and the bladder. The blood may only be present in the pelvic cellular tissue, constituting what is known as sub-peritoneal haematocele. If it is bound down by adhesions it is called encysted.

Haemorrhage in this form nearly always occurs during the menstruating period of a woman's life, and indeed usually during the menstrual period. It often is connected with the pregnant state. Macnaughton Jones[1] met with a patient aged sixty who had this affection following a fall from a chair.

It may be due to conditions of the blood generally, such as will be shown later on in this paper to be the cause of menorrhagia or metrorrhagia, eg. purpura, plethora, - lead poisoning, contagious fevers, jaundice &c., or the haemorrhage falling into this abnormal position may be due

[1] Diseases of Women

to obstruction in the genital passages.
It may occur during pregnancy, during the progress of an abortion or by the early rupture of the impregnated uterus, or of ectopic pregnancy. The haemorrhage occurs after operations on the uterus in some cases. It may also be caused by any violence to, or by manipulations of, the genital organs, and especially if these exert their influence during the menstrual period.
Pelvic haematocele may exist, and be produced by other causes than those acting directly on the uterus. The origin of the bleeding may be in the ovary or Fallopian tubes.
The symptoms of the occurrence of haemorrhage in this form are those common to all forms of internal haemorrhage, plus those due to accumulation of blood in the lower part of the abdominal cavity. In addition to the symptoms of severe bleeding attention will be directed to the pelvis by a feeling of weight and pain. In addition to these signs external haemorrhage may be present as well. The degree of shock will vary according to the amount of blood lost.
The blood will usually be found on examination as a semifluctuating fulness towards the back of the uterus, pressing it forward, and causing rectal dis-

tress, either in the shape of tenesmus or of difficulty in defaecation. while dysuria or retention of urine is frequent. The abdomen is swollen and tender especially in the hypogastric region. As the case progresses the semifluctuating mass becomes smaller and harder. and the further local sequs will depend on the further progress of the case.

There is often marked pains in the limbs from pressure on the sacral nerves.

The diagnosis of the existence of this condition is based on the history of the case. the sudden appearance of all the symptoms, or the sudden appearance of those denoting internal haemorrhage in the course of an illness. It may be distinguished from inflammatory effusion around the uterus by the history, and the presence in the latter of febrile symptoms. From acute retroflexion of the uterus the diagnosis is made by the sound. The history should distinguish it from fibroid tumours or cysts near the posterior aspect of the uterus.

Peri-uterine haematocele is necessarily very dangerous to the life of the patient. She may rapidly succumb to the immediate effects of the haemorrhage, but if she should survive these, she has before

inflammatory reaction, with all the dangers of subsequent septic poisoning which well depend of course on the cause of the haemorrhage

The treatment of the actual haemorrhage is that of all intimal haemorrhage, rest in bed hypodermic injections of ergotin, ice, or iced water in Leiter's tubes, to the part affected, - the hypogastrium, stimulants to prevent syncope. Subsequently opium by rectum, and digitalis gummic & iron are indicated. The indications for tapping or making an incision into the cavity containing the fluid - per vaginam - are, symptoms of distress from pressure of the fluid such as to embarrasse respiratory or cardiac action, long persistence of the effusion, evidence of suppuration in the effused fluid, or any symptom indicating threatening septicaemia. Unless these conditions are present it is safer not to interfere surgically. It is needless to say that every thing must be done antiseptically. Aspiration is to be tried first by vagina or rectum, and if the fluid will not flow, the cavity should be opened per vaginam, & the contents evacuated, the cavity washed out by bichloride solution, and a drainage tube inserted, the vagina being packed with iodoform gauze.

Uterine Haemorrhage not connected with pregnancy is of very frequent occurrence and may be due to constitutional conditions, or to abnormal states of other and distant organs, or it may be due to some affection or condition of the womb-itself.

Bleeding may occur in the case of acute diseases. as typhus fever; measles, scarlet fever, small pox, acute yellow atrophy of the liver, many cases of jaundice, malaria, scurvy, & phosphorus poisoning. In many of the acute fevers abortion in a pregnant patient is very apt to take place with great risk to the mother. In these acute diseases, according to Pozzi, the illness is occasionally heralded by "uterine epistaxis."

In debilitated conditions haemorrhage may be present either in the form of menorrhagia or of metrorrhagia. Thus it is found in chlorosis, anaemia, chronic lead-poisoning, Chronic Bright's disease, purpura, Haemophilia, chronic phthisis, and debilitated states generally. In these conditions amenorrhoea is often present but it may alternate with menorrhagia. In these conditions and diseases the alteration in the quality of the blood has probably much to do with the haemorrhagic discharge, and the uterine blood vessels will participate in the shattered condition

of the system generally. In chronic Bright's disease the high arterial tension will tend to cause rupture of the small uterine vessels, and especially during the congested condition of the womb at the menstrual period. In haemophilia a special condition of the blood-vessels is present, and in this diathesis bleeding will be apt to occur after exertion, coitus or per-vaginal digital examination, while excessive menstrual flow will also probably be present. But in debilitated conditions generally, metritis is especially apt to occur, and indeed the existing metritis may be the cause of the debility, while other conditions eg. polypi fibroids must be taken into account as these may be the cause of the anaemia. The history of the case must be taken into account in judging of the relation of cause & effect.

In speaking on the subject of uterine bleeding connected with acute fevers with Dr Drew of Kilmarnock, he remarked that he had very frequently observed this symptom just at the commencement of the illness, but that he had never observed it during the illness itself, or during convalescence, and he regarded it as in the same light as bleedings from the nose in these diseases.

The following case of uterine bleeding in a case which ultimately developed into Purpura Haemorrhagica occurred in my practice here about three years ago. E. C. aged 16 had been complaining of great weakness for several weeks before I saw her. She was very breathless on any exertion, and had all the symptoms of marked anaemia. She had never menstruated but had always been healthy & strong up to a few weeks previous to my first seeing her. Blaud's pills were ordered, together with stoppage of work and good food. A few days later haemorrhage appeared from the vaginal orifice, but as she had none of the usual symptoms of menstruation I concluded that this was not menstrual flow. I advised rest in bed with the internal administration of ergot and iron three daily. The bleeding lasted for a week, and on examination, the blood was seen trickling from the os, but as it never assumed alarming proportions, I did not pursue my investigations further. After the haemorrhage had ceased she was allowed to get out of bed and the administration of iron was continued for a month when arsenic was added to the mixture. The patient improved somewhat but was always anaemic. Three months after bleeding first appeared, haemorrhage recurred and lasted for ten days. As in the previous in-

stance the bleeding were was more than a more trickling Ergot & Iron were again administered and after the haemorrhage had ceased absence was continued alone. The bleeding was never accompanied by any symptom referable to the uterus The anaemia continued and six weeks later large purpuric blotches appeared all over the surface of the body The patient was now so far reduced in strength as to be unable to sit up in bed and had the characteristic appearance of a patient with advanced pernicious anaemia. A few days later, after the first appearance of the purpuric spots, the patient passed very dark stools and she continued to do this almost uninterruptedly until her death. The patient also vomited several times daily and on many occasions, the vomited matter consisted of dark blood. On several occasions she coughed and expectorated mouthfuls of blood. Blood also oozed from her gums. Haemorrhage from the uterus again appeared and continued to flow until her death, which took place about three weeks after the appearance of the purpuric spots. In the acute diseases, the disease itself, and not the haemorrhage accompanying it usually gives rise to anxiety but if the uterus plugging the vagina with

iodoform gauze; with the application of cold in the shape of ice or cold wake cloths over the hypogastrium may be resorted to.

In the anaemic & puerperal forms Iron & arsenic should be given continuously for many weeks, with the administration of ergot and digitalis at the menstrual period if the haemorrhage is severe.

In lead poisoning the treatment appropriate for that condition should be undergone.

In chronic Bright's disease, the administration of iron together with medicines such as solution of nitroglycerine or ethyl nitrite - which tend to lower the Blood-pressure, in combination with a judicious use of purgatives and sudorifics should be tried. Residence at a mineral spa in a warm atmosphere may prove beneficial, in conjunction with a restricted diet.

For anaemic cases where expense is no object residence at a ferruginous spa proves beneficial.

In obesity & plethoric conditions of the system generally, menorrhagia is sometimes present, and in this condition the question of the abuse of alcohol must be cautiously enquired into. Alcohol is a very common cause of menorrhagia and in all cases where no evidence of any local mischief is present to

explain the presence of the bleeding, the question of its excessive use should be enquired into. Alcohol is contra-indicated in hemorrhagic conditions unless there is some urgent indication for its use. In plethoric conditions, its influence in causing hemorrhages may be explained partly by the congested ~~state~~ of the liver following its use, and partly by the congestion caused in the pelvic generative organs, added to the existing plethoric condition of the organs generally

Hemorrhages in obesity & plethora will be benefited by abstinence from alcohol, very plain diet with residence at a mineral spa

Haemorrhage due to over-lactation

During lactation menstruation is usually absent, but in some females it continues regularly throughout, just as in a few exceptional instances menstruation or at least a periodic flow continues during pregnancy. In some women lactation early begins to reduce the strength, and in others a prolonged period of suckling, causes the health visibly to suffer. It is usually in these cases that excessive menstrual flow occurs. and the two conditions quickly reduce the body strength The menorrhagia in this condition is, then, analogous to that some-

times present in anaemic and debilitated states.
I had the following case under treatment a few years ago.
She aged nineteen. had an illegitimate child at full time, but, as she had to earn her living, her own baby was brought-up on cows milk, while she went out as a wet nurse. The baby she suckled was a large healthy little fellow and required a good supply of breast milk, so that she soon began to feel rather pulled down in body and strength. Five months after the birth of her baby, she began to menstruate. The flow was much more than she had been accustomed having previous to her pregnancy. She continued to menstruate, losing too much at each period, and the periods occurring too frequently, until her baby was nine months old, when she became so anaemic and feeble that she was forced to go home, taking however her foster child with her. On my visiting her. I found her so anaemic and weak as to be unable to leave bed, except for a very short interval. She was menstruating at the time and the blood was coming away in clots. She said that for 2 months previously she had menstruated every two weeks, the flow being similar to that present on my visit, and lasting on each occasion for five

or six days. The foster child was put on cows milk, and she was enjoined to remain in bed until the end of her period. Ergot and iron were administered every six hours. The bowels were moved by enemata and the breasts attended to. The period ceased in three days and during the interval; iron was administered with rest mostly in bed, & good food. The milk soon disappeared from the breasts. And the next menstrual period did not occur for three weeks, and the flow on this occasion was not so excessive, and was unaccompanied by clots. The administration of iron was continued and in a few months menstruation had assumed its normal condition.

In any menorrhagic affection during lactation care must be taken that there is no local cause to explain the unusual symptom, and especially that metritis is not present, as it is so apt to be in a patient who has some time previously been confined. It must be remembered also that the uterus may be rendered more liable to haemorrhage by its being subjected to reflex irritation from the nipple
The treatment of a simple case is easy but of course any existing abnormal local condition requires attention. Cessation of lactation good food with

the employment of iron for a period of weeks, and with the use of Ergot- Polas Bonnet or Dequales at the menstrual period if necessary, will usually soon bring the patient back to her normal condition.

Haemorrhage due to affections of the heart and liver sometimes occurs and must be looked upon as beneficial in its action rather than the opposite, unless it is present to such an extent as to endanger the life of the patient. The haemorrhage in such conditions is not to be treated locally, unless it is so severe as to call for plugging, but by appropriate means directed to the organ at fault. If due to obstruction in the liver, such as would be caused by cirrhosis, Bil Hydrarg. and salines with the administration of Polas Bolled. are indicated with abstinence from alcohol. It is especially apt to occur if ascites is present and the cessation of bleeding may correspond with an increase of the ascetic fluid.

If due to cardiac incompetence, slight haemorrhage will relieve the venous congestion present and it is in such a condition that Dequales or Hydrastis will act most powerfully. A few years ago I attended a patient aged 40, who was suffering from mitral incompetence & from ascites due to alcoholic cirrhosis of the liver, and

who was much relieved temporarily by menorrhagic attacks. Pills containing Pulv Digitalis, Pulv Scillae & Pil Hydrarg a.a. grt. relieved the patient wonderfully and so lessened the necessity for excessive menstruation.

Haemorrhage at the commencement of the menstrual period of life

Menstruation in young girls is sometimes ushered in by pretty smart haemorrhage. The periods are often irregular, and the haemorrhage excessive on each occasion. The haemorrhage usually tends to right itself spontaneously as time goes. In such a case the usual remedies are indicated where interference is called for, and in this connection Digitalis and Potas. Bromide probably will give as good results as any drug we can employ.

A few years ago I saw a girl aged 16, who had never menstruated previous to the setting in of the bleeding which caused her to seek advice. The haemorrhage continued steadily for four months, and all the usual remedies failed to produce any effect, and the most careful examination failed to discover anything abnormal, and the case finally got well of its own accord. The ovaries are probably the cause of the haemorrhage for the most part at this time of life when they are

just springing into activity. but according to Pozzi[I] there is a special liability to endometritis in girls at the age of puberty. The intense congestion of the uterus at this time often is the cause of inflamatory mischief and especially if the patient gets chilled at the menstrual period, or has recourse to masturbation, or if the uterus is deformed in any way by incomplete development or by any obstruction to the outflow of menstrual fluid, eg. by conical cervix, stenosis of the os, or congenital anteflexion. In such cases the metritis is the cause of the unwonted bleeding. At the commencement of the menstrual period of life, as at its termination, the haemorrhagic form of metritis is very common. and this gradually passes on to the fungous or villous form. Women frequently have experience of bleedings occurring at the menopause and frequently a woman lets some very serious disease run on unchecked until it is past hope, the haemorrhage being the most marked symptom which has attracted her attention. Women expect to have bleedings and pain at this time and so we find that diseases causing these symptoms are far advanced before alarm has arisen as to their condition. This is the reason that so few malignant growths of the uterus are seen in their earliest stages and a careful examination should always

I A Treatise on Gynaecology (New Sydenham Society 1893)

be made to eliminate this source of error in diagnosing haemorrhage as due to the menopause. Polypi also should be excluded. I notice under "Haemorrhage from polypi" a case where a woman at the climateric period had been losing blood freely, and where the removal of a small cervical polypi was followed by cure;

The haemorrhage at this time usually takes the form of menorrhagia unless there is something abnormal in the uterus to cause bleeding at other times. The periods sometimes come too frequently and the flow may be excessive but usually the periods are irregular, or the patient may have menorrhagia at intervals of two or three months. Polas Bromide, Aegi ales or any of the other drugs used to check bleeding may be tried to alleviate the symptoms

At the menopause the uterus is again subjected to excessive congestion, which shews itself in the periodic and excessive haemorrhages which are so common at this time. But this excessive congestion often leads to endometritis on any further cause of uterine congestion being introduced, and at this time of life, as at the age of puberty, there is a special liability to the haemorrhagic form of metritis, which leads to marked changes

in the endometreum, constituting fungous endometritis. At the menopause, as at puberty, the ovaries are in a very disturbed condition, and it is easy to imagine that nervous influence from them would act on the state of the uterus and cause haemorrhage.

Marriage very frequently is the cause of haemorrhage in women who have previously been regular. The periods get irregular and the flow increased, and this is due partly to the congested state of the pelvic organs caused by marriage, and partly on the excited condition of the nerves which however sometimes causes amenorrhoea. Menstruation usually assumes its normal state as the female gets more accustomed to married life, but if excessive coitus takes place and especially if this occurs at the menstrual period, the excessive congestion may lead to endometritis and the menorrhagic condition become permanent.

Haemorrhage due to Metritis.

This may occur in the form of menorrhagia or of metrorrhagia. and metritis may cause haemorrhage in the unimpregnated uterus. Should conception occur abortion is very apt to occur. As has been noticed in a previous part of this paper. haemorrhage from this cause is apt to occur at the commencement

and termination of the period of life during which menstruation occurs. The blood is sometimes mixed with a yellowish or dirty leucorrhoeal discharge, or this discharge follows close on the cessation of haemorrhage at the menstrual period. The leucorrhoeal discharge is often streaked with blood or dirty from slight haemorrhages occurring at other than the menstrual periods. Bleeding is more marked in fungous or villous endometritis than in the other forms.

In many cases of endometritis menorrhagia and metrorrhagia are absent, and amenorrhoea or scanty menstrual flow is the condition present. In many forms of uterine disease gastric symptoms, dyspepsia with complete anorexia, are present. In all kinds of metritis the general health gets reduced and if the gastric symptoms are also present, it is easy to understand how the health may get so far reduced, and the patient so anaemic, that haemorrhage does not take place the presence of metritis notwithstanding.

The following case which is illustrative of this is presently under treatment.

Mrs A. aged 27 multipara has suffered from metritis ever since the birth of her last baby five years ago. Since then she has suffered considerably from pain in

the left iliac region, and especially on menstruating. She suffered from menorrhagia on four or five occasions after the birth of her child. but since then, until after I had treated her for some months, scanty menstrual discharge was the condition present She had never suffered at any time from metrorrhagia. About fifteen months ago she came under my care. She was very far reduced at the time and the menstrual periods were very irregular, sometimes not occurring for 3 months at a time, for many months previously. She complained of no gastric symptoms and took food fairly well I treated her by douches of warm water morning and evening and by the passage of a probe — for the first six weeks — rolled in cotton soaked in a solution of Copper Sulphate gr 40 to ℥i. I passed this quite to the fundus twice with the object of coagulating all the leucorrhoeal discharge lying in the endometrium, and so facilitating its removal by the probe and cotton on withdrawal. I then introduced Lugol's Iodine passing the probe well to the fundus. The treatment was carried out twice weekly for the first six weeks, and weekly during the next three months. Under this treatment she improved very much, and her health and appearance changed for the better. and her weight increased. By this time

she commenced to menstruate regularly and the flow she considered normal in amount. She felt so well then she imagined she was permanently cured and was confidently expecting that pregnancy would soon follow. She therefore refused to undergo further treatment.

About two months later she again consulted me her health was bad she had lost her appetite. and the leucorrhoea which had previously been in abeyance returned afresh. She complained of great pain soon after food with a feeling of loading or weight in the epigastrium, often followed by vomiting, when these symptoms ceased. Diarrhoea was frequently present, the stools consisting of undigested food, and being sometimes mixed with blood. The menstrual flow had also lessened, and the periods became irregular. As she refused to undergo uterine treatment I prescribed for her gastric symptoms by ordering milk diet, rest for one hour after meals. with a mixture containing

Ac Hydrochlor dil 3ii
Liq Strych 3i
Liq Pepticī 3ī
Spt Chlorof 3ii ad 3iii

3ii T.D. after meals.

She however did not carry out my instructions, and a few evenings later I received an urgent

message to visit her. She had in a sudden fit of hunger eaten half a pound of fried steak, with the result that, on my arrival a hour later, I found her completely unconscious, writhing about the bed and retching violently. She had previously to my arrival vomited freely. I at the time thought that rupture of the stomache must have occurred, and gave a very unfavorable prognosis. I remained by her for four hours giving hypodermically every half hour ¼gr of Acetat. morph, watching carefully the effect on the pupil. By the end of that time she had become quieter, and on my visiting her again five hours later, I found her conscious but complaining of great pain over the epigastrium with occasional retchings. I put her on iced soda-water, iced peptonized milk, and on Cannecks Beef Peptonoids. and to this diet I confined her for a week and to bed. I then allowed her to get out of bed a little, and I then commenced my intra-uterine medication as before. She was getting on rapidly when she again took a large quantity of cheese, with the result that she again became unconscious for two hours, and the same course of treatment had to be undergone as before. I continued intra-uterine treatment and warned her carefully to follow out my instructions as regards

diet. The strength gradually improved, her headache symptoms left slowly, and in 2 weeks I was able to allow a greater variety in diet. In a month after her last gastric attack, she was able to take ordinary food. The leucorrhoeal discharge ceased almost entirely and her menses became regular and soon assumed the form of menorrhagia. She is now in good health & able to do her daily work, the leucorrhoeal discharge is kept in check by intra-uterine medication, once in three weeks, and her only symptom now is menorrhagia. She keeps well as long as menorrhagia is present but the menorrhagia is only present when she is in good health.

In the villous form of metritis, haemorrhage may persist for weeks and reduce the patient to an extremely anaemic condition. Polypi or fibroids are sometimes present along with the metritis, and this makes the haemorrhage more severe. Metritis is also frequently associated with other conditions, as sub-involution, flexions of the uterus &c. And is also frequently present in anaemia & prolonged lactation.

The diagnosis of haemorrhage from this cause is usually easy to make by the presence of the leucorrhoeal discharge. the enlargement of the uterus, and by examination of the endometrium after dilatation of the cervix. It must not be confused with the bleeding in a case of malegnant disease of the fundus, which is distinguished by the serous and foetid discharge. pain, and by microscopic examination of a part removed from the endometrium affected by the disease.
Confusion is apt to occur between haemorrhage due to metritis, and that due to a polypus, and distinction can only be made after dilatation of the cervix, and thus, combined with bimanual examination, may be necessary in the haemorrhage due to fibroids. It must not be forgotten that the two may be combined.

The treatment of this condition is not very satisfactory in its results as metritis is so apt to return
In addition to general treatment. ie. regulation of bowels and diet, hygienic surroundings. instruction as to work, and attention to any derangement of health, local treatment is required
If the metritis has followed a recent confinement or abortion, curettage with a subsequent injection of

ferric perchloride solution is indicated.
Where the metritis is acute, rest in bed is necessary and vaginal douches of hot water should be given. Tampons of glycerine are here very helpful. and if this does not remove the most prominent symptoms, small incisions should be made in the cervix radiating from the os, followed by vaginal douches.
The extent to which treatment will be required depends much on whether the endometrium of the cervix or of the fundus is affected. If the former vaginal douches combined with local applications of glycerine acid carbolic or Tincture of Iodine, and the remedying of any lacerations in the cervix will be sufficient in most cases
Many local applications have been used for application to the diseased mucous membrane. The electric cautery has been used after dilatation of the cervix, but Pozzi objects to this use on the ground that it leaves a cicatricial surface which effectually prevents pregnancy.
The application of strong chemical caustics is open to obvious objections, while the application of liquid caustics eg. chloride of zinc, nitrate of silver nitric or carbolic acid, on cotton fixed on a probe is inconvenient if properly applied. Unless the cervix is very

palliatives or has previously been related, the cavity gets all the caustic and the endometrium higher up none. Strong caustics should be very cautiously used, as their application may be followed by stricture.

Pozzi recommends intra uterine injection of 3 grammes of Tincture of Iodine. and if this fails he advises curettage of the endometrium with a blunt curette, followed immediately by an intra-uterine injection of ferric Perchloride. Injections of tincture of iodine are given on alternate days, commencing five days after operation, for two or three weeks as the case requires.

Gordes[I] relates a case where a few minims of Tincture of Iodine were injected after curetting the endometrium, and when immediately, severe pain came on followed by tetanic spasm of some of the muscles especially of the fingers & jaw. Hypodermic injection of Morphia gave instant relief but albuminuria resulted.

The treatment described above is the best means of combating haemorrhage and can be undergone while haemorrhage is present but for palliative treatment digitalis or Hydrastis (Fluid Extract), may be tried, sometimes followed by good results.

[I] Central Blatt. fur. Gynakolog.

Very hot vaginal injections are often very useful. Plugging may be resorted to if the case is urgent, either by introduction of a tent into the cervix, or by tampons of gauze or cotton wool in the vagina. The tampons may be soaked in an astringent solution. These of course are only palliative and should not be used unless in case of necessity. Fritsch[1] recommends ligature of the uterine arteries at either side of the cervix. While in exhausting haemorrhages such as sometimes occur in some forms of metritis, ovariotomy or vaginal hysterectomy may be had resource to in order to save the patient's life.

Haemorrhage due to uterine fibroids

This may occur in the form of menorrhagia or of metrorrhagia, and along with the bleeding there is often a leucorrhoeal discharge which sometimes has a foul or disagreeable odour, and especially if the fibroid is decomposing, or a fibrous or placental polypus is present. The haemorrhage is more marked if endometritis is present along with the fibroids, as it is so apt to be. Haemorrhage from this cause is exceedingly common. In some cases of fibroid tumour, haemorrhage is absent

1 A Treatise on Gynaecology (Poggi)

but in the great majority of cases, bleeding is present in some form or other. The bleeding may amount to a flooding at each menstrual period, but usually it occurs at other and more irregular periods as well, and in either of these conditions the bleeding may be such as to threaten the life of the patient, and indeed death has resulted by the rupture of a uterine sinus. The amount of blood lost depends partly on the situation of the fibroid. If it is sub-peritoneal, menstruation may not be much disturbed, and metrorrhagia be absent but it is usually present in a marked degree if the fibroid be interstitial, and especially if the fibroid take the form of a submucous tumour or a polypoid fibroid. Haemorrhage also will usually be more marked if the tumour is in the body or fundus, rather than in the cervical portion of the uterus.

The nearer the mucous membrane of the uterus the tumour is, the more haemorrhage is present. Villous degeneration of the endometrium is often present along with the fibroid, and in such a case the haemorrhage is worse. The nearer the endometrium is the fibroid, the more certainly will endometritis be present. If the fibroid is submucous, metritis is

always present and in these cases, along with marked bleeding, a leucorrhoeal discharge similar to that present in endometritis, will characterize the intervals of bleeding. If the tumour is sub-peritoneal, glandular endometritis only is present. The influence of fibroids in being the indirect or direct cause of haemorrhage is not confined to the unimpregnated state. Fibroids are apt to cause abortion with bleeding. After labour too, fibroids are apt to cause post partem haemorrhage, the presence of the tumour interfering with efficient uterine contractions. Fibroids, too, may cause sub-involution with its accompanying haemorrhage, while polypoid fibroids attached to the fundus are believed to be the most frequent cause of inversion of the unimpregnated uterus. Fibroids may cause slight bleedings during pregnancy simulating menstrual flow.

Bleeding from this cause must be distinguished from that due to ovarian tumours, malignant disease, pelvic inflammation or that present in retroflexion or anteflexion. The history of the case will help us in drawing a distinction between ovarian cases, pelvic inflammations, and fibroids. In pelvic inflammations the temperature will be raised and

local conditions will be quite enough to distinguish between the two diseases. Very careful digital examination, combined with bimanual examination and examination per rectum, and by passing the sound, should be made. In doubtful cases dilatation of the cervix will give us a better opportunity of examining the endometrium

Treatment of haemorrhage in fibroid tumours

When the haemorrhage takes the form of menorrhagea; rest in bed for a few days previous to, and during the menstrual period, with a saline purge previous to the period, will aid us in moderating the haemorrhage. Sexual intercourse should be sparingly indulged in, and avoided towards the menstrual period. To control the bleeding, very warm vaginal douches often do great good. Ergot of some may be given hypodermically, or by the mouth, while other drugs may be used if that fails. eg. Potas Brom. Digitalis & Hydrastis. Dilating the cervix is a temporary means of arresting the haemorrhage and glycerine and tannic acid can be subsequently applied to the endometrium, or curettage may be employed with advantage. Curettage often proves most useful It is carried out in the same way as when it is done for endometritis, and indeed it is chiefly

where endometritis is present that it will arrest the bleeding, altho the stimulation will act reflexly and cause muscular contractions, which will assist in controlling the haemorrhage.
Intra-uterine injections of liq. ferri perchlor. or of tincture of Iodine will sometimes be serviceable
Electricity either in the way advised by Cutter or Apostoli has proved very useful in arresting the bleeding altho a case is noted[1] where the application of the electric current was always followed by haemorrhage
Where the haemorrhage has been very severe and is endangering the life of the patient, with the object of inducing the menopause, oophorectomy has been tried, as advised by Battey, with favourable results: while many surgical operations have been devised with the object of removing the tumour, or the entire uterus but the results so far are not very favourable & the subject is not one which can be entered upon here.

The following case is illustrative of the effect of tincture of Hamamelis in arresting the bleeding due to fibroids
Mrs H. aet 35, five children, youngest aged six years, complained of the menses coming too frequently, every three weeks - with a profuse discharge on each occasion
This profuse discharge lasted for a weeks and was followed

[1] Epitome of current medical literature B. M. Journal Jan 30th 92

by a gentle oozing, lasting usually for about six days, so that the patient was only free from discharge for intervals of a week between the periods. She complained of considerable difficulty in defaecation. On examination I found the os rather low down, with a hardness at the back of the uterus. The sound passed four inches The diagnosis was a fibroid on the posterior aspect of the uterus. I treated her by administering in turns Extract Ergot Liquidum, Acid Gallic, Potas Brom, Digitalis with rest in bed during the haemorrhage, and vaginal douches of warm water and alum grs 10 to ℥i, but without effect. During the period I then gave her Potas Brom gr 6. & Tinct Hamamelis ℥15 in mixture three daily. Continuing the hot vaginal douches and the rest in bed. Under this treatment the discharge became less profuse and the trickling after the menstrual period ceased. I continued this treatment during several menstrual periods, and in the interval she had a mixture of Ext Ergot Liq ℥10 Syr Ferri Iodid ℥15. three daily. Under this treatment, and with regulation of the bowels by enemata, and insertion of a Hodges pessary, she continued to improve and in a short time passed out of my knowledge

Haemorrhage due to uterine polypi.

This either in the form of metrorhagia or of menorrhag-

ea is a common symptom in polypi of the uterus but sometimes it is absent when they are present I lately removed a polypus from the uterus of a young lady. The polypus was presenting at the os, and was about the size of a hazel nut, and was connected with the interior of the uterus by a long narrow pedicle. She suffered from dysmenorrhoea with very scanty flow. Along with the haemorrhage, there is often a foul or leucorrhoeal discharge which is especially the case if the polypus is fibrinous or placental, or is undergoing decomposition

Sometimes a polypus in the cervical canal gives rise to repeated haemorrhages during pregnancy, and these have been successfully removed without interfering with the course of pregnancy.

The following case is a good example of the effect of small polypi in producing bleedings.

Mrs S. aet 48. 3 children, the youngest 17, came complaining of excessive menstruation. She said that for the last eight years she had menstruated every three weeks, that each period had lasted for ten days or a fortnight, and on each occasion the blood came away to an excessive amount, and clotted. On examination I found a small mucous polypus presenting at the os, which was pedunculous, and with

the pedicle attached to the uterus about the internal os I removed these with the curette, and gave the surrounding endometrium a slight curettage. After its removal she saw nothing for six weeks when she menstruated once. Since then she has never had bleedings although it is now six months since its removal.

To diagnose the cause of haemorrhage, the cervix must be dilated and the endometrium examined, unless as sometimes happens the polypus presents at the os. If the polypus is presenting at the os it must be diagnosed from a partial inversion of the uterus. and this is more difficult if the polypus be occupying the vagina. but the points of distinction are referred to when considering bleeding due to inversion of the uterus. (page 46)

The treatment of the bleeding consists in the removal of the cause, by the ecraseur or by twisting, with previous dilatation of the cervix if the polypus be intra uterine.

Bleeding due to Malignant Disease of the Cervix

This is a very usual and early symptom in malignant cervical disease, and is sometimes for a considerable time the only one, although it is usually associated with pain. The bleeding at first is usually in the form of metror-

haqia and in this form it may be continuous or periodic but menorrhagia is often the form it assumes, at least in the first instance, and these two conditions may be present in the same case. The blood at the commencement of malignant disease does not escape, owing to ulceration but is due to the congestion or neitritis which accompanies it. Haemorrhage is occasionally so severe as to cause death & is usually more severe after the case has gone on to ulceration. It is chiefly in the soft fungous growths that bleeding is such a prominent symptom, and in these cases it may be so severe and come on after exercise or any special exertion to such a degree as to rapidly cause marked constitutional symptoms.

Bleeding coming on after the menopause is in a large proportion of cases due to malignant disease. Haemorrhage from the vagina should always lead to a careful examination, as malignant disease may attack females of any age, altho it is most common at the climateric period. Haemorrhage may exist for some time, in the form of menorrhagia with no other symptom to arouse the patients suspicions, and thus the case may be past all hope of cure before medical advice has been sought. Women especially at the period that cancer is most apt to occur, - the climateric - are so apt to look upon pain and excessive menstrual flow as natural to their

time of life, that it is only after bleeding has been present for a long time, or after a more than usually severe bleeding, that advice is sought. It is not often, then, that this disease is seen at its initial stage. The blood at first may be pure, but after the case has gone on to ulceration, the blood is mixed with a watery and foetid discharge, the foetor of which is soon evident to the patient herself and attaches itself to the patients clothes, and person, and the whole surrounding. The haemorrhage comes on often after a per vaginal examination or after connection which causes considerable pain. It is apt to occur also after movements of the rectum, or after the passage of urine and especially if these are accompanied by straining. Haemorrhage often bears a proportion to the rate of ulceration, - the more rapid the ulceration, the more marked the bleedings.

Haemorrhage from this disease may occur in a pregnant woman, as pregnancy can occur even where this disease is present, and in this state, haemorrhage is apt to be worse than in the unimpregnated uterus, the extremely vascular condition of the uterus and the surrounding tissues, being communicated to the growth itself. Such bleedings will often deceive the patient and even the physician, unless a very careful local

examination be made. — the presence of pregnancy being overlooked through the irregular bleeding being mistaken for menstruation. In these cases there may have been nothing to suggest the presence of any disease previous to pregnancy. The disease develops very rapidly after pregnancy has taken place, and in many cases this fact would be apt to lead to the belief that conception had taken place previously to, or simultaneously with the beginning of malignant cervical disease. Abortion often occurs in these cases. In Lewers cases at Guys Hospital 40 per cent. aborted and abortion occurs early as a rule. but if this does not take place. Labour usually comes rather prematurely. Abortion is usually accompanied by severe bleeding and risk of septicaemia. If pregnancy proceeds rupture of the uterus may take place during the course of pregnancy, or during labour. A large percentage of women die while Heyman[1] reports that out of 128 children born only one half survived.

Diagnosing the cause of the bleeding, there is at first nothing pathognomonic either in the discharge or in the bleeding itself. but after ulceration has taken place. the foetid discharge, pain, constitutional symptoms, the rapid downward course, together with the local appearance of the cervical portion of the uterus, well distinguish

[1] Treatise on Gynaecology Pozzi

this disease from any other except a sloughing polypus, which has been strangled at the os. and these two conditions can only be distinguished by searching for the os and noting its condition, and its relation to the ulcerating mass.

At the commencement of the disease, it is important to distinguish it from benign conditions of the cervix & from these it may be distinguished by the effects of treatment, and in doubtful cases by microscopic examination of a portion of the diseased cervix. Small fibroid tumours are more defined than small malignant growths and the mucous membrane is not fixed to the growth as in cancer.

Treatment of Haemorrhage in malignant cervical disease

The treatment may be palliative or radical If the case is seen early, the best treatment is radical. Infra or supra vaginal amputation may be performed. But Pozzi says. "a lesion has only to be of a cancerous nature for me to perform complete hysterectomy". But if evidence exists of the disease having passed to other parts, eg. vagina, bladder, rectum or to lymphatic glands, palliative treatment for the pain, foetid discharge and the haemorrhage can only be undertaken. For this purpose scooping out the diseased tissue with

I. "A Treatise on Gynaecology" 1892.

a sharp spoon and following this up by the applic ation of the actual cautery with subsequent dressing of the cervix with Iodoform gauze, and the use of vaginal douches. This is better than using chemical caustics for destroying the growth. If it is inadvisable to apply caustics to the bleeding ulcerated surface, haemorrhage may be controlled by packing the part with gauze soaked in a solution of alum, perchloride of iron, iodine &c. Purgatives may aid the checking of troublesome bleeding. Constipation should be prevented by the use of enemata and of food which will prevent sluggish action of the bowels. If the patient has difficulty in micturition, the catheter should be employed. Straining in connection with either defaecation or micturition is a source of haemorrhage.

I think that in this disease the internal administration of sedatives in large doses tends to check bleeding from the diseased surface. I have presently under observation a patient aged 50 who has been afflicted with malignant disease of the cervix for the last three years. At the commencement haemorrhage was a marked symptom, but since beginning to take large doses of sedatives, haemorrhage has been very seldom observed. She has been taking during the last-

sixteen months, large doses of morphia, and during the past six months she has been taking 2 grains of morphia every four to six hours as necessity requires and during that period haemorrhage has not once been observed, notwithstanding the fact that ulceration has advanced far into the uterus and has now involved the rectum and the walls of the bladder.

Injections of warm water often and us in checking bleeding from the ulcerated cavity.

Haemorrhage due to Malignant disease of the body of the uterus

This occurs mostly in multiparous women who are over the middle period of life and it frequently occurs after the menopause, and is intermittent in character. The bleeding is usually associated with great pain and a foetid discharge containing little particles like little pieces of raw meat. On passing a sound gently into the enlarged uterus haemorrhage is excited. The cause of the haemorrhage must not be confused with the condition caused by the partial retention of the products of conception, or with a slough by intra uterine fibroid or polypus. In cases of doubt the history will distinguish the condition due to retention of conception products. Dilatation of the cervix will enable an examination of the interior of

the uterus to be made. A part of the growth should be detached for microscopic examination.

In sarcomatous growths in the fundus, bleeding is also present and is associated with pain and offensive discharge although these are not so marked as in the former disease. Distinction between this and the last can only be made microscopically.

It is only after the tumour has begun to break down that haemorrhage becomes almost constant.

Total extirpation is indicated if the case be seen early enough before the uterus has got fixed or evidence of secondary growths are present.

If this course is not advisable, and after dilatation of the cervix, the growth is found superficial, it may be removed by the curette or other suitable instrument and the site of the growth cauterized with the actual cautery. "and the cavity dressed every second day with iodoform gauze which acts as a haemostatic and antiseptic." (Pozzi)

If this is not advisable, bleeding may be controlled by vaginal douches of hot water, together with the administration of large doses of sedatives, and the avoidance of straining at stool, or during micturition, by the use of enemata, or of the catheter. The sedative may be combined with digitalis.

Haemorrhage due to displacements of the uterus

Haemorrhage in connection with inversion of the unimpregnated uterus is dealt with, along with inversion of the gravid uterus. - in another part of this paper.

Anteflexion and sometimes anteversion cause haemorrhage which is usually in the form of menorrhagia. It is more apt to occur in anteflexion than in anteversion, but probably this is due to the fact of anteflexion being often caused by perimetritic adhesions. and by metritis. Metritis often is the primary cause of the anteflexion It leads to softening of the uterus, and so inducing flexion; the natural curve of the uterus being simply exaggerated. Anything which causes metritis may be the indirect cause of anteflexion, and hence it is frequently traced to the puerperal state. altho it may be due to something acting on the uterus at puberty or at a menstrual period, eg. masturbation, excessive fatigue from any cause &c. and so causing endometritis. Metritis leads to subinvolution, so that it is easy to understand how menorrhagia may occur in anteflexion. The excessive menstrual flow in anteversion can be accounted for by the obstruction to the

venous return of blood from the uterus in its abnormal position

In congenital anteflexion, haemorrhage is absent and amenorrhoea or delay in the appearance of the menses is the condition present.

I have at present a case under treatment where menorrhagia has been present for some years. The patient Mrs D, had, five years ago, been delivered of a dead foetus at the eight month. The foetus had been dead for one month when born. She made an excellent recovery, but about six months later she came complaining of frequent micturition, menorrhagia and pain in the left iliac region. The menses came every four weeks but the discharge was excessive, blood escaping in clots, and it was accompanied by very considerable pain. The periods lasted five or six days, whereas formerly they had lasted for three days. She complained of inability to walk, and the bowels were very costive. On examination the os was found looking straight downwards, and the body of the uterus was found to be lying almost at a right angle with the cervical portion. The uterus was distinctly enlarged, soft & flabby and was quite mobile. The patient was kept

mostly in bed for a few weeks, vaginal douches were employed of hot water & alum. Glycerine tampons were employed twice weekly, and allowed to stay in 48 hours. By the end of a few weeks the uterus had decreased somewhat in size and was firmer to the touch. A Galabin pessary was introduced; the sound was passed after each menstrual period, and the uterus straightened. Pills composed of the following were ordered

Ac Arsenosi gr $\frac{1}{60}$
Pil Ferri et Aloes gr $\frac{2}{4}$
Ferri Sulph gr $\frac{1}{2}$
Extract Sarsaparilla ℔ss.
one morning and evening.

Patient is enjoined to take gentle exercise and to rest on the couch at the menstrual period, and by this treatment she is enabled to walk about a little, and feels much more comfortable than before treatment was commenced.

The treatment of this condition consists in securing fixity of the uterus by a belt or by the introduction of a pessary and the treatment of any existing disease which may be the cause of the retroflexion.

Bleeding due to backward displacements of the uterus is usually more pronounced than in the case of displacements forwards and occurs in the form of menorrhagia. Many of these cases present no signs of haemorrhage but if the uterus be bound down in its abnormal position by the broad ligaments, venous congestion sets in and thus manifests itself during menstruation by the presence of menorrhagia. The bleeding in such a condition is beneficial as it tends to relieve the existing congestion. Metritis is often present in retroflexion while subinvolution after pregnancy is the most usual cause. Perimetritic adhesions sometimes exist and these conditions account partly for the menorrhagia and pain at the menstrual period.

Diagnosis is to be made by means of bimanual examination, & by examination per rectum & by the passage of the sound to distinguish these conditions from a fibroid on the posterior aspect of the uterus, from a faecal accumulation, inflammatory or haemorrhagic effusions, or cystic growths.

The treatment consists in the reposition by the hand or by the sound of the displaced organ, and the introduction of a suitable pessary. Of course in the case of perimetritic adhesions no reposition

need be attempted. Any existing metritis or sub-involution of the uterus requires special treatment

Haemorrhage in prolapse of the uterus

According to Pozzi menstruation is not disturbed in any particular way, but as prolapse is frequently accompanied by endometritis and retroflexion, haemorrhage either in the form of menorrhagia or of metrorrhagia will often be present. Sub-involution of the prolapsed organ will also frequently be present, while the abnormal position of the uterus renders it liable to venous congestion which will probably shew itself as menorrhagia. Ulcers of the cervix are often present too, and especially if the cervix protrude beyond the Vulva. These ulcers are liable to bleed at irregular times.

To relieve any haemorrhagic symptoms which may be present it is necessary to replace the organ by the hand, and introduce into the vagina any of the many pessaries which have been introduced with the object of supporting the uterus - ring pessaries, air-inflating pessaries, or any of the numerous pessaries whose support is received from a waist-band. Abdominal belts are frequently of use while perineal pads may be

tried

If these means fail utterly. surgical operations may be had resource to, with the object of supporting the uterus from below; either by restoring a ruptured perineum, or by constricting the vagina by the excision of a triangular piece of the mucous membrane. or support from above may be aimed at. as in Alexander's operation with the object of shortening the round ligaments; or by stitching the uterus to the surrounding parts thus stretching may be required in extreme cases where all other means fail.

The metritis of present will require treatment after the reposition of the uterus. Any ulcers which may be present should be touched with strong nitric acid.

Haemorrhage in eroded states of the cervix.

Bleeding in this condition is not usually severe - frequently simply a staining of the discharge It may occur after special exertion or after sexual connexion, and it occurs during any manipulation of the inflamed area. Haemorrhage from this source is frequently associated with haemorrhage occurring from different causes. in the same case. Thus this condition of cervix is frequently dependent upon

an irritating discharge from the interior of the uterus such as will be present in endometritis, endocervicitis, fibroids, polypi or malignant disease. It also frequently accompanies displacements of the uterus or splitting of the cervix. But it is also found in irritation from below, such as occurs in vaginitis from any cause, or from irritation from foreign bodies eg. pessaries &c, in the vagina. It may occur also in certain states of the system, tubercular syphilitic &c.

The existence of this condition is easily recognized by examination by the speculum, but the symptoms present vary according to the cause of the congested cervix.

The treatment of an inflamed cervix is for the most part that of the cause of the congestion. Constitutional remedies may be required if the patient is syphilitic or tubercular. Appropriate remedies should be applied to the interior of the uterus in endometritis, cervical or corporeal. Polypi may require removal, or displacements of the uterus remedying. Vaginal irritation in the form of foreign bodies or of vaginitis, gonorrhoeal or otherwise, should not be neglected.

Rest & avoidance of sexual intercourse should be enjoined.

For local application, tampons of glycerine, or of glycerine & an astringent, eg. tannic acid, or an antiseptic as boracic acid, creolin, or ichthyol vaginal douches often relieve.

Local depletion of the cervix often relieves temporarily the congestion. Ointments of various kinds have been applied with the object of soothing and keeping aseptic the inflamed mucous membrane. The local application of some strong caustic often proves the most effectual means of remedying the defect. such as nitrate of silver, Carbolic acid and glycerine, strong nitric acid chloride of zinc, &c.

It is one of the most intractable of affections. because it so often depends on causes which are very difficult to remedy, & these causes will simply cause a return of the affection, as long as they are present, as soon as the local remedies have ceased to act.

Tubercular of the endometrium presents at first the same symptoms as endometritis, & diagnosis can only be made microscopically by discovery of the giant cell & bacilli in the discharge. The treatment in suitable cases is hysterectomy.

Haemorrhage during pregnancy may occur at irregular times from erosion of the cervix, and markedly at those times corresponding to the menstrual periods. The haemorrhage may alternate with a stained dirty discharge. The cause is easily recognised, and if the blood is due to this alone & is not oozing from any other part, it may easily be remedied by the application of styptic cotton, but sometimes the inflammatory process extends into the cervical canal, and treatment for this had better be delayed until the labour is over; or if the haemorrhage is very severe and is exhausting the patient, abortion may be induced.

Very many cases of menorrhagia or of bleeding from the uterus occur, where on the most careful examination no abnormality is to be found in the condition of the uterus, but it must be remembered that on the state of the ovary depends to a great extent the amount of blood lost at each menstrual period and the frequency of such periods we may have then, the phenomena of blood being lost from the uterus, but due to a condition of the ovary, and the ovary produces this effect through the nervous system In these "ovarian menorrhagias," as Dr Meadows calls them in an excellent paper published in the British Medical Journal July 12th 1879. menstruation may be too profuse, or it may recur too frequently, and these symptoms are very frequently accompanied by hysterical manifestations such as globus hystericus, loss of voice, and frequently by the secretion of a very large amount of urine. The cases often present symptoms which lead one to investigate the condition of the ovary, eg. pain over either ovary, most frequently the left, dysmenorrhoea &c. The result of examination shews that some abnormality exists. the ovary may be displaced or it may be the seat of enlargement due to chronic inflammatory

mischief. I have a patient at present under treatment who has had ovarian menorrhagia for thirteen years. She has had five healthy children and nursed each in succession. She suffers from pain over the left ovary, and on examination it is found to be enlarged and tender. The pain is greatest just before the menstrual period, and is very severe during frequency. The patient menstruates monthly, but the flow is very abundant & clotted and lasts for a week on each occasion. Menstruation continued throughout the periods of lactation.

In an earlier part of this paper I have stated that the excessive menstrual flows at the beginning and at the termination of the menstrual period of life are in many cases due to ovarian disturbances. and that the ovarian irritation caused during lactation by suckling produced the excessive menstruation which sometimes characterize that period

Ovarian menorrhagia is frequently due to some displacement or pathological abnormality in the ovary and especially in that of the left side but it may be due to some abnormal state of the ovary or ovaries without pathological change — some physiological

peculiarity in their structure, or special liability to respond to slight reflex stimuli.

The treatment of this condition is simply the administration of Potas. Bromid. Dr. Meadows believes that by the continued administration of this drug, menstruation may be completely arrested, and atrophy of the ovary results. He has frequently seen menstruation delayed by its use. Dr. Meadows insists on no salt of iron being administered unless it be the bromide. He also occasionally administers along with Potas. Bromid & Bromide of Iron. — potas iodide. These drugs are given where the ovary or ovaries are inflammed and enlarged. In these cases too Dr. Meadows advises the use of a pessary containing conia gr i and atropiæ gr ½ each night at bed-time, with the object of allaying ovarian pain and controlling vascular action.

Along with the above treatment, avoidance of Coitus is necessary. Any source of reflex irritation should be removed, while counter-irritation over the seat of the ovary, together with regulation of the bowels by salines, and the avoidance of alcohol, are necessary aids to the amelioration of the conditions present in enlarged and inflammed ovaries.

In cases where remedies produce no effects, it may

be necessary to perform oophorectomy with the object of bringing on premature menopause.

Mrs. A. aged 26. had suffered since the commencement of menstruation, at fifteen, from pain over the seat of the left ovary. but as she reached the age of twenty-three the pain began to affect both sides The ovaries on both sides were enlarged and very tender. Menstruation was much affected, the flow during each period was not increased any in amount but the periods came on much too frequently, and at irregular times. Dysmenorrhoea, with spinal irritation, and reflex gastric symptoms, — anorexia vomiting at the menstrual period, were the prominent features in the case. About six months before it was considered necessary to operate, the vomiting and anorexia became so prominent and persistent, that the patient was reduced to a mere skeleton. The pain in the abdomen too became very constant and severe and at last, in the interests of the patient, it was deemed advisable to operate. Palliative treatment had produced no effect. Professor MacEwen of Glasgow University accordingly removed both ovaries. which were found to be as large as a hen's egg. the result of long continued congestion. and to be slightly adherent to

the surrounding structures. After the operation she got quickly relieved of the gastric symptoms; the appetite improved greatly. Defaecation which had caused great pain during and previous to the act, was now painless. The other symptoms also rapidly improved and the only trouble after the operation was with some inflammatory adhesions which involved the intestine and occasionally caused symptoms of obstruction. She is now well - two years after the operation, her weight has increased to what it had been previous to the worst symptoms setting in, she is free from all her old sufferings, and is able to be out of bed all day. She had, for many months previous to the operation, been confined constantly in bed.

Haemorrhage occurs frequently in cases of old standing pelvic inflammations. Pelvic inflammation is usually accompanied by a similar condition in the uterus, hence it is difficult to say in many cases whether the bleeding is due to the endometrium of the uterus or to the parts surrounding. In inflammations of the tubes and ovaries — oophoro. salpingites — haemorrhage usually

occurs in the form of metrorrhagia but amenorrhoea is common; hence menstruation is irregular, and bleeding in such cases is more marked in proportion to the implication of the ovary in the inflammatory process.

In cystic oophoro-salpingitis menorrhagia is frequently present but as in the other cases amenorrhoea is often the condition present. Pozzi mentions that Puech has in cases of haematosalpinx sometimes observed a continuous flow of blood in very small quantity to occur instead of menstrual flow, — the "distillating amenorrhoea" of some authors, and this phenomena has been observed in some cases of metritis as well.

In cases of pyo-salpinx, discharges of serous, sanguineous or of a purulent nature, occasionally occur at long intervals, preceded by an attack of pain. This discharge probably arises from an intra-uterine accumulation as in those cases, the uterine orifice of the tubes is usually closed.

The diagnosis of the presence of fluid in those cases is to be made - under chloroform - by means of bimanual examination with the patient lying on her

back & the thighs rotated outwards. Two fingers are introduced into the vagina.

In oophoro-salpingitis, haemorrhage will not usually require treatment, but here as in bleeding due to congestive states of the ovaries. Potas Bromid. will be found very useful, given in thirty gram doses, three daily, combined with hot vaginal douches, or vaginal pessaries of conine. The condition itself should receive attention by bleeding locally if necessary, either by leeches over the iliac region, or by incisions into the cervix, and by counter irritation. Pozzi strongly advises the treatment of endometritis, in such cases, to be pursued, viz. curettage followed by intra-uterine injections of tincture of Iodine, and by this means he says he has cured many cases where the disease consisted chiefly of catarrhal salpingitis. Massage has been useful in very old chronic cases.

If the disease is rendering the patient unfit to earn her living, if this is a necessity, or rendering her life unbearable or the menorrhagia is very severe, and the effect of palliative treatment is not beneficial, and if pus be detected in the tubes or in the ovaries, then removal of the

appendages should be performed. If the tube of one side be removed the corresponding ovary must also be taken away, but partial resection of the ovary can be done, if the corresponding tube be patent & healthy, and the ovary only partly diseased.

In growths of the ovary. Menstruation may not be affected. and this is so especially if only one ovary be diseased. Moreover in many cases it is only part of the ovary which is affected and in these cases bleeding may occur chiefly as menorrhagia In the case of ovarian cysts, pregnancy is not infrequently coexistant. Pozzi mentions that menorrhagia is not infrequent in cases of cysts; fixed in the immediate neighbourhood of the uterus. After the menopause, a more or less constant haemorrhagic discharge sometimes occurs in cases of ovarian cyst due to congestion, and this has been mistaken for the reappearance of the menses. In the case of the ordinary growths of the ovary. cystic & malignant - the only course to pursue is removal in suitable cases. Where the growth is not growing and is benign and small no special treatment may be necessary.

It is evident that abnormal uterine haemorrhage being due to so many causes, a careful diagnosis of the cause is in the first place essential to admit of an intelligent method of treatment being carried out. and in this connection it must be remembered that haemorrhage may occur from the uterus without there being anything abnormal in the condition of the uterus at all. This may occur in constitutional disturbances where the blood is not healthy eg. jaundice scurvy. fever. Bright's disease purpura. Also in haemophilea. It may also occur in obesity, or cardiac or hepatic disease and especially if alcohol is used to excess. These should be eliminated before making an examination with the object of finding the cause of the haemorrhage. and especially should the abuse of alcohol be enquired into. Where the cause of the bleeding is situated in the pelvic generative organs it may be in either the ovaries or the uterus. and the ovary produces this effect through the nervous system. There may be some definite disease in the ovary eg. cystic degeneration solid growths &c. or the ovary may only be in an abnormal physiological condition such as may occur at puberty and the menopause, after

marriage or during lactation in some cases.
I have presently under treatment two cases of chronic spinal meningitis. One case was attacked eight months ago by influenza and this was followed in a few days by spinal meningitis which has passed into a chronic form. In the other case the disease has been present for six months and has been chronic from the commencement. In both cases some difficulty in micturition is experienced. Both women have borne children and are in the prime of life. Before their present illness began both menstruated normally every four weeks but in both cases shortly after the illness had set in pain became almost constant in the left iliac region and the menses became more profuse the discharge being clotted. The periods came on two or three weeks never at longer intervals. In neither case was there any abnormality in the uterus to be detected on examination. In these cases the ovaries were probably at fault due to the disease in the nervous structures in the vertebral column.
Where the haemorrhage is due to some uterine affection it will often be difficult to diagnose the exact condition and diagnosis in these affections are

frequently arrived at by a process of exclusion
Frequently it is the interior of the uterus which is the
seat of disease, and an exact diagnosis cannot
be made until the cervix has been dilated and
the cavity explored, or the microscope brought into
use for the examination of a part of the diseased
structures.
Haemorrhage occurring during pregnancy usually in-
dicates abortion but by a careful examination and
by a consideration of the symptoms, it may be found to
be due to molar pregnancy accidental or unavoid-
able haemorrhage. Bleeding, occurring in a patient
who complains of pain in either iliac region, may
be due to some ovarian disease, or some peri-uter-
ine inflammation, or it may be due to extra-uterine
pregnancy, and the distinction between these
will depend very much on the history and symptoms
Bleeding after labour or abortion may be due to peri-
uterine inflammation, to subinvolution, to endometritis,
to retention of the ovum in part, or to fibroids which
have undergone development during pregnancy. and
the symptoms will partly differentiate these, but ex-
cept in the case of the first. dilitation of the
cervix will have to be undergone before a definite
diagnosis can be arrived at.

Bleeding at the menopause may indicate merely ovarian disturbance, or commencing malignant disease.

In some cases two or more causes are present: eg. endometritis is frequently present along with fibroids, pericervical inflammatory conditions, ovarian disturbances, &c. or ovarian displacements may exist with uterine. Sometimes a condition which frequently gives rise to bleeding does not do so until some other cause of haemorrhage arises eg. haemorrhage may be absent in fibroid tumours until endometritis sets in, and curettage may stop the haemorrhage in those cases. Bleeding in the presence of fibroids may be absent until the patient abuses alcohol.

The causes of abnormal uterine haemorrhage being so numerous, it is evident that no routine method of treatment is applicable to different cases - the treatment of each will vary according to the cause. It must be remembered that the haemorrhage (unless exhausting) is beneficial in many cases, relieving congestion, and in those cases no local treatment should be employed. Thus in cardiac incompetence, the oozing of blood is beneficial, and in such a case head-bowes are indicated.

In hepatic obstruction of any kind, salines combined with mercurials, & plain, light diet without alcohol are indicated. In renal cases lowering of the blood pressure, & purgation and diaphoresis should be used.

In the case of fevers and other diseases where the blood is gravely altered in quality, no special treatment is required unless the bleeding is reducing the patient when plugging the vagina by iodoform gauze, or the introduction of a tent into the cervix, with the application of cold over the hypogastrium, may be had resort to.

It is only where the loss of blood is very great that the treatment of uterine haemorrhage can be said to be at all uniform. In those cases plugging with the local application of cold are the general means to be used. Plugging may be performed in the vagina with lint, carbolized tow, Iodoform gauze, or with water or air bags, or a tent may be introduced into the os, which, if patulous, may be packed with strips of lint soaked in an astringent solution.

Where all other means fail, castration has produced good results, & especially if the haemorrhage is ovarian or due to disease in the tubes. but it

has proved serviceable in uterine diseases eg fibroids, as well Complete hysterectomy is at times advisable in cases of fibroids, metritis or malignant disease

Potassium Bromide is the drug which produced the most marked effect in controlling bleeding where the ovary is at fault It should be given at the times of bleeding and in the intervals bromide of iron should be given if there is any anaemia as there is so apt to be in these cases Pots. bromide often proves beneficial in arresting the haemorrhage due to fibroids.

Ergot is the drug on which most reliance is placed but many authorities have found that in many diseases eg metritis its effect is very questionable.

Digitalis, hamamelis, and hydrastis have all been used, and have often proved useful where ergot has failed Hydrastis often is useful in arresting the haemorrhage in endometritis. Ergot is the drug which should be used in acute bleedings the others including hydrastin are only to be employed where the haemorrhage is not very severe, a slight continued trickling.

Sedatives especially opium, control bleeding to a certain extent & especially in my experience if given

in large doses in malignant disease.
Where anaemia is very marked iron should be given continuously, or during the intervals, and acts as a haemostatic to a certain extent.
The ordinary astringents are of no use unless employed along with hot water, as a vaginal douche, or as an intra uterine injection.
Where slight bleeding is occurring from the interior of the uterus, and an exact diagnosis cannot be made, simple methods should be tried in the first instance before exploration of the endometrium, — vaginal hot douches, rest in bed, and the administration of the drug which seems most suitable to the case. but if this fails the cervix should be dilated and the endometrium examined and treatment adopted according to the condition found; — curettage for endometritis removal for polypi, or curettage for incomplete abortion &c. Even after exploration of the cavity no cause may be discovered and in obscure cases injection of a strong solution of perchloride of iron M 4. may produce the desired effect.
Electricity has been used to control post partem haemorrhage, haemorrhage from fibroids and in ovarian cases, and in some instances with good results.

Plugging is chiefly serviceable in haemorrhages occurring during pregnancy, where the blood must be stopped by some means, at once. to save the patients life.