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An Analysis of 2300 Confinement Cases with Remarks

N. Irvine-Jones, M.B.
221 Gorgie Rd

April 1909
During the last 9 years I have completed 2300 confinement cases in general practice in a working class district in Edinburgh. During this period I resolved to keep a correct record of every case and to enter each case in a book kept for the purpose and written in every instance immediately after the birth had taken place while the facts were fresh in my memory.

The object then of this thesis is
1. To contrast it with analyses of other records
2. To give a faithful account as to the manner and success with which I did my work.
3. To make suggestions which such an experience may indicate.

Presentations
It is noticeable that in my cases nearly all the presentations were LOA or ROP, and that only 3 were ROA and two LOP.

In looking over other statistics we
find quite different figures.
Naegele gives 40% LOA and 29% ROP
with no cases of ROA or LOP.
Murphy gives 16% ROA and 4% LOP.
Swayne 9% ROA and 2% LOP.
Simpson and Barry 70% LOA and 25% ROP with only .2% ROA and .5% LOP.

Fothergill suggests the following as a
fair average - percentage
LOA 72; ROP 21; ROA 5 and
LOP 2.

It is however curious why such
differences in such figures should
occur and the question arises Is
such a difference explainable?

In comparing notes with other
practitioners at the post graduate
classes last Summer I met one
graduate from McGill University.
He showed me in his written notes
which he had taken in Dr. Cameron's
class that the professor referred to
such a wide divergence of opinion.

Fothergill's Manual of Midwifery Page 212
And that the cause might be found in the presentation changing so frequently. He mentioned an instance of one of his assistants who came and told him that the presentation in a certain case was such, and that later on another assistant came and said it was different.

Both, Professor Cameron said, might be correct as the presentation had probably changed during the interval of the two examinations. He also stated that the presentation known as ROA might not be counted at all. He thought it did not exist.

It might be that one accoucheur might meet with many of one kind of presentation and few or none of another kind.

On December 10th, 1849 Dr. Croom read a paper "On the Causation of Some Primitive Face Cases" and in this paper he incidentally mentions...
"Yet changes in the presentation of the forlas are by no means uncommon."
In my cases ROP and LOP were very rare but on reading the records of the Edinburgh Obstet. Society one often meets with the mention of a case of R.O.A.
In an analysis of 250 consecutive cases Dr. A.S. Currie gives one instance of R.O.A while Dr. Hooper in his analysis gives the presentation as LOA 204 R.O.A 41 ROP 6 LoP 1.
Such figures seem to be unexplainable.
Of the 2300 cases I have done in this neighbourhood 29 must be deducted, as the presentation could not be got, as I was not there in time. The labours were so precipitate that one could not be present in time.
Of the remaining 2271 there were 1429 case, LOA and 473 ROP and the usual cause was rickets. In 14 cases however, I had been sent for while the patient had had previously, normal

Dr. Hooper. Edinb Obst Trans Vol xii 36
Dr. A.S. Currie Edinb Obst trans Vol xii 38
children without difficulty but owing to the presentation on these occasions were obliged to obtain assistance.
Two cases of R O P were very difficult owing to the very retracted condition of the pelvis and craniotomy had to be performed.
In both these cases I had not been called until the pains had been going on for some time. Hence the head was irretrievably jammed in the pelvis and turning was impossible. The Conjugate vera in both cases was 3½ in.

Although my number of R O P cases was fairly large it is very remarkable what a small number of them failed to retrieve by rotation and also by rotating in the right direction. Of the number 473 of R O P cases only 4 came to the world "face to pubis".

Dr. Anger, McDonald says of 26 difficult occipito posterior cases 6 terminated face to pubis - Vedel Scien Osetet Trans. Vol 111 Page 360
Much discussion has arisen as to the cause of rotation, and perhaps the most popular theory is the one given by Dr. Berry Hart. For my own part I find difficulty in accepting this theory, as I remember one case of complete rotation where the pelvic floor or perineum was so very dilatable, and was widened so much that the presenting part scarcely touched the floor, and besides in some breech cases we do not find the body of the child rotating until the child is more than half born. What has the pelvic floor to do with rotation in such cases?

Face presentations
I had 11 instances of face presentations in all. Two of these were anencephalic monsters at 5 months; but at that period it does not matter what the presentation is.
Two others were premature but well formed.

Berry Hart, in Movement of Internal Rotation Vol. XI 92
Four others were born at the 8th month, and did very well in spite of the great strain due to the face presentation. The remaining four were full time. One of these was a Considerable time engaging in the brim so that I suggested chloroform and turning especially as the CV was fairly wide, but the mother preferred matters to take the ordinary course. The labour went on very slowly, and ultimately the baby was born with the face in the transverse diameter of the outlet. The remaining three cases I diagnosed on my first examination, but were well down in the pelvis with the membranes ruptured. I was unable to change the face presentation into an occiput in any of my cases. The four at 8th month, and the four born at full time all did well. They all continued the head extension. The heads were of normal size. There was no thyroid enlargement. There was no dystocia.
There was no uterine obliquity. The sole cause in my opinion was the bony pelvis somewhat peculiar. Dr. Melne Murray described an interesting account of a difficult face presentation which Dr. Croom described as a primitive face case with deptovii, while Dr. Croom himself instances a case of primitive face presentation. While Dr. L. Newton, Regent, describes a face presentation due to (1) enlarged thyroid (2) great tension of head. I have had no case at any time which may be described as primitive face presentation and in no instance was I able to transform a face to a vertex presentation. I had one brow presentation. I never saw a shoulder presentation either in these 2300 cases, or at any time previous to these.

Dr. James Newton, Edin. Obst. Trans. Vol X - 95
Dr. Croom, Edin. Obst. Trans. Vol 5 Part III Page 49
Transverse Presentations.
I had nine instances of this form of presentation. My first case was where there was a hand presenting and as it was the first case of this kind I ever saw, I got assistance; version was easily performed and baby did well. The remaining eight cases I did myself and all were quite successful. They were all in multiparas.

Breech Presentations.
Of the 2300 cases I had 35 breech presentations and in such cases I always acted upon certain rules, namely:

1. Never to leave such a case lest while I was away the labour might terminate and the nurse unable to relieve an impacted head. This has caused me very long waits especially if the condition of the pelvis were not favourable to any interfering.
2. It has been my plan to wait for...
the assistance nature may give as
I have found so very much benefit
from severe labour pains. It is to
this plan that I owe my success
in breech presentations.
3. I never in a breech case draw
down aleg but keepe the buttocks
to dilute the passages.
4. I have never interfered with a
breech case, unless I was absolutely
sure by measurement that the
condition of the pelvis was such that
I could get away the head without
difficulty, i.e. without having the
head impacted.

Therefore when I arrive
and diagnose a breech presentation
I examine to find
1. What are the dimensions of the
pelvis, especially the Antero-
posterior diameter of the brim.
2. The size of the Child but especially
the size of the head and the
relative size of the head and the
pelvic brim.
3. Whether the breech is a L.S.A. corresponding to the L.O.A. of a vertex
   as I find the L.S.A easier to do.
4. An important item in the prognosis also is whether the
   uterus is likely to be active
   My plan then is to wait
   until the pains come on with energy
   and the child is expelled to a
   considerable extent by the pains,
   and then I extract the head by
   the usual methods.
   If after waiting a
   considerable time and find the
   pelvis fairly normal, I may
   put forceps on the breech c.e. if
   if the relation of the measurements
   of the child's head and pelvis brain
   are favourable - If not I wait for
   the pains
   I never use a blunt hook but put
   on the buttocks Simpson's long
   midwife's forceps.
   I have waited on some occasions
   for 12 hrs but it was well worth it.
as I went home having been successful in leaving a living child with the mother—what I would not have been able to do had I hurried matters for convenience. When finding things favourable I applied the mediocrity forceps in four cases and all four were successful. I never used the blunt hook.

I always in such cases use Simpson's long forceps.

Dr. Herman advises especially made forceps but I am quite satisfied with Simpson's. Yet in spite of all precautions I have lost some breech cases and in spite of fairly good pains and a considerable amount of experience I have failed in four cases to bring the baby home alive and the cause was partly due to the narrow Conjugate Vera of the bony and

Dr. Herman Difficult Labour Page 46
partly due to having had not sufficient assistance from the mother - the pain being too weak.

So I have thought of another plan viz to press back the breech of the foetus for a reasonable time until one is satisfied that the passages are well dilated and then on the coming of a strong pain, suddenly take my hand away. By this method the child may possibly be born as far as the shoulders.

Dr. Herman suggests that if the head is impacted one should put on the forceps and he says it is very easy to do. Well I must say that I have found it not easy to do - I have found it difficult to put instruments on an impacted head. I have tried a few times and succeeded only once but on this occasion the baby was brought...
home alone and threw.
I find great difficulty in putting
forceps on an impacted head—the
shoulders are in the way.

There is another method I
have found useful and that is
explained by Case No. 1485. She
was a primipara and I found
that the relative measurements of
the fetal head and the pelvic
breech were somewhat unfavourable
for a living child and I felt
somewhat anxious about it. So
I left the patient walking the floor
while I went to another room to
consult whether I should not send
for a specialist to share the
responsibility. While in the adjoining
room, I heard my patient shout
and I ran to her assistance and
found that owing to a severe pain
and the action of gravity the baby
was born and the mother was
lying on the floor. Both did well.
So I have often thought that the
Uterine contractions upon which I so much depend, may often be made more intense if the patient were asked to walk about, and besides we have the force of gravity. The risk of leaving the patient to walk about is not great. It is not an uncommon thing for a patient in a working class district to have her baby on the floor and here I may mention that in 2300 cases 24 were born on the floor. And neither mother nor baby was anything the worse for the experience.

However in 35 cases of breech presentations I have lost 4.

With regard to the severity of the pains when the patient is in the erect position Dr. Frost says, "Recollecting that in the erect position the uterus acts with more frequency and with greater force than in any other position."

Dr. Frost Edin Obstet Trans. Vol III Page 196
and again Dr. Trot "delivers breech cases in the erect position" but I do not believe in his plan where he says: "I have found the plan successful of putting my finger into the mouth of the forlius where there is an impacted head so that it is intended the child may breathe."

In cases of foot presentations I have not been successful. In 9 cases I have lost 3 possibly owing to the fact that in breech presentations the passages are well widened whereas in foot presentations the dilatations are not so effectual.

In all cases the difficulties have arisen from a deformed pelvis and the only kind of deformed pelvis I have met with in this practice is the Rickety Pelvis.

In order to be absolutely successful in every case of

Dr. I. B. McDougal, Obstet. Trans. Vol. III, 197
reckety pelvis it is necessary that the practitioner should see his patient some months before the end of the period of gestation. He should see his patient about the 4th month of pregnancy, and if he has not attended her before, he should ascertain the dimensions of the bony pelvis and note the presentation. If it is a vertex he should see that it remains a vertex. If the pelvis is a recpetty one he should ascertain the exact dimensions, or as far as possible, the antero-posterior diameter of the brain, and also ascertain the size of the child, more especially the head. If he thinks it is not advisable to wait to the full time, he might suggest premature labour; and the exact time for this operation may be ascertained by various considerations.

1. Some idea may be got from the date of the patient's last illness and also
from the time of quickening but
both these may be fallacious.

2. Measure the length of the forius -
how far it extends above the pubis.
This may give some idea as to
how far the pregnancy has
advanced.

3. One may use Muller's Test 2/13
the head going into the breni of the
pelvis and then allow the period
of gestation 20 or until the ultimate
limit when the head will engage
the breni of the pelvis.

4. Obtain the dimensions of the
pelvis especially the Antero-posterior
diameter and then measure the
size of the child's head with Perret's
cephalometer. (Perret of Paris)

In measuring the fetal
head pinch up the abdominal
wall with the cephalometer and
note the thickness of the double
abdominal wall. Then measure
the head through the abdominal
wall and get the size of the
head of the child.
One can then compare the ascertained size of the fetal head with the ascertained antero-posterior measurement of the brim of the pelvis. This may be fallacious but there is always one thing certain viz. there is always a difference of one inch between the occipitos frontal and the bi-parietal.
Hence we should try and gauge the bi-parietal for the flat pelvis and not using the Cephalometer always punch up the abdominal wall to measure it double — thus by Cephalometer thro' abdominal wall size of head — 10·CM.
But thickness of abdominal wall — double — 1·5CM
. . . Actual size of head — 8·5CM
But after all as Dr. Barbour says the best gauge for the brim of the pelvis.

Dr. Barbour quoted by Dr. Munro-Kerr
is the foetal head' or 'the foetal head is the best pelvimeter'.

Munro Kerr of Glasgow goes further. He presses down the foetal head on to the brain and if it does not enter he measures how much it may overlap.

I wish by these remarks to indicate that if one desires to be absolutely successful in his cases of eccentric pelvis, he must examine his patient about the 7th month and make careful measurements of the pelvis and foetal head and come then to a definite conclusion what is best to do, and how far he may allow gestation to go on with safety to both mother and child.

One word more as to the eccentric pelvis -

Sri James H. Simpson, Goodell and Meline, that abresep presentation especially before the term

Overlapping - Dr. Munro Kerr Vedi
is most favorable to the child, and that such a presentation at
the term is very dangerous on
account of the after-coming head.
And there is a reason given for
this assertion.
'Breech cases are easier than Vertex
in that when the head passes
through the brim in a breech case
the parietal bones slip under each
other and the head is thus
narrowed; whereas in a Vertex
case the greater the obstacle
to the head the wider becomes
the presenting part.' Bœslinière
In favour of this I may quote W. W. W
Turner "Of nine children which she
bore one was said to have been delivered
alive and it presented the breech
All others were born dead"

Volume VI Page 112 foot note
Bœslinière "Ostetric accidents, Emergencies
& Operations" Page 75
and again Mr. W. Turner says, "In a case described by Simpson (Select Obstet. Works Page 394) and which appears more than any other to have given origin to his ideas on this subject, he delivered by Vereoni a child, was deeply indented. The bitemporal diameter of the head at the seat of indentation was carefully measured and was found when held compressed by the fingers to be not more than 2½ in."

Boullier also instances a case of his own where he had failed to bring home three children (male) at the 7½ months with sufficient vitality to live, whereas a female was born spontaneously at the 8th month. On the other hand it might be said "We are too much inclined..."
to regard the fetal head as an
undeciduous mass – Angus McDonald.
And in stating that in Vertex cases
the head becomes wider as it presses
on the pelvic brim, I wish to mention
that the brim is not in the same
plane and that the parietal bone
on one side of the fetal head may be
pressed on the Sacral prominence, long
before the other side of the head
touches the pubic side of the pelvis
and is safe. Some heads are very
hard, and will not yield in any
part.

However I quite remember the
Two Cases I had – Vertex case,
where they became so impacted
that perforation of the head was
done, yet I must admit in spite
of all that has been said that
I am much more successful
with such Vertex cases than Breech

See Berry Hart Edin Obst. Tran. Vol VII Page 8
Dr. Angus McDonald Edin. Obst. Tran.
Vol. III Page 363
Diseases due to Pregnancy.
In a pamphlet written by Dr. J. W. Ballanlyne some years ago, he advocated the establishment of a hospital with the sole view to the study and treatment of diseases due to pregnancy. It is a most worthy object and there is no doubt much good would accrue from it, both as regards the patients and also the advance of knowledge of the troubles peculiar to pregnancy.

Yet I do not think that from a working class district such as this, Dr. Ballanlyne would have many patients.

During the last 9 years (1972-1980) in this district I would have had very few patients who would be sent to the pre-maternity hospital and benefit by it, because the great majority of cases, sent by me were needing urgent treatment, and the cases to have stayed in would have been very few.
The following is a Summary

Obstinate Vomiting
Advanced Kidney disease
Senile heart trouble
Postpartum eclampsia
Placenta Previa
Accidental Haemorrhage
Albumenuria (no Serum)

The heart case was sent to the maternity and was treated there for six weeks previous to labour. She died during labour.

The Advanced Kidney case was also taken to the maternity, & she gave birth to a healthy child, and died a few days after.

The nine postpartum eclampsia case, and the eight placenta previa case, were received into the maternity hospital as urgent cases. There was no time for study.

The Accidental haemorrhage cases were treated at home with rest only, & they died well.

All the nine Albumenuria cases,
were treated at home and all did well.
In this way it was shown that only 3 cases in all were admitted for study and treatment. If every practitioner's experience were like my own, the number of patients in the prematurity hospital would be very few. On the other hand there can be no doubt that many interesting cases would be received into hospital, and our knowledge of such diseases would be much increased thereby. It would be well, if, during pregnancy, a patient complained of swelling in the lower extremities that the urine be examined on several different occasions as we are sometimes too apt to think that the swelling may be entirely due to varicose veins or mechanical pressure. We should remember that kidney trouble may be there as well although there is no puffiness in the face.
However, the following I consider
dangerous symptoms during pregnancy.

1. Haemorrhage
   (a) At 3 months or thereabouts. It
      may mean placenta slightly
detached.
   (b) At 6 or 7 months placenta
      previa

2. Vomiting. Early vomiting may
   not be dangerous, but if it continues
   (persistent) it may indicate
   (a) Kidney failure
   (b) Hydatid mole owing to
       increased size
   (c) Hepatic tumour
   (d) Other abdominal tumours.

3. Retention of urine may be
   regarded as a serious sign.

4. Decrease in urine—a serious sign.

5. Persistent headache, especially
   if associated with eye
   troubles.

6. Puffy face.
Labour.

Labour is often divided into Normal and Abnormal. The Normal labour is one in which the pathological element is not considerable, while such element is distinctive in the Abnormal ones.

Dr. Hermann in his book on "Difficult Labour" gives the requisites of a normal labour, but I would prefer to consider labour as

1. The Ideal birth,
2. Normal labour,
3. Abnormal labour.

My notion of an ideal birth is one in which the pathological is entirely absent, and in which there is no haemorrhage - no pain - by no pain I do not mean no uterine contractions - but no actual pain. In my ideal birth - I call it birth advisedly because there is no labour in it - in my ideal birth there

Dr. Helman's Difficult Labour Page
is when the fullness of time has come—there comes a gentle elimination of energy either from the Spinal Cord, or the Central Nervous System, or from that Extra-Mural Nervous System to wit, the Sympathetic Ganglia, and in obedience to the gentle stimulus the whole system of the parturient canal is in attention—then from the uterus to the perineum. A stronger nervous stimulus is then given off and the uterus contracts without causing pain to the patient and the whole of the passages begin to dilate to become moist by the excretion of mucus.

At each discharge of nervous energy the uterus contracts, the Cervix dilates and the Vagina; and even the perineum dilate in response, and soon all these are in such a dilated condition as to offer no resistance to the advance of the approaching foetus.
The uterine contractions are regular and increasing in frequency and energy, and the muscular fibres of the uterus contract in the direction most suitable for expelling the foetus, with the expenditure of the least force. There is not much energy needed on the part of the uterus, as there is no obstruction to the head of the foetus - the whole of the parturient canal dilating to receive the foetus in its progress.

In a few minutes after the birth of the child the placenta follows. There is no haemorrhage whatsoever. There has been no pain. There will be no after pains.

And the action of the uterus may be in this way compared to the action of the heart. In my opinion the
heart with many times its usual force could never propel the blood as it does, through all the ramifications of the body, if it were not for the active assistance of the blood vessels. The heart has to rely upon the vitality and responsiveness of the large and small blood vessels, especially the small, and with every cardiac systole the blood is forced through the vessels, which dilate in front of the wave and thus facilitate the progress of the current, then contracts after the wave has passed and thus assists the circulation. In other words the arteries act as little hearts to promote the circulation of the blood. Life depends upon the responsiveness of every organ and each of its parts to a nervous impulse, and here one may see the reason for what we often see when we meet a patient with severe cardiac lesions, living on
for many years, owing to the
rescriptiveness of the blood vessels
such is my own conception of matter:
but to return to my ideal birth —
a short account of the first one is
as follow:

Case 543. Mrs. Python. I was sent for
the forenoon by Mrs. P., as she desired
to know whether she might need me
soon or not.

When I arrived she apologized for
sending for me so soon, as she
had had no pain but only a kind
of tightness.

However, I asked to examine her and
found the os uteri well dilated
and thinned out, and all the
other parts of the parturient canal
well dilated, and even the perineum
well widened out.

I told her what I had found and
asked her to send for her nurse. I
suggested she might go to bed.

While I was sitting at the bedside
she was relating to me an incident,
and in doing so, she quietly stopped to tell me she thought the baby was born. I looked and found it true—the baby was born. And a few minutes later the placenta followed. There was no haemorrhage—no pains—no after pains.

She is a patient whom I could absolutely trust to speak the truth, and she says she never had any pains during the process of the birth of her children. In all I had three patients who always had ideal births.

Normal labours.

First Stage. If the practitioner had attended his patient at a previous confinement, he should have entered into a book kept for the purpose several items respecting her—whether her labours were quick or tedious, whether she was liable to have considerable haemorrhage, but above all he should have kept a record of the dimensions of the pelvis. If he had not attended her before
nor seen her previously, with a view to ascertain the nature of the bony pelvis, he should go at once to his patient and get a clear idea of the size and shape of the pelvis, and the size of the foetus, and the size-relation of the two, viz., Know whether the pelvis is large enough for the passage of the foetus.

It is no use neglecting this and trusting things are all right. He must determine these things as a general routine work. If he is satisfied that there is room for the foetus (the passage of the foetus) and that the presentation is satisfactory, and that the placenta is not previa, he will allow the labour to go on and not tammi again except to note that the Cord is not coming down (Berry Hart) although my experience is there is no need to think of the Cord prolapsing unless there is Very Considerable abnormality.

Berry Hart Post graduate lectures 1908.
Berry Hart at this stage lays stress on the necessity that the bladder should be emptied; that the patient should get food in order to keep up her strength, and that the patient should be examined by abdominal palpation as well as internally.

Dr. Ballantyne at this stage also suggests that if one does not hear the foetal heart at either of the four cardinal points, he should get round to the right or left at the kidney area. It might be heard there.

If, on the contrary, the pelvic dimensions are not satisfactory or the child too large, e.g., hydrocephalic, then the accoucheur is forewarned, and has time to consider what may be best - to call in assistance if necessary, and he may tell the friends of the condition of affairs.

Dr. Berry Hart's Lecture on the 2nd & 3rd Stage of Labour - Post Graduate Lecture 1908
Dr. T.W. Ballantyne's Post Grad. Maternity Lect 1908
Amongst the complications which I have found quite unusual at this stage, the following may be noted:

I was called to Case 534, and the patient thought she was in labour. On examination I found the OS were dilated to a very small extent, and she complained of severe pain in her back (the lumbar region) and down the back of one of her legs to the ankle. The symptoms were exceedingly like unto lumbago and sciatica, and as there was no progress with the labour, I gave remedies suitable to alleviate lumbago and sciatica. She was nothing better and as the trouble was very painful, I called frequently. On one occasion when I looked in, I found my patient in bed resting on her knees and elbows, and she said the pain was very much less when she took up that position.

It instantly occurred to me that the lumbago and sciatica symptoms
were caused by pressure, and so it was
the pressure of the head of the foetus
on the sacral plexus. It continued
until the birth of the child and
then entirely ceased. The pain
extended down the Sciatic nerve and
its branches to the ankle.
A condition on the same principle
is found when a patient (Surgical
patient) complains of severe and
persistent pain on the inner side
of the thigh just above the knee, or
no amount of blistering will put it
away — the pain is felt there
owing to the irritation of the
Obturator nerve by a cancerous
growth in the rectum, and the
pain is not felt at the seat of
irritation, but the terminal branches
of the irritated nerve.
After this case I had two others,
for which I did not prescribe but
told the patient what the pains
were due to.
Perhaps it would not be amiss to
mention that hysteria in the 1st and 2nd stages ought to be considered a complication, and if not, it certainly leads to complications. When the patient greatly excited, that "something should be done" it is a great temptation for the accoucheur to deliver the patient even at the loss of the child.

One case of this kind was especially bad. The patient and her people were very respectable but of a very nervous tendency, and as the patient had been in labour for a considerable time, one after another of her relations present became frightfully hysterical and the patient's husband was quite as bad. They all even threatened to jump through the window, and this looked serious seeing that they were on a top flat. I thought first of sending for a special ste to see if he could quiet the storm, until the fetal head came within reach of the forceps. However it was not a very happy
position to be in, and I soon determined what to do. Although the os was only a little dilated I gave ether 3 and diluted it with my hand, and incised the blades of the forceps between the falcal head and the uterus, and then commenced a long hard pull. After considerable time I landed the baby, who was nothing the worse for the trial, but it cost me very much time and labour to keep away cephalic mischief. Her illness for a few days however served a purpose, as she and her people behaved admirably at her subsequent confinement.

Uterine Inertia

Dr. Herdmann thinks it is unfortunate that the term uterine inertia should have been applied to conditions so different, and I agree with him and would like a more precise term or terms, which would indicate what Dr. Herman "Difficult Labour" Page 117 The foot note.
part of the mechanism was out of order. It does not, for instance, indicate whether it is the uterine muscle which is tired out, or possibly degenerated, or whether the centre in the lumbar region of the cord or sympathetic does not give off sufficient energy, or whether the nerve connection between the two — between the nerve centre and the muscle is a good conductor of nerve impulse, or whether that unknown irritant which commences labour has not given off sufficient stimulus to the nerve centres.

It seems to me unfortunate that when asked why is there not more progress made at a birth, that we have nothing else to say than "uterine inertia". I dislike the term because it is not precise enough and think the term "weakness of pain" applied by Brayton Hicks not much better.

But there is another aspect of this so-called uterine inertia. We cannot expect nature to produce severe labour
pains at once as if with one fell stroke the whole was to be over. Nature is gentle. If she were not gentle we would hear very much indeed of collapse in labour. But we do not. I had only one case of temporary collapse in 2300 cases. Nature begins gently and goes on gradually, so that the nervous system may not be shocked. Now these prolonged first stages may be nothing else than a rather long preamble or prelude to the final stage, and our diagnosis of uterine inertia may therefore be wrong. Just let us take two examples of extreme cases. Patient A is a highly strung young woman, perhaps I should not say hysterical, Oakes because the late Professor Syme objected to the term. As soon as she has the slightest pain she lies like a log in bed, possibly for several hours or even a day or two and complains of the troublesome pains, but no progress is made in the labour - and things go on very unsatisfactorily. We do not.
Know in such a case whether the pains were anything as bad as she said they were. It is difficult to form an opinion. Contrast patient A with patient B. She sends for the doctor who is not in the house three minutes before the 2nd stage is over and she smiles as she apologizes for keeping the doctor three minutes!! Upon being pressed she tartly admits that she has had pains for 3 days but did not care to trouble the doctor.

Now the labour in both these cases may have been virtually the same, but the former patient was of a totally different disposition to the latter, and there would be considered great uterine inertia in the former case and none in the latter.

In cases of prolonged 1st stage I do not give ergot. I give ergot in no stage. I give it only for post-partum haemorrhage and after pains; I have found however 3i dose of Tinct. Ferri Perchloridi act quicker than ergot in acute haemorrhage. If labour is protracted I follow
the plan of Chamberlen the inventor of the forceps and one Carminatives. I have
found they improve Hyd. in 20 and I met.
Hypocyan. in 20 as one does very useful.
Such a method gives rest, and then the
patient wakes up with a better quality
of pain.
I have never seen a case where strong
labour pains will not come provided we
wait long enough, but the following is a
typical instance of what happens in
the great majority of normal labours.
Mrs. A. No. 372. Sent for me at 9.30 A.M. & I
found the 02 uteri dilated to the size
of a 21. piece. She had ineffectual pains
until 4.30 P.M. When suddenly the
uterine contractions became severe, &
the child was born at 5. It seems to me
that a large percentage of cases there is
a considerable period of ineffectual pains
or energy, and suddenly comes the change.
What produced this change one cannot
tell.

Dr. Herman Difficult Labour Page 118
Foot Note refers to Chamberlen's Carminatives.
The above rough diagrams may illustrate the arrangement of the uterine muscular fibres. Only in pregnancy can we see the muscular layers of the uterus. The muscular fibres, after 6 mo. pregnancy are arranged into 2 great sets: (1) External or Sphenoid (2) Internal. 1 Sphenoid is seen in the lower animals, a very fine network of muscle fibres covering the uterus. In the human being, this layer is also present but it is a very thin network of fibres, marked best in the posterior wall. The fibres fan outward, on either side of the broad ligament and reinforce the fibres of the round ligament.

2 Intrinsec. They are divided into 3 groups:
(a) External. Running up from cervix until it reaches the fundus—amphoric. True funiculi of the uterus, from arch downward to 2 ovipel any body lying there
(b) Middle layer is that one to set which runs transversely. They contract the uterus, from side to side, and run in irregular way. These transverse fibres each and all surround a vessel and the contraction of these fibres absolutely prevent haemorrhage. They are living ligatures.
(c) Internal layer or circular set of fibres at each of the openings of the uterus we have a group of circular fibres. They are sphenoceild fibres.

Extract from notes in Midwifery taken at Sir Haliday Croom's lectures.
A peculiarity in the contractions of the uterus I have seen on rare occasions of which the following is an instance. About a year ago I attended a patient, I found the 02 uterus quite dilated, and, in spite of very severe pains, the foetus did not descend. The pains were real, and there was no obstacle to prevent the child coming down. I came to the conclusion that one variety of uterine fibres were acting with exceedingly great force while another variety were not acting at all. I was obliged to give dilatation immediately and I easily performed version. This is one of four cases which I had.

The inset sheet has some rough diagrams and a very clear idea or description of the muscular layer of the uterus, and of the three layers of intrinsic muscles. The external or set of longitudinal fibres were not acting in the above case while the middle layer or the set that pains transversely were acting in a very powerful way — the description on inset sheet is from notes taken at Sir Halliday S roommate's class in Midwifery.
and this year I read of a similar case, "A Case of Uterine Contractions Without retraction." Where Dr. Herman states exactly the same thing.

Dr. Berry Hart in his postgraduate lecture 1898 1908 on the 2nd and 3rd stages of labour, pointed out that the foetuses did not as a whole become lower down in the 1st and 2nd stages of labour, although the head of the foetuses came to the perineum. It apparently does come down, but he states that the position of the head lower down than at first is due to the extension of the head—the head, arm and legs are more extended as labour proceeds than they were at first, and the apparent lowering of the foetuses is due to this extension.

Dr. Berry Hart thought differently in 1881

"As the pains go on he can feel the uterus diminishing the vertical height of the foetuses until it ultimately expels a living child" E. Obst. vol vi P. 130

"A Case of Uterine Contractions without retraction" Vide Obstetrical Transactions of the London Society Vol 49 Page 46 (1898)
He showed two casts of a foetus - one cast indicating the condition at the commencement of labour - extreme flexion, and another cast of a foetus where labour had progressed considerably and showed extension of the head, arms and legs to some extent.

I had always been under the impression that the foetus moved bodily down during labour as Dr. Hart himself believed in 1887. After that lecture when opportunity offered, I commenced to measure the height of the fundus above the pubis in many cases, at the commencement of labour and afterwards. I found that Dr. Berry Hart was quite correct.

So the foetus does not descend as a whole during the 1st and 2nd stages of labour. The presenting part descends owing to extension but not the fundus uteri.

Edinburgh Obstetrical Society Transactions
Vol. VI Page 130 Line 15
Influence of age on labour.

I had not found the effect of age on labour, as much as is usually thought.

I had 4 cases of primiparae who were over 40 years and of these 3 were slow, and 4 had very quick labours.

I had one primipara aged 51 and she was so very quick that I could not get there in time.

Dr. J.W. Kennedy mentions the case of a woman having given birth to a child at the age of 62. It was a quick and comparatively easy birth, but she was not a primipara.

There is a great deal written about the impaction of the head in a breech case, but very little or none about the impaction of the shoulders in a vertex case.

Dr. Berry Hart in his post graduate address on the 2nd and 3rd stages of labour.

Effect of age on labour Dr. Herman's difficult labour page 250
labour (1908) says the head should not
be pulled, or there might be rupture of the
5th and 6th branches of the Cervical plexus.
But he did not say what we were
to do if we cannot get the shoulders
away.
We might certainly try to stimulate the
uterus to get another pain, but if no
pain comes what then?
I wish therefore to refer to cases in
my practice where the shoulders were
impacted, and there were no further
pains and there was no other alternative
but to pull on the head.
The worst instance I had of this kind
was case No 1463 a Mr Webster.
After the pains which expelled the head
had passed away, all other pains ceased.
We tried to get contractions of the uterus
but all to no purpose. We then tried gentle
traction on the head and later we pulled
more strongly until 15 minutes had
collapsed.
The nurse and I thought by this time the
child must be dead and so we resolved
to use great force, I placed a narrow towel round the child's neck to give me a good hold, while the nurse put put her two hands on the child's neck. We pulled hard - so much that my arms were sore the next day. We got baby away living, and it did live.

Dr. Freeland Barbour had a case similar to this; but the body would not come away owing to one forearm being flexed at a right angle, and lying across the back of the neck and while the head was being forcibly pulled through by the forceps the elbow caught in the brain. Dr. Barbour thought he would do better had he turned.

It is not uncommon that I am obliged to pull on the child's head to some extent, or allow the child to be suffocated and there is no doubt about such cases occurring with other practitioners.

It seems then that the Child will bear
a very considerable amount of pulling
provided we pull
1. In a straight line and not twist or
   bend the neck to any side.
2. If we do not pull with a jerk but
   make a steady pull.

One might however prevent all this
if you use some pressure against the
progress of the Coming head until
the lower passages are well dilated.
But after everything is done we do get
the shoulders impacted. Hence the
operation called

Cladectomy

Where one or both Clavicles are divided
because the pelvis is narrow (or shoulders
very broad) and the shoulders will not
come away.

When the Clavicles are cut the body comes
away easily.

It was Dr. Herbert Spencer who first
did this operation - Cladectomy.
But he did not publish it.
Nor did he give it a name.
He did it in the course of another operation.
A Russian then did the operation and published a paper on it and it was then spoken of throughout Germany.

Dr. J. W. Ballantyne did it in Scotland and then wrote an article on it and gave Dr. Spencer full credit for the operation.

The clavicles are divided at the junction of the inner and middle third and it is wonderful to see with what ease the child then comes away.

If this operation is done in a living child, we must mind the Subclavian Vein.

The third stage of labour.

The third stage of labour has always been the battle ground in obstetrics and there is a good reason for it, as Etheldred says, "The last stage of labour is just that on whose course the life and health of the woman chiefly depend." Vide

Gleideotomy by Dr. J. W. Ballantyne
"Discussion on third stage of labour" by Professor Simpson.
In a normal labour the head may come into the world in two ways (Berry Hart)
1. Simple Translation
2. Extension
Both are good but the former is the better.
We should press on the Sinciput to keep the head flexed.
Have the patient on her left side to guard the perineum with the thumb
upwards and in front of the ances and so press the Sinciput to preserve flexion.
In an ordinary labour then except we keep forehead back until the occiput
is well round the pelvis around the corner and there will be much less liability to tear the perineum and
less liability to get the shoulders impaled.

We should turn the patient on her back immediately after the second stage of labour.

Air is more likely to enter the uterus if she lay on her side (Ballantyne).

In ROP cases the occiput comes first over the perineum and comes to the left side. Then follows the posterior shoulder.

The Cord.

The ligature should be about 1½ in. from the child and so much of the stump should be left in cutting as to prevent the ligature slipping. It is said that the cord may become infected and the child may get pyaemia. I have never had a case nor heard of one in my district.

Squeeze the jelly out of the cord to heal up the cord.

J. W. Ballantyne Postgraduate Course last summer (1908)
It is suggested that in the cut cord the arteries projecting should be tied separately and the jelly squeezed out and the ends brought to form a stump. (Ballantyne) But the present method seems to be quite good.

If each artery of the umbilicities were separated and tied surgically there would not be better results then than now.

Amongst the 4 graduates who attended Dr. J.W. Ballantyne's post graduate Course at the Maternity Hospital in 1908, there was not one in favour of surgically tying the arteries. What we all agreed was that there was no necessity for it as the present method was absolutely satisfactory.

It is interesting however to note the changes in the cord

1. A dark colour in 3 days
2. Then there is a line formed where
It may drop off.
If there is any redness - red streaks from behind the cord to the symphysis, it means sepsis.
If there is sepsis there are two roads by which it may travel - one along the hypogastric arteries which are being obliterated, the other road along the urachus.
We may note also the direction upwards along the obliterated hypogastric vein.
Hence jaundice occurs by sepsis going to liver even in mild cases.
On post mortem examination the pus has been traced.
In all my cases I had only one very short cord - so short that I had much difficulty in tying it.
In one case as the mother was crossing the room in labour the foetuses fell from her, and the cord snapped. There was no one in the house at the time. I was the first to arrive and found the baby crying lustily.
on the middle of the kitchen floor, while the young mother with her cheeks bedewed with tears was in the bed.
The cord had torn 4 in from the foetal side. There was no haemorrhage from the child and very little from the mother. Both did well.

Dr. J. W. Ballantyne at the Post-graduate Course 1908 showed us a baby with Talipes Calcanæeum which was produced in utero by the cord which had been round the foot. I held it in the position of Talipes Calcanæeum.

It was anticipated that manipulation and massage would right that foot. I had 9 cases of prolapse of the cord and succeeded in each case in returning it. In 4 cases the child lived; in two the child was born dead.

I found the elbow and knee position very successful in keeping up the cord during labour. It was much better than the fleq.
The prolapse of the cord was always due to pelvic deformity or an abnormal position of the child, or both. Not uncommonly I have met knots on the cord. On two occasions I have found two knots on a cord, but never were the knots tight and the circulation was never impeded. Neither was the Whartonian jelly atrophied. We very often see Spurious knots on the cord. They are thromboses in the cord due to the activity of the poetus twisting the cord.

The Placenta.

I agree with Dr. Berry Hart when he says that Credé's method should not be used for the placenta unless there is haemorrhage. Dr. Berry Hart is very consistent in this because when I heard this statement from him it reminded me so forcibly of a paragraph written in 1887. when Professor Simpson...
says he would use Crede's method
to separate the placenta. Dr. Berry Hart
dissents and it is easy to imagine he
would dissent very sharply.
He strongly urged us not to interfere
at all for one hour.
In discussing this subject it may be
well to take a short historical retrospect
of the subject, and Professor Simpson in
1901 gave an very interesting epitome of the
subject before the Edinburgh Obst. Sociey.
Hippocrates in his writings advised the
use of drugs to bring away the placenta.
He does not advise active treatment.
Neither does Rösslini in his first text book
on midwifery.
Louise Bourgeois in her "complete midwife"
advices removal of placenta by the hand as
a last resource.
Then comes Deventer who is the first
Champion of active treatment of the
placenta and in his writing answers
all objections to it.

Deventer was very successful in his method but the general practitioner was not.

So a reaction set in.

It is difficult to understand why Deventer was so successful and others were not.

Professor Simpson says "that whilst this kind of treatment in the hands of a master might be carried out with safety, it was attended in the hands of the general practitioner too often with disastrous consequences."

But it is difficult to understand what has "the hand of a master" got to do with the microbes of sepsis; then as now were no respecter of persons; and if Deventer's hand got fairly into the uterus soon after the birth of a child, it would be a serious matter for the mother in those pre-antiseptic times.

Possibly Deventer did nothing else but midwifery while the general practitioner.
had to do with sores and abscesses in
his general work, and thus got his hands
contaminated with pus.
Possibly Sevener might have been
fortunate in having a considerable
number of placenta fairly loose and
lying in the cervix and upper part
of the vagina.

In any case, there is no doubt
that deaths had become very much
more frequent than previously, and
so a reaction set it headed by
William Hunter and Dr. John Harvie,
and what the latter says seems to me
very reasonable, considering the conditions
under which they lived at that time,
because I am sure that if it is dangerous
in these days of antiseptics to introduce
the hand into the uterine it would be
far more dangerous then.
Hence Dr. Harvie says "if after waiting
an hour there be no unusual dis-
charge they order the woman to be put
carefully to bed and then leave her.
In such cases I have not known of
any placenta that has remained longer
than 19 hrs and all the women thus
treated have recovered to great
advantage. Is it not therefore reasonable
to believe that nature would complete
this part of her work with safety as
often or oftener than she does the
delivery of the Child."

If I had lived at that time I would
follow the advice of Dr. Harvie and
not that of Deventer.
It is very difficult to understand how
the general practitioner, if he followed
Deventer's treatment, would have any
patient survive.
At the same time I do not agree with
Dr. Harvie when he asked, the general
practitioner to leave her patient, she
might die of haemorrhage.
In 1769 Dr. Wallace Johnston advises
pressure on the abdomen and pulling
on the Cord. He had however introduced
his hand into the uterus, because he
writes, "Had I known sooner the
method of assisting by compressing
the abdomen I might probably have succeeded in some of these cases without introducing my hand."

In 1772, Charles White of Manchester says that by gently pulling on the cord and by pressure on the abdomen the result was satisfactory, because he writes, "I can with satisfaction declare that in the years during which I have proceeded in this manner, I have never had occasion for the manual extraction of the placenta;" but he adds, "I have never left my patient till it came away, nor have I ever been detained a single hour by it."

And Dr. White illustrates his case by the remark that on one occasion a surgeon having been advised, left his patient before the placenta had come away. She began to bleed during the night; she died of haemorrhage.

Dr. Dease (Dublin) in 1783 also advised gentle traction on the cord and pressure on the abdomen but also went so far...
as to introduce "two or three fingers between the OS uteri and the placenta."

So at the close of the 18th Century there were still diverse views held as to the treatment of the placenta. Osborne says the placenta ought not to be permitted to remain under any circumstances for any considerable time after the birth of the child; while Denman (a colleague of Osborne) says "if the placenta be not expelled at the end of 4 hours from the birth of the child it is generally wise to determine upon extracting it and the determination of choosing that time is, I believe, best found on the opinion that the parts have not closed since expulsion of child."

Then Professor Crede noting the dangers of delay and the still greater dangers of manual extraction hit upon the method which bears his name.

But he (and especially his followers) erred in having recourse to too early and
too frequent interference with the natural efforts and amongst his followers it was too evident that
1. bits of the placenta were frequently left in the uterus
2. If placenta were wholly away, some of the membranes were left.
3. The uterus was said to be often inverted
4. There was very much haemorrhage
So a change of policy was again instituted when Ahlfield and others protested against active interference and advocated the leaving of the extraction of the placenta to natural processes.

What then at the present day is done?
Sir Halliday S. Groom waits about 30 min.
Professor Kynoch says that in hospital practice he generally adopted the expectant method as safer teaching for nurses than laceration. But in practice waits for 30 min until he had ascertained that the placenta was separated, then expels it by pressure from above.

Professor Kynoch, Edin. Obst. Soc. Trans Vol 26 P 246
Dr. McVie thought the third stage was as capable of being managed by natural processes as the first or second stage, and that if there was interference in the 3rd stage it should be because shown and must have warrant for such interference, and that the general practitioner would protest against a time limit, and that if the cord were pulled upon it simply means pulling on the uterine wall.

Dr. Ritchie was not in such a hurry now to bring the placenta away, as he was when he commenced practice and said there should be no time limit.

Dr. Waddell said he taught his class that a general average would be 30 minutes. Professor Simpson said he might wait as long as one hour.

So the time varies with different authors. Some wait 10 or 20 minutes others one hour or more.

In my practice I wait much longer—several hours. I remember attending Case No. 2049 a Mr. A. who had only just returned from Brazil. I found
in the 3rd stage of her labour the placenta was adherent, and she replied that it was the same with all the 7 previous children. Then asked her what the doctor in Brazil did for her when the placenta was adherent every time. She replied that she lived in a very remote district where there was no doctor and she had to wait until the placenta came away itself. It usually took about 10 hrs to come away and she was nothing the worse for it.

Dr. J.R. Purdy strongly recommends leaving the uterus and the abdominal walls alone - not to rub the uterus when it relaxes. He strongly approves of the method advocated by S. Burchard.

My rule in adherent placenta is to wait by my patient for me hour & if the placenta was not away by that time, I would get my patient made comfortable in bed and allow her to

Dr. Purdy in British Medical Journal

Oct. 31, 1908.
rest quietly without having touched
the abdominal wall - unless there were
haemorrhage.
I do this not because I have the least
fear of setting up septic mischief,
or at least much septic mischief by
interference; I may wait several
hours and I wait because if it is
possible to release the placenta without
inserting my hand into the uterus,
there will be no fear of septic
mischief, and there will be no need
to annoy the patient with intra-
uterine or vaginal douches. So I wait
for many hours and in the large
majority of cases the placenta comes
away of its own accord in a few
hours. And thus I save the patient
some annoyance, and myself a great
deal of anxiety and work. Because
once the hand, however clean, enters
the uterus one must be very active
for a few days, otherwise periperal
fever may set in.
I saw a very decisive case of this;
Kind sometime ago by a doctor who had come to this city to do some post-graduate work in diseases of women. While here however he undertook to do a few obstetric cases and on one occasion he had a case in the neighbourhood, and he called on me to ask if I would accompany him. I did so. He was a person who took special interest in his work, and for whom I had the utmost respect. However when we arrived we had not far to wait for the 2nd stage was about over but the placenta was adherent, and after waiting 30 minutes he resolved to reach it with his hand.

Before doing so the perineum was thoroughly cleansed and his hands and arms were well washed with antiseptics. He got very little trouble in releasing the placenta which came away entire with the membranes. But here it was that we differed. He said that since the perineum and
his hands and arms were rendered aseptic he did not see the necessity of giving intra-uterine or even vaginal douches of antiseptic solutions.

In theory he might be correct but in practice he was not, because on the 14th night after the birth there was a violent ringing at my bell & I went to the door. I was told that W. A. had taken about turn & that the bed shrank with the regorgs.

I immediately went along & found the patient with a temperature of 104° & a pulse of 140. The pulse was of a bounding and accentuated character.

The abdomen was much distended and worse than anything was the very anxious expression on her face. I at once telephoned for my friend, but every effort was of no avail.

I mention this case to indicate and to emphasize that he who interferes with the inside of the uterus, however clean his hand may be, must be prepared for active measure.
at the time and afterwards, because however good antiseptics may be, one's hands however carefully washed are not absolutely aseptic.

It is to avoid energetic clowthing or irrigating the uterus and so trouble the patient that I am so reluctant in removing from the uterus the placenta with my hand.

So I wait for several hours.

Dr. J. S. Purdy Writing in the British Med. Journal Oct 31. '08 states "it is best to avoid touching the uterus or abdominal wall after the birth of the child until the placenta is born. He says that he has tried this method and found it a revelation to him - no difficulty with the placenta. The longest period he had to wait was 49 min and the average 10 min."

To this I reply that it is very rarely I get any placenta away in 10 minutes, or even 30 minutes.

Sometimes the placenta will not come away even after waiting several hours.
and then I insert my hand, but only under the most antiseptic precautions and with every case that my patient gets an intra-uterine douche at the time and at least once daily and a vaginal douche three times a day. Then under such precautions the patient makes an excellent recovery.

My antiseptic solution for this purpose is not strong—in fact very weak but the water is previously boiled for half an hour and the syringes and all utensils cleansed and the perineum sponged.

The keeping of the uterus quite aseptic, like the keeping away of gonorrhoeal ophthalmia in the new-born infant depends not upon the strength of the solution, but upon the frequency of the application.

However this is my apology for waiting so long for the placenta, and I find that in the great majority of cases it will come away by waiting and it comes away then completely.
There is also another distinct advantage in waiting, whether the placenta comes away or not during that wait. The advantage is this: It is well known that when the hand is passed into the uterus soon after the birth of the child how one feels the warm, moist uterine mucous membrane. Now if my hand is passed—say in two or three hours after the birth of the child—the mucous membrane is comparatively dry. Now I have noted that when the hand is passed when the mucous membrane is comparatively dry it is far less liable to septic absorption, than when it is in a hot and moist condition.

Dr. Herman relates that he had only one case of adherent placenta in all his experience. He introduced his hand into the uterus but it did not birth with antiseptic cleaning.

Fothergill states that after separating the
placenta with his hand inside the uterus, one hot antiseptic douche is sufficient and there will be no further trouble.

I would not undertake the risk of relying upon one antiseptic douche. In some cases where there has been not much interference I have had good results with an intra-uterine douche at the time, and vaginal douches twice or thrice daily with a Higgensin Spring.

Another fact I have noticed is that on few occasions it was very difficult to get the whole of the placenta away when the placenta was really adherent. There are fibrous bands or cords like whip cords passing from the placenta to the wall of the uterus, and it is very difficult to get the whole of the placenta away.

In these cases it is of no use trying to do what the text books say, in edging one's hand between the placenta and uterine wall. We must pick
up the placenta as best he can, and be careful not to take away part of the uterine wall. If in doubt leave bits of the placenta—I know this—that it does not matter if bits of the placenta are left, because they will come away with the douching—either intrauterine or even only vaginal douching. The great point is to keep the uterus aseptic and all will go well.

I remember more than one instance it was impossible to feel which was placenta and which was uterine wall and I had a subconsciousness that there must be some bits left, but I kept the uterus quite aseptic and the result was satisfactory. Some bits came away with the Ureaphin and if these happened to be something left the uterus can be curetted later on. I knew in such cases that all went well because

1. Involution was complete
2. There were no septic symptoms
3. There was no haemorrhage at any time.

4. There were no miscarriages at subsequent pregnancies, so the practitioner should not worry.

A peculiar instance of adherent placenta I have met on a few occasions is where the uterine peritoneum is attached or adherent to the peritoneum in other parts of the abdomen. I saw such a thing at a post mortem examination on two occasions. The exact condition is this - that the placenta is adherent to the internal surface of the uterus to a certain extent and on the outside of the uterus corresponding to the attachment of the placenta to the inside, the peritoneal surface of the uterus is attached by inflammatory adhesions to the peritoneum covering the connective tissue at the back of the abdominal cavity or a crus of the diaphragm. This is the reason why on some occasions we cannot get any grasp of the uterus.
and when my hand enters the uterus it follows the Cord to trace the placenta to its junction, and then with the looseness of the placenta the peritoneal adhesions give way, the uterus falls upon my hand and follows it down.

Dr. Robert Jardine speaks of the whole of the anterior wall of the uterus firmly adherent to the abdominal wall.

I do not at anytime allow the placenta to remain in utero many hours but on one occasion I knew of a placenta remaining for months.

The father had called and desired me to go to attend his wife at her confinement. She was in labour at the time but I could not go. I heard nothing more of the case for a long time when the husband again came along in an excited state stating his wife was "fainting" I immediately went along and found his statement quite true.

and on examining found a placenta coming down the parturient canal. It was somewhat hard and it came with the foetal side foremost. It was, meaning the cord. When it came away the haemorrhage stopped. Now this was the placenta belong to the birth to which I had refused to go, and it was exactly eleven months and 3 days since the confinement. The baby was able to stand by the chair and was looking on.

Dr. Herman relates a case where the placenta was in utero several days.

"Aitfield has rendered most important and valuable service. . . . . . . . . And still more in demonstrating that the placenta may be left for lengthened periods as John Harvie had declared a century before without endangering a patient's comfort or her life." Professor Simpson.

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Professor Simpson Edin. Obst. Trans. Vol LXVI - 240
Dr. Herman Difficult Labour Page 380
But it might be asked are there not risks in waiting some hours for the placenta? My reply is I have never regretted waiting.

1. I have always taken precautions against any haemorrhage, and in the many cases I have had, there has been no trouble.

2. I have had no sepsis.

3. Some fear that the uterus might close. I have never had any trouble in this direction. The longest period I have waited for the placenta was 18 hrs. I have never had the os uteri closed or in a condition that I could not insert my hand.

The Cause of the Separation of the Placenta:

With regard to this I have taken an interest in only two theories (1) That of Dr. Barbour (2) That of Dr. Berry Hart.

Dr. Barbour says "Diminution in area of the placental side beyond 4 in. by 4½ in. + the action of the uterine as a whole on the placental mass I regard as the formal
cause, the pains of the 3rd stage as the efficient cause of separation—Blood effusion is an accident, i.e., not essential. Dr. Berry Hart does not mince matters in replying for he says "Dr. Barbour does not know how the placenta separates and he advocates a theory for which there is no evidence."

According to Professor Currullo, Dr. Berry Hart considers as one the mechanism of placental detachment whether the insertion be on the body of the uterus or on the inferior segment, and the separation can only occur when there is a disproportion between the placental surface and the area of insertion. It takes place from the elastic recoil that follows the contraction."

But distinctly more interesting is Dr. Berry Hart's account of his theory as given in his lecture on the 2nd and 3rd stage of labour at the Obstetrical Postgraduate 1908. These are his words:

"The placental area is reduced in the..."
3rd Stage of labour from 4 to 4½ hours. 

This shrinkage of the side of the placenta does not separate the placenta in the 1st and 2nd stages, but in the 3rd stage there is a disproportion between the placental site and the placental area and the proportion may not be much but quite sufficient to detach. In the 1st and 2nd stage, the placenta detaches walls work together - the one retracts and the other does the same. The 3rd stage it is different.

The disproportion may be only microscopic yet it is sufficient for detachment.

This explanation given by Dr. Berry Hart seems to be much plainer than the account given by Professor Curatulo. It may be somewhat different to what Dr. Hart held some years ago.

However Dr. Hart explained it in a very forcible way so that one feels almost compelled to take his theory. But to return now to less debateable
ground.
We should examine the placenta and so avoid trouble later on. It comes away inside-out and so the first thing to do is to invert it - turn it the other way. There must be no irregularities on its uterine surface, look if a piece of tissue is wanting, and if it is wanting is it in the uterine, vagina or outside? We should note also in tracing the membranes if it may stop short or abruptly. If so we must account for it.
It is well to look for haemorrhages into the substance of the placenta - multiple haemorrhages indicate kidney trouble or syphilis.
Calcareous concretions indicate post mature labour - the pregnancy having gone on after time, and the time was intended for the bone of the child.
Placental lobes - supernumerary lobes - are apt to be left in the uterus. Hardness in the placenta indicates
haemorrhages into it.
The foetal surface of the placenta is not so important usually but it should be examined for the umbilical vessels. The Battle-axe placenta has the cord into the margin (membranes) and yet into the placenta.
So in rupture of the membranes in Battle-axe Placenta, one might have one or two vessels torn into, i.e., vessels of the cord torn across. This is quite possible, as when a tear begins it may go along way, as in case of rupture of the uterus extending to the bladder.
We must see that no succenturiata are left in uterus. I have very rarely met with single ones - on two occasions in all, although it is stated that there is one case on record where the placenta had them all round its margin little little moons.
The green colour on the foetal side of the placenta is due to meconium going into the liquor amnii and staining the liquor amnii, & so stains the foetal
side of the placenta. This may especially be seen if the child is dead, as the sphincter ani gives way and the meconium escapes. I have seen it also when the child is asphyxiated.

If a piece of the placenta is missing and left in the uterus it is better to remove it by the hand under anti-septic precautions. It might not be well to try pressure. But it is important to remove it as a sponge left in the abdomen. It is better to give ether although it is the 3rd stage—the hand scratching the uterus is very irritating although the passage are wide and the hand inserted easily.

The same applies to membranes but you can wash out the membranes. Many beasts come away of themselves. But it may be asked why I should be so anxious to allow the placenta to remain for many hours before inserting my hand, whereas here I advise the removal of a small piece of placenta forthwith with my hand.
The difference is this—that when the whole placenta is in the uterus, there
is not the tendency for the uterus to
close, as when there is only a small
part.

Velamentous Placenta—The cord runs
into the membranes before reaching the
placental margin. So a tear in the
membranes might extend to one or more
arteries.

Dr. Ballantyne had a case in 1904 where
he wished to produce premature labour
in order to obtain a living child.
The pregnancy had advanced to full
9 months and he desired to wait a
little longer as the head would enter
the bony pelvis easily, but without
provocation the waters burst, and
labour started. But he wished to delay
for 7 or 8 days.

However when the placenta came away
he found a single blood vessel running
cross near the tear, so that the vessel
might have given way. Hence such
placentae as the Battle's case and Velamentous
have some risk.
The kidney-shaped and horse-shoe
placenta are peculiar; while two
halves of a placenta may be joined
by a membrane with the cord in the
membrane between the two halves.
Sometimes we may have a great
membranous placenta—a great big
thinned-out placenta which is very
dangerous and causes frightful
post-partem haemorrhage, as it may
cover the whole of the uterus and
thus the whole of the uterus bleeds.
There is some danger when there are
two lobes of placenta joined by mem-
branes, and the cord inserted in the
membranes between the lobes.
In twin placentae there may be
great variety both as to position of
the cord—one battledore the other central,
and also variety as to Amnion and
Chorion.
Twins
We should not wait for the other twin
as usually the first is larger and so
there is plenty of space for the other.
It is well not to diagnose twins until
one is born.
You cannot depend on the foetal heart
to diagnose twins.
One may think that hearing a quick
heart in one place and a slower
heart near by that there must be
two hearts and so twins. Not so;
the heart of the foetus may vary
in beat.
Since the second twin is often much
smaller there is no gain in waiting.
In 21 instances I had to do with twins,
and of these only 4 were in full time.
It was remarkable that in all my
twin cases, which were full-time, the
labour was very quick so that in no
instance was I there in time, and although
I went at once and had only a short
distance to go. In one patient a prematurity
I was there in time to receive the second
one.
Excepting these seven, the others were
premature & the labours were not so
quick as in the full timed ones.
I used to wait for the second baby and
after waiting hours was obliged to reach
it with my hand. So I have altered
my method.

The Child.
In infectious diseases the child is infected
almost the same moment as the mother.
If we vaccinate the mother in the
last month of pregnancy, baby when
born will not take on vaccination
(resisibility) during the first
months of its separate existence.

The mortality of the child at birth or
in its early life may be due to

1. Asphyxia due to forceps or pressure
   on cord, or child may swallow some
   liquor amnii.

2. It may die in 2 or 3 days or later owing
to overlaying.

It is curious that so very little is needed
merely carrying baby and pressing it
against the breast when only a few
weeks old.

3. There is the possibility of getting septic
mischief through the cord.

Convulsions during the first fortnight are practically always due to gastrointestinal trouble and the absorption of septic material from the alimentary canal.

Green stools may be due to meconium during the first 3 days.

Then from the 1st week to the 6th week green stools may be the presage of diarrhoea.

3 or 4 stools a day is not diarrhoea in a child.

Dr. Ballantyne is of opinion that in most of such cases the mother's milk is not good and he admits this is quite contrary to what is usually taught.

In any case it is well to use for green stools as a trial one drop of dilute HCl in water and if the stools do not improve in 24 hrs, give an alkaline a trial—say Sod-bi-carb. but not Hg.

Dr. J. W. Ballantyne: lecture to Post graduate at Maternity Hospital 1908.
If this fails try artificial feeding
I consider the eye affection are nearly always due to gonorrhoea. and I use

1-2000 corrosive or
1-20 Protarqol.

Rather than strong solutions it is much better to use weak solutions frequently. Even pure water if used frequently will do.

There are some cases however in which
the gonocoeci are so very virulent that water will not do and that it requires
all our art to keep away the mischief.
I had in all 19 cases of ophthalmia due to gonorrhoea. but only two of three
were bad cases.

For retention of urine it is best to try
hot cloths. at first and if not better
we should inspect the penis, and in
female, the clitoris; possibly we may
find adhesions - adhesions of the prepuce
to the clitoris.
It sometimes happens that we are told that
baby has not passed water - because the
nurse may not have seen a wet cloth
It may be well however to examine the 
cloth and just in front of the meconium 
we may find urine acid crystals 
which will go to prove that baby has 
passed water and that the water has 
dried.

With regard to the failure in passing 
faeces we had better pass the finger 
high up the rectum; obstruction far up 
The hair in the meconium may possibly 
be derived from the liquor amnii. 
I never had a single instance of a baby 
failing to pass water, or faeces.
Dr Ballantyne in his postgraduate class 
showed us a child with facial paralysis. 
The child was getting better.
Such a condition may be due to instru-
ments where one blade of the forceps 
is further on than the other, but there 
are other things to be considered 
besides the blade of the forceps; 
because it must be noticed that the 
style mastoid in a child is not well 
developed - is not far out enough.
Hence the loss of that protection—
also the cartilage of the ear of a
child does not form protection.

In such cases of facial paralysis
we should note the power of shutting
the eye.

Facial paralysis in a child may be
due to a central lesion and then the
eye can be closed. So if the eye can
be closed it is not a good sign.
The prognosis usually is 2 days to one
month and 60% percent after this
it is central.

I had one case of facial paralysis after
forceps. It was a low, easy forceps
case and occurred only a few months
ago. Baby died well.

Hema.

Leptomeninges is blood between the
pericranium and the bone. It never
crosses the middle line.

We may meet with a double haematoma
with a groove between them—a groove
in the middle line.

There is sometimes a tendency to new-
bone formation and this is so well
marked that one may be apt to think there is a defect in the cranium—a ring of bone as if you could put your finger into the cranium.

The cephalo-soma usually tends to disappear in six weeks or more.

I have had none in my practice but have seen a few elsewhere.

The midwifery forceps

The percentage of forceps cases in my practice was 25.

The main reasons for using it were:
1. Prolonged labour due to inactivity of the uterus.
2. Occipito-posterior cases which would not terminate without interference.
3. Pelvic deformity—rickety pelves.
4. Those cases in which I hurried matters owing to marginal placenta previa.

Professor Kynoch says

"In marginal placenta previa, the os being fairly dilated, but the pains not strong enough to deliver the child quickly the forceps should be applied chiefly in the interests of the child." Edict Obst Soc Iran Vol 29 Page 224
5. I would apply forceps as Dr. Herman suggests in tonic contraction of the uterus.
6. I have been obliged to use forceps in two of my cases where there was contraction of the uterus without retraction see page 45.

The percentage of forceps cases is very varied. According to Professor Rynoch the Continental maternity's give a percentage of 3-6 : Edinburgh maternity 10 : Glasgow 18 and Dundee 7.

In the Rotunda Hospital under Dr. Johnstone the percentage of forceps cases was 45, in many of which the cervix was undilated.

He had in consequence a high percentage in maternal mortality, and, what was considered a low percentage of infant deaths, 9 percent.

While Dr. Clark had in the same hospital had an infantile mortality of 53 percent with far fewer maternal deaths.

But more interesting to me is what a general practitioner may indicate and a paper read.

Dr. Herman's difficult Labour Pages 125, 72 and 258
As stated by Dr. Michael Dewar, it should be compared; and the following table is of interest, as it gives not only Dr. Dewar's own experience but also that of others:

<table>
<thead>
<tr>
<th>Name of Place</th>
<th>No of Cases</th>
<th>Int. forceps</th>
<th>Material</th>
<th>Inf. death</th>
<th>Use of 1 cent</th>
<th>Death</th>
<th>Per cent</th>
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<tr>
<td>Eclab Mat. Hap</td>
<td>300</td>
<td>10.6</td>
<td>1.3</td>
<td>4</td>
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<td></td>
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<td>Quoted by Dr. Dewar</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dr. C (Country)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. G (Country)</td>
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<tr>
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<td></td>
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<tr>
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<td>10.0</td>
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<td></td>
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<td>Dr. Dewar (city)</td>
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<td></td>
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<td>0.5</td>
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<tr>
<td>Dr. M (city)</td>
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<td>35.0</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dr. M (city)</td>
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<td>35.0</td>
<td></td>
<td></td>
<td></td>
<td>nil</td>
<td></td>
</tr>
<tr>
<td>Dr. P (city)</td>
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<td>35.0</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Dr. B (city)</td>
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<td>35.0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dr. C (city)</td>
<td>35.0</td>
<td>35.0</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dr. H of</td>
<td>Falkirk</td>
<td>70.0</td>
<td></td>
<td></td>
<td></td>
<td>nil</td>
<td></td>
</tr>
</tbody>
</table>

Where space not filled in, no indication was given.

Dr. Michael Dewar no indication was given. Video Oedui Obst. Trans. Vol XXVII Page 242.
At first I had thought my 25% of instrument cases was very high, but on glancing at the above tables it does not seem so formidable as there are others much higher.

This is however considered by many far too high, and Dr. Sinclair stated that 14% of forceps cases should suffice, although others again say that 12 to 15 per cent is reasonable.

The reason given by Dr. Sinclair for asking for a low percentage of forceps cases, is that there is so much injury done to the pelvic organs, and such interference is also the cause of postpartum fever, and that the forceps so often causes the death of the child.

When Dr. Sinclair publicly gave forth these remarks he intimated that the young general practitioners did not know how to use the forceps as he should, and blamed the Medical schools for this incompetency.

In reply it might be said that the great majority of young practitioners
become assistants to older men before commencing practice on their own account, and do their midwifery under their supervision, and thus make up for any deficiency in the medical school. While Dr. Sinclair thinks the young general practitioners may not be able to use the forceps as he should, I do not believe the fault lies there. It is not the inability to use the instrument but the inability to know when to use it. A young practitioner may allow himself to be swayed by ignorant people in the house to assist the patient with instruments when he should not do so, and also attempt a very high forceps case in the first stage of labour when an older practitioner would not only refuse to attempt such a case but would resent any interference with their suggestions. I have never had one instance where the perineum was torn to the anus and in the few years I have had...
I must admit the broad shoulders did more mischief than the forceps. It is difficult to give a record of such tears, but if pressed to give a number I believe the number of distinct tears would not be more than 20, and that each healed up by first intention not even showing a scar.

It should be remembered that some perinei go in spite of every care and even with no instruments, and even when supporting the perineum in the way Dr Berry Hart suggests. In a normal labour as one writer says "it tears like wet paper".

In no case have I had a maternal death due to forceps, and in only one case did I do any injury to the child, and in this particular instance the child had some facial paralysis, which happened not when I commenced practice but after ten years experience, and in a patient—
Whose parietal canal was well dilated, she having had 14 children before. The paralysis disappeared in 5 days. I do not share the opinion of many people about the dangers to the child or the mother due to the delay in the use of the forceps.

Churchill quoted by Bosliniere states that the child is lost at least one time in four, when the head remains in the excavation longer than 4 or 8 hrs after the dilatation of the os uteri and rupture of the membranes, while the 2nd stage may be prolonged even 60 hrs before the rupture of the membranes.

Professor Kynoch says the applications of the forceps by the general practitioners is too often delayed, resulting in the loss of foetal life which might be prevented by the timely use of the instrument.

Professor Kynoch Edin Obs Soc Transact.
Vol XXI x Page 218 line 1
Obstetrical accidents by Bosliniere p. 89
Then Denman's rule was that the forceps should not be applied until the child's head had rested in the perineum for six hours.

Again Professor Kynoch says, "It has not yet been proved that by a frequent application of the forceps a very large saving of foetal life is obtained."

My own experience on this question is this. I have never found the mother or the child anything the worse however long I had waited after the rupture of the membranes and the dilatation of the OS.

Provided there is actually no mechanical obstruction to the progress of the foetus I have only one rule for the use of the forceps and that is I wait until the condition is such that I am absolutely sure that I can use the

Page 229 line 3

Vol xxix - Page 221 line 5
forceps without injuring either the mother or the child. I have waited for 36 or 48 hours after the rupture of the membranes and found the child quite well. In no case have I found things different. Sometimes I have found the head fairly well down on the perineum and have put the forceps in the head of the child, and finding things rather tight, and that the perineum might tear if I persist, then I just take them off again and wait.

The Instruments I almost invariably use are Simpson's long forceps. I used them long before I graduated and I have never had reason to change when the head is rather far up. I use the axis traction, but usually, I use Simpson's long forceps.

I am fully alive to the advantage of the axis traction forceps, but in Simpson's long forceps we have an instrument which (1) is easily applied...
2. It does not slip
3. It does not catch in the parts as taking
   in a pinch of the perineum.
4. I can regulate with it the pressure
   on the child's head, and this to me
   is an important matter, because by
   the use of Simpson's forceps I scarcely
   ever have the slightest mark on the
   child's head.
Dr. Herman says that the defects of
the axis traction forceps are
1. Its complexity - the number of joints
   and crevices into which dirt may
   get, and it is difficult to keep clean
2. The continued compression of the
   head while it is applied.
He further says that "if the Axis traction
were often required it when the head
is above the brim - the advantages
would outweigh its disadvantages,
but in 19 cases out of 20 the head is in
the pelvic cavity, and the ordinary forceps
will do just as well."

Dr. Herman's difficult labour Page 379
line 7
I do not quite agree with him in the last line quoted since the axis traction allows the head to rotate. My ideal forceps for a case where the head was in the pelvic cavity would be a short forceps which would allow of the rotation of the head.

Dr. Berry Hart thought the axis traction forceps was an admirable instrument, but thought they were rather apt to have a higher infant mortality, for the forceps was two rigid an instrument and the head was compressed, and if statistics were taken he would not wonder if there were a higher foetal mortality than was usually imagined.


The Puerperium.
The most important symptoms in the puerperium are
1. The Pulse
2. The size of the uterus - involution
   We should palpate to find the size of the fundus and also note the size of the bladder.
In the 3rd stage of labour the top of the fundus is midway between the umbilicus and pubis.
Then from the 1st visit to 24 hrs it is a shade above the umbilicus.
The 2nd day it is a shade below the umbilicus.
3. " a finger breadth below 1. " 
4. " halfway between pubis and umbilicus.
5. " just above pubis.

And involution is complete in six weeks.
During the first ten days of the puerperium
there is a quantity of muscular tissue (muscular tissue of the uterus) absorbed into the mother which is equivalent to
10 lbs.

Dr. Serur Koff. "Involutions Ideal & Real Vol III-69
It is evident from this that the mother will not during the first ten days need butcher's meat, and this absorption of muscular tissue accounts for the Albuminuria and puerperal clampsia which sometimes happens during the puerperium.

There is no physiological explanation of the absorption of muscular tissue. However I now allow my patients only unrestricted diet all in the direction of the carbohydrates.

In palpating the uterus it is well to note whether the uterus is not lying to one side.

Post-partum haemorrhage.

I have not yet seen a definition of post-partum haemorrhage.

Some people say that it has reference more to time than quantity - that small quantities going on for a considerable time - say a day or more to post-partum haemorrhage while others look to the amount. It may perhaps be best to look at both aspects.
Then the question arises how much must be the loss in order to call it post partum haemorrhage.

In comparing notes with a graduate of McGill University it was shown by his notes that a loss of ten ounces constituted post partem haemorrhage.

Dr. Ballantyne suggested that if after applying a napkin, the blood soaked through it - that would be considered post partum haemorrhage.

The haemorrhage may be from:

(a) The uterus
(b) Cervix - born cervix
(c) Torn perineum
(d) Vaginal rent

If after some pressure on the abdomen there is still haemorrhage we should examine the cervix and perineum to note if the blood is escaping from either of these.

We should as a matter of routine practice examine the cervix just as we examine the perineum.

If the cervix is torn it is not difficult
to stitch.

If the patient is put under ether the cervix can be pulled well down and easily stitched, and there be no need to fear ether in the 3rd stage of labour.

It is difficult to calculate the number of cases of post-partum haemorrhage which I have had owing to the want of an exact definition but I have had not death from haemorrhage and the number of ordinary losses of blood has been very few.

One case startled me, it was one in which I had given ether and used forceps in a protracted labour, and after the placenta had come away there came such a rush of blood I at once inserted my right hand into the upper part of the vagina and lower part of the uterus and with the left hand pressed the uterus externally. The haemorrhage at once ceased, & the patient made a good recovery.

A very useful rule is that when I am about to leave the house I put my hand
Under the bend to feel how the uterus is contracting.

Dr. J.W. Ballantyne jocularly remarks that the doctor instead of shaking hands in congratulating the father that hand would be better employed in feeling how the uterus is contracting.

I remember once forgetting to do this and suddenly remembered after I had gone a good distance from the patient's house. I felt dissatisfied and went back and then left with an easier mind.

Dr. Peter Young gave an interesting account of two cases of dangerous haemorrhage from the external genital organs during and after labour. He pointed out that the tear extended from the left side of the clitoris to the left side of the urethra in one case which proved fatal and in another case mentioned that the tear was in the same neighbourhood and that the haemorrhage was very severe.

Dr. Peter Young in Edinb. Obst. Trans. Vol viii
Page 48
Dr. Young also quoted Mathews Duncan who records that out of 25 cases examined the vestibule was torn in 16.

Professor Simpson at that time (1883) stated that he had never seen a fatal vaginal or cervical laceration.

Dr. Charles Bell records a fatal case in which it was stated a woman died of post partum haemorrhage due to an adherent placenta and two condylomatous tumours in the vagina, and her refusal to allow anyone to attend her.

Dr. T. Connell of Peebles also describes a fatal case of post partum haemorrhage due to haemorrhagic diathesis.

A very interesting paper by Dr. Alex Melrie gives a discussion on post partum haemorrhage. He showed with Dr. Mathews Duncan that there may be haemorrhage with a contracted uterus. There is no doubt that Gooch might have seen considerable haemorrhage when the uterus...
was firmly contracted but Good did not prove that the blood did not come—say from a lacerated cervix or a vaginal rent.

The moral of all these cases is obvious viz:

1. That in haemorrhage one should think of the whole parturient canal and not the uterus alone—Examine also the external genital organs.

2. That prior to the 3rd stage we should know whether our patient has a haemorrhagic diathesis.

3. Attend to the mother carefully from the time the child is separated.

Professor Simpson quotes Ahlfield who says:

"Ahlfield has rendered most important and valuable service in indicating the propriety of inspecting the whole genital canal to ascertain possible sources of haemorrhage other than that resulting from the necessary laceration of the utero-placental vessels."

Haemorrhage

Dr. Jardine gave an interesting paper on haemorrhage during the later months of pregnancy and early stages of labour, and also unavoidable haemorrhage. He divides the position of the placenta into central, lateral and marginal placenta previa.

He advocates rest until the foetus arrives to a viable age - palliative treatment unless the haemorrhage be severe. If the foetus be viable, and the haemorrhage be at all severe, prompt treatment is suggested.

1. By plugs - the vagina cleansed and well plugged
2. Barnes' bag or de Riles' bag, very effective in preventing haemorrhage
3. The bringing down of one leg of the child (after version if needed) and then gentle traction if needed to stop haemorrhage and thus practically allowing nature to take its course, because if the cervix is torn in Placenta Previa it is far more dangerous
haemorrhage than a tear in the cervix on other occasions.
4. If the os be fully dilated, version should be done or forceps used.
5. The placenta should be removed at once.
Caesarean section should not be done for this.

With regard to accidental haemorrhage, Dr. Jardine divides it into external and internal or both combined and the treatment will depend upon the amount of haemorrhage and the time it occurs.

He advocates treatment to commence labour by rupturing the membranes if the bleeding is not severe, but if excessive, the uterus should be dilated and the foetus removed by forceps or version.

The Rotunda urges plugging in such cases if external, and maintains that thus an external haemorrhage is not converted into a concealed variety. If there is haemorrhage during the early stage of labour—may be due to
Placenta previa or it may be accidental, the membranes may be ruptured and the uterus should be excited to contract. If however, the haemorrhage is very great and the uterus over expanded, abdominal section may be required.

Professor Simpson mentioned an interesting case of haemorrhage which was not placental or uterine but decidual - the decidua remaining vascular in the lower uterine segment.

Dr. Robert Barnes was present and and he suggested the use of his own instrument - the elastic uterine dilator to dilate the cervix and heartily agreed with the plan of drawing down a leg to prevent haemorrhage. He said nothing of plugging.

Professor Simpson did not believe in temporary treatment after the first haemorrhage. If a second occurred, more active treatment was necessary. He preferred Barnes' bag to plugging the vagina and other to dilate the cervix and turn and bring down a
Dr. Berry Hart supported Professor Simm.
Dr. Rynoch thought plugg ing as good as any other method, but insisted on absolute cleanliness. He however insisted that the uterus should be emptied if bleeding is copious.
Dr. Munro Kerr did not favour plugg ing or any palliative treatment in placenta previa but commended the Rotunda School in the use of plugg ing for accidental haemorrhage.
Dr. Nair Ferguson thought one might palliate if the patient was in hospital under supervision and said that the mortality in private practice was 23% and in hospital only from 5% to 10%. He urged that the great mistake (apart from sepsis) was to hasten delivery after the haemorrhage had stopped. He meant that after a foot was drawn down and haemorrhage stopped, we should not hurry matters.
Dr. Herbertson thought that plugg ing was the best treatment for Placenta
If the working class wife would remain in bed, but she would.

With regard to placenta previa I have had in all and my first case I got after there had been considerable haemorrhage from time to time, and beside I had been called in at a late stage. The uterus was dilated by de Ritis bag but the patient died owing to the fact that she had lost too much blood before active treatment was called for, although the amount of blood at the time of the operation was not so much. Seven cases were sent to the Maternity hospital and all recovered with the loss of the child in every case. I had three marginal case, which I treated at home and did well. I did not plug in either of these three case, but dilated the cervix and turned in two and used forceps with the third.

I have had four patients with accidental haemorrhage - in one patient it occurred twice. Hence I had fine instance of
The first two instances were external and the haemorrhage not very much. One of these was sent to Ward 35 of the Royal Infirmary. I was sent home before the bleeding had stopped. The other was treated with rest at home. No plug was used.

Both did well.

My 3rd case was a 14 para who came to engage me for her confinement and at the time expected I was hurriedly sent for. I found my patient bleeding frightfully. It was a case of external and concealed haemorrhage because the uterus was very much distended showing that there was considerable blood in it. My first thought was to plug the vagina to try to prevent such a rush of blood. I did it and noticed the abdomen become still larger. Very soon severe labour pains set in and the labour ended very precipitately. The placenta and child (nearly dead) were thrown out together and the bleeding ceased. The placenta had become entirely detached before labour. She
recovered. Very soon she became pregnant again and I hoped things would do better next time, but found that matters were quite as bad as before. So I resolved now to investigate and she admitted that prior to leaving Glasgow she had had a similar experience on two occasions. However I asked her to inform me if she ever became pregnant again. She did so and I ordered Pil hydrodode to be taken thrice daily for nearly the whole of the period of gestation. The result was a normal labour.

An abortion at 6 mo is a miniature labour with a second and third stage and a placenta. At six months a patient is liable to accidental haemorrhage.

In a labour at six months one has no need to worry about turning etc. Whatever may be the presentation it will be bundled out no matter how the foetus lies.

It is important to remember that accidental haemorrhage may not show
And we may not know of it except by a decoloured clot at the birth.

Dr. Ballantyne in his postgraduate course 1908 taught that if a patient faints during pregnancy one must think amongst other things, of accidental haemorrhage.

He said whether any blood is seen or not, we might watch for flattened decoloured clots at birth - very little minature pancakes.

I have on seven occasions met with decolored lumps of blood at the birth in different occasions but about three weeks after the last postgraduate course, I was called to see a patient who was pregnant and taking fainting turns. I examined her carefully and could find no cause and was compelled to think of internal haemorrhage. When her confinement came in I went along in an expectant mood and was on the scene early. I had not long to wait because the baby soon came and the placenta soon followed, but I never saw the pancakes.
Puerperal Fever. There is now a standard definition of this trouble, and it was decided upon by twelve eminent obstetricians from different parts of the British Isles. Note then that we must:

1. Exclude the temperature and pulse for the first 24 hours.
2. Exclude everything after the 8th day.

So our limit to puerperal fever is 2-8 days (inclusive) that is to say if there is a temperature before the end of the 1st day or after the end of the 8th day — that temperature and pulse drop not constitute puerperal fever.

3. If during the 2-8 days a patient has a temperature of 100° and a pulse of 100 per minute taken on three consecutive occasions such as say tonight, tomorrow morning and tomorrow night — if a pulse of 100 beats per minute and a temperature of 100° is seen on all these three occasions, then it is considered Puerperal Fever.

Professor Tweedy of Dublin desired to make it a pulse of 99 and a temperature of 99° as an indication of sepsis and
he argued his case with all the
energy and pertinacity so characteristic
of the Irish belt, but the firmness and
constancy of the Saxon prevailed, and
I was ultimately settled at the
original 100.

It must however be distinctly understood
that the three consecutive readings must
be 100 at least.

According to this standard the percentage
of morbidity in the Colne Maternity Hospital
is 4 (Ballantine).

If we are in doubt as to sepsis it is better
to smell the cloths (clochea).

Every lochia has a smell, but a definite
Sapraemia has a very bad smell.

It does not follow if there is a very bad
smell the prognosis must be bad—
possibly the opposite. The amount of
smell does not increase with the bad
prognosis.

We should be guided chiefly by the
pulse and involution of the uterus.
The main cause, Scheeke of Pericardial
fever, are too much subvenience on the
part of the accoucheur or a possibility of septic hands or instruments. I cannot blame the atmosphere for it. In all my cases I have but one cause to state viz too much interference.

There are very few exceptions to this cause. The vitality of the patient has sometimes to do with it. I was asked by a local practitioner one day to accompany him to a confinement case, and on the way he explained that the patient always took periperal fever, however careful he was. When we reached the house he examined, and found the head low down on the perineum, and resolved to assist her with forceps. It was well to assist her with forceps, but the temperature rose as usual, and she was obliged to get intra-uterine douches to reduce the temperature. I had some difficulty in believing that the constitutional symptoms were due to a septic uterus, but when I found that uterine irrigation did her so much good one was bound to believe. She was of a very tubercular diæ-
thesis although she had no tuberculosis at the time. She died two years later of phthisis. I mention these facts to show that a patient with a low vitality is so very liable to take puerperal fever.

Again No. 1385 was a patient who was delivered of a still-born baby slightly decomposed. She took puerperal fever. She took puerperal fever owing to septic absorption from a septic foetus. I had on other occasions delivered patients of dead foetuses more decomposed than this one. Then the question arises why should patient No. 1385 have septic fever. The reason was plain—low vitality owing to deficient nourishment.

No. 1436 was another patient whose temperature rose after being delivered of a slightly decomposed foetus, and the reason here was—a tubercular death-stasis. She died later on of Phthisis. But such facts may be mere exceptions. It might be said that anyone in a low state of health is more liable to any trouble. Quite true, but what I maintain
is that the liability is very much more than ever I anticipated.

The late Dr. Underhill records a case of pericardial fever, which he said was due to the patient being in the same room as another patient with cancer. He explains that the temperature went up owing to the bad smell - impure atmosphere - from the cancer patient. I believe this is possible but one should be extremely careful to exclude all other sources of infection.

Dr. Ballantyne asks us to lay one patient on her back because on her side air is likely to enter into the uterus and Dr. Berry Hart says that the genupectoral and semi-prone positions admit air into the uterus when the vaginal orifice is open - not on the dorsal or semi-dorsal position.

Dr. Ballantyne, Postgraduate Lecturer, 1908
also an article or paper read by Dr Underhill
"Some cases of puerperal septicemia due
to impure atmosphere" by Dr Underhill
indicates the same thing and none of the
fellows seem to take exception except
Dr M. Dewar.

Dr Haughton records the death of a patient
from Puerperal Fever due to the B. coli. The
patient lived above a stable.

I mentioned just now that one should be
careful to be sure to exclude all other
sources of infection before diagnosing
puerperal fever and to cause. Case
1944 illustrates my meaning. On the
4th day of the puerperium the temperature
of Mrs W. began to rise, and it continued at
about 103 or 104 degrees for several days.
There were however many signs of puerperal
fever absent. The uterus was washed out
and the fluid returned in the same
condition as it entered—although I may

Dr Underhill Edin Obst Soc Trans Vol xiii-120
Dr Naulhaam Edin Obst Soc Trans Vol xii-131
do that even in distinct periperal fever
because the pus might have soaked into
the walls of the uterus and infect the
lymphatic system. Before the uterine
membrane had been washed

However involution of the uterus was also
good. So, she was satisfactory and there
was not that great weakness which
marks periperal fever, nor any
anxiety in the expression of the patient's
face — yet the temperature continued
high, and although I had asked others
to see her, there was no definite diagnosis.

One morning when I called I found my
patient quite better and the nurse said
that when she drenched her head morning
a considerable quantity of pus came
from the vagina; an examination of which
indicated that there had been a diffuse
abscess in the wall of the vagina and I had
escaped notice.

I had one case of periperal fever due to the

head head of the Child, and the blade of

the forceps eroding the parturient canal
had two cases of puerperal fever due to gonorrhoea.

An interesting case of puerperal fever I got in one of those houses in Edinburgh where patients are privately taken in for confinements. This patient was at her home in the South side when the waters broke and the cord came down and she got a cab and was soon in West End Place. I was sent for and seeing the condition I suspected a pockety pelvis, although the patient seemed well built, and the picture of health. The conjunctive vera was somewhat more than 3½ in and the presentation a breech. I thought this a most suitable case to see what I could do in the way of getting the baby home alive and I would get every assistance at the private home. The cord was pulsating and so the first thing to do was to get the cord back into the uterus and keep it there. I succeeded in doing so, but then there were no labour pains. Sometimes even after the waters break pains may not start for days. I met one case where labour did not commence until the 10th day after rupture of the membranes.
and it is quite common to have to wait 4
or 5 days for labour pains after rupture of the
membranes.
However in this case labour commenced the
next day and I noticed she was slightly
feverish. But I was bent upon getting
a living child, which I did, after very
considerable difficulty in getting the head
away. But during the puerperium (3 or 4
days) she had all the symptoms of
puerperal fever, and there is no doubt the
cause was due to my putting a yard or so
of cord back into the uterus after it (the
Cord) had got septic in its outside by contact
with many things while she came from
the birth room.

The lesson is this that while the text books
are careful to describe how to put back the
cord and keep it there, it should be taught
that care should be taken that the life of
the mother be not endangered by replacing
a dirty cord.

I have had during my practice in Edinburgh
4 cases where the temperature was high,
although the pulse was comparatively not
so fast, and all due to the nervous condition of
the patient; and before concluding my
diagnosis in this matter, I took care to
examine every possible cause, and in this
matter I quite agree with Dr. Lackie in his
"Series of non-epidemic puerperal pyrexia,"
and also Dr. Herman in his case of
"Prolonged High Temperature of Nervous Origin" chloroform, of the 2300 cases I have given
CATTLE in 931. It was given in all forceps
cases and venereal cases but never in breech
cases except four, when forceps were put
on the breech. If labour is protracted and
not much advanced, I give sedatives such
as morphine and hypocras; but if further
on, I give CATTLE and dilate the passage
with my hand, and when the patient is free
out of CATTLE, energetic labour pains begin
another may be born in 15 min. I have

Dr. Herman in Transactions of the London Obst.
Society, Vol. XLIX Page 76.
Dr. Lackie in Edin. Obst. Society Transactions
Vol. XXVIII Page 58.
found this plan very useful, but have not
found it effective in every case, but in the
majority of cases it does. It is well
worth a trial
I give nitrous oxide and nitrous ether in
other anaesthetics than chloroform or
ether. I have no reason to change it for
any other. I have never had any trouble with
it, and I can say with Dr. Atthill "And
amongst them all there was never once cause
for alarm much less did a death occur"
Dr. Atthill quoted by Dr. Alexander Ballantyne.

Rupture of the uterus. I have never had one
instance of rupture of the uterus, nor have
I known of one in this or any other neighborhood.
During the last six years, I have interfered
much less during labour and allowed
labour to continue for long periods yet I have
had no rupture.
In one case a missy, a primipara and
aged 43, her labour was very tedious

Dr. Ballantyne (Alexander Ballantyne) Ballantyne
quoting Atthill, Collicott Soc. Med. New Val xxii
Page 8 line 14
and ultimately she was delivered by forceps. Within 6 weeks of her confinement she was operated on for fibroids, and it was found that the muscular tissue of the uterus was to a great extent substituted by fibroids—one as large as a Walnut, and all in the process of breaking down into pus.

It was remarked as being exceptional that the uterus had not ruptured.

Dr. Millard of Dunbar records a case in which a fibroid was the probable cause of rupture of the uterus—causing peritonitis and death, while Dr. Melne Murray instances a case of ruptured uterus and the tear injuring the bladder. "Spontaneous rupture in an apparently normal uterus," by Melne Murray.

Dr. Matheson reports a case due to mechanical injury.

Dr. Croom read an interesting paper on a case of
Intra-uterine Hydrocephalus with rupture of the uterus.

But I never in my whole practice met with a single instance of hydrocephalus or rupture. Dr. Munro Kerr in an epiteme in the B. M. Journal for Oct 31st 1908 deals with the causes, symptoms, and the treatment of rupture of the uterus with reference to 14 cases.

He mentions instances of insidious rupture, where the classical symptoms were absent, while he had other conditions which simulated rupture e.g. he had one case of dystocia from pelvic deformity in a patient who had a bipartite uterus - the double swelling and collapse suggesting rupture of uterus. It turned out to be one of Accidental haemorrhage. Plugging perhaps will be the best treatment in uterine rupture if the practitioner has had no experience in Abdominal Surgery.

Dr. Munro Kerr in British Medical Journal for Oct 31, 1908.

Dr. Croom in Edinb. Obst. S. Trans Vol IV Part III Page 82
The simple blunt hook is used for breech cases and the key for decapitating. The key is put round the neck and then twisted.

The sharp decapitator has a cutting edge with a knob on the end.

Ram's bottom's hook has no knob. There is another hook by Jardine. It has a knob and also a sawing edge. In all there are four kinds of hooks.

The broach is never used now.

To break up the head it is better to use the bascilyst. It is by far the best. It has a screw and we should not pierce much above the screw because at that part it widens out more than any other. You can send it then to the base of the child's skull, but it should not be sent further than the base or beyond the base of the skull in the uterus.

The bascilyst tractor of Simpson is too heavy and big.

The lanceo-clast is used after the bascilyst.

The toled blade of the trancoclast goes
into the hole made by the base-leaf.
Before we start using the Crano-colostom
it is well that we should put them (ex
the blades) together to see how they
should lie when in use. Then before
putting in the first blade, we should
lay the second blade down in a
definite position, so that we may be
correct in their use as they differ
from the midwifery forceps.
The baphalotribbe is never used. It acts
like a forceps, and if it makes the head
small in one direction, it is made larger
in another way.
It is necessary be very careful not to
hurt the mother in bringing down a
piece of bone.
Large scissors may be used to decapitate.
It may also devide the clande.
In using de Riches bag, know how the bag works, t
before-hand how many syringe-folds are needed
is full of. Then use the forceps gradually. Not putty
the whole bag in and then easing the syringe.
Blow up the bag, or syringe alittle at a time.
Then take out the forceps.
Operations. Spinal Tapping is of double interest these days as the same operation for tapping the spinal fluid in case of a hydrocephalic fetus, is also used to get a small quantity of the same fluid as a test for Cerebro-Spinal Meningitis.

If the fluid could always be got away from the fetus, the plan would certainly be better than using the perforator.

This is an operation which might be done by the general practitioner.

Version is performed of necessary and the body is brought away. The head being hydrocephalic will not come, but comes away easily after the fluid is drawn away by the Spinal canal.

Bossi's dilator by Professor Bossi of Genoa 1889 used to dilate the Cervix in emergency cases.

The point must be put in well beyond the Cervix and then one turn is made every 2 minutes, so that in about 30 minutes the Cervix is well dilated.

Dr. J. W. Ballantyne describes the operation and admits tearing the cervix owing to the point of the dilator being not beyond the inner end of the cervix. At the first grand-dame class there was some curiosity how so distinguished an operator should have torn the cervix and so. Dr. Ballantyne was asked. He replied that the instrument, put in well beyond the cervix but in manipulating the instrument it had come out. Thus there is a defect in the instrument that it was so liable to come out.

Vaginal Caesarian Section is too dangerous for almost anyone. It is not needed. The induction of premature labour is well within the range of every practitioner and the method by Catheter is by far the best. The Vagina should be made aseptic with Vaginal douches of antiseptic solutions and the

Vaginal Caesarian Section by Dr. Munro Kerr in Eden Obst. Soc. Trans Vol XXI Page 68
Dr. J. W. Ballantyne in Eden Obst. Soc. Trans Vol XXI Page 76
perineum & labia should be well cleansed.

2. Grasp the OS uteri with a Volsella.
   It is far better than fumbling inside the
   vagina to find the OS.

3. Dilate the OS uteri gently with a dilator.
   There need not be much dilatation.

4. Pass a catheter into the uterus, if possible
   to the back between the foetus and the
   posterior wall of uterus.

5. Before doing so let the catheter be
   absolutely clean: Well washed with
   Lysol and allowed to remain in a
   strong solution of permanganate of
   Potash for several hours and let the
   Catheter be a new one.

Labour will soon Commence, and if not in
24 hrs, put in a second Catheter.

I have delivered 9 children in this way who
would not have been born alive at the full
time. Seven out of the nine lived.

I almost invariably contrived to commence
labour about the 8th month, but my main
guide is the comparison between the rise
of the head of the child and the brim of
the pelvis. I wait until the head barely
enters the breach.

This operation was first done by a London midwife in 1759 named Mary Donelly who I have some reason to believe was herself English but that she had married an Irishman.

But the induction of premature labour is not an unmixed blessing.

As far as success is concerned it is, but the one drawback to it is the uncertainty of the baby living. Mine have done fairly well but taking an over view I must say premature babies do not do well.

During the Scottish National Exhibition I had an opportunity of watching the success of the incubator and my opinion was that it was anything but a success. I thought at first that the only thing one needed to do was to phone and get a baby removed. Not so. After the order was given, the chief nurse called at the house, saw the baby, examined

Scottish National Exhibition at Saughton
1908
It, called the next day, and if she thought the baby had a good chance to live, she took it to the incubator. Of course this rule was slightly altered because if there were very few babies to keep the show going, the nurse would come down from her high pedestal and take baby, perhaps less likely to live. But in the whole they were well selected. Yet the results were not satisfactory. I know that the seven children I sent all died, and there was no one in the district who would send a baby there at during the last six weeks of the exhibition.

The one great principle which should guide us in the treatment of premature babies is that we must follow as far as possible and imitate intra-uterine conditions.

I believe that an incubator carried on in this city on scientific lines would be a greater boon even than a premature hospital.

Dr. Jardine says "To make the child a reasonable

Dr. Jardine in Edinburgh Obst. Soc. Transactions
Vol. xxix. Page 141
Chance to live, the 32nd week should have been reached. The nearer the full time the better.
"Pinnard thinks the induction of premature labour no longer justifiable and does Symphysiotomy."

Bar has abandoned it for Caesarean Section.

Symphysiotomy

Sigaudt in 1797 performed this operation successfully on a woman with a pelvis of which the Antero-posterior diameter was 2½ in. The pelvis was also asymmetrical. Succeeding operations were not so successful and Symphysiotomy was condemned.

Then for 100 years the operation was scarcely ever performed.

It was again revived during the last quadrant of the last century.

The advantage of the operation for widening the pelvis is considerable. There is a distinct gain but (1) There is so much
danger in tearing the soft parts
underneath the symphysis
(2) There is danger of sepsis
(3) The sacro iliac ligaments on the internal
aspect are stretched
(4) The patient is along time getting well.
The caesarean section patient is running
about along time before the patient,
handy had symphysiotomy done,
so able to get out of bed.
Dr. R.C. Burist mentions an instance
where the symphysis at the end of 3 months
was still moveable.
This maybe an advantage because if it
remained ununited the operation
would not be needed to be done at the
next pregnancy.
I saw this operation done only once but it
was performed successfully, yet I have
never cared for it. The child may be
somewhat larger than we bargained for
at the start and the shoulders may

Dr. R.C. Burist in Edin. Obst. Soc. Transact.
Vol xxvii Page 116 line 19
dilate the passage more than we had anticipated.

It might be recommended where a very small increase in the CV would suffice to allow the child to pass.

The Ayres method of Subcutaneous plan may not improve matters very much. Another plan described in the British Medical Journal is where a chain saw is used for dividing the symphysis subcutaneously but my experience of such saws is that they have the knack of turning and sawing in quite the opposite direction to which we require.

Caesarean Section is probably the oldest in Obstetrics, and like all old things it has a history in which fact and fancy are blended together. There is a doubt even about the origin of the name. Some maintain it derives its name from Julius Caesar who is supposed to have come to the world by abdominal section while others think...
that its origin is from Baedo, Cessi (L. Curt).
If it is called after Baedo one might as well call it the Macduff operation.

Pliny cites the names of several celebrated men who by this operation were delivered from their dead mothers—S. Africana, Manilius, and Caesar.

The lex regia enacted by Numa Pompilius made it obligatory upon the surgeon to remove the child by abdominal section in case the mother died during pregnancy.

Nicola de Falco is said to have done it in 1491.
Rousette in 1581 had performed it 16 times always successfully, 26 of his operations being on the same woman.
Scripio Mururina affirms that it was as common in France in her day as blood-letting was in Italy, where patients were bled for almost every disease.

Then came a reaction headed by Guil

Macduff—... from his mother's womb.
Unravelly ripped Shakespeare. Macbeth
Act V. Scene VIII. Line 18.
lemean and Ambroise Pare - who had failed in their attempts at Caesarean
Section.
Dr. Bretonneau of Tours performed it successfully five times in his own wife. In Philadelphia it was performed three
times, successfully in the same woman. Frenches relates a case in which performed
Caesarean section to save the child. Then when
he proceeded to provoke premature labour
and labour began in another pregnancy,
the uterus reffracted, and in spite of the
intestines protruding & the difficulty of replacing
them, the woman lived.
Caesarean Section is the great operation in
Obstetrics and it is important inasmuch as it covers nearly every difficulty. What-
ever the obstruction may be Caesarean Section
covers practically every thing.
The general practitioner should be able to induce
(1) Premature labour (2) Use the lobe
bag for opening the cervix and (3) Caesarean
Section. No 1 and No 2 are easy. No 3 needs
some experience and he should acquire that
experience. Dr. Michael Dewar in his paper
before the Edinburgh Obstetrical Society remarked on his "isolation" when he was in a Country practice. If any practitioner elects to go to a country district where he may be isolated, he must be of a surgical turn of mind, and hold himself in readiness to do any emergency operation. "The peculiarity of obstetric practice is that every man must or ought to be, an expert thus differing from the sterile branch of surgery."

W. Dewar

I have quoted the history of Caesarean section because it shows how that operation has been done in the most adverse circumstances, and therefore is not too much to be expected from the general practitioner, and besides, Lawson Tait distinctly says that the operation is well within the range of the general practitioner, and there is no doubt that general surgery is improving every year. "This operation is the easiest one in surgery."

Lawson Tait quoted by Bodmerie's Obst. Accidents &c. Paq. 249

as stated by Corner and Finchies "With the advance of medical and surgical knowledge a better educated and more highly skilled practitioner has come into existence. At the beginning he is prepared to do much surgery" Dr Nepean Longridge read a note on "64 Cases of Contracted Pelves" which had been delivered in Queen Charlotte's Hospital, and the author concludes that the treatment of this abnormality appears to be narrowing down to two methods of election, namely the induction of premature labour, and Caesarean section; and speaking generally it seems that the former method is most satisfactory with a conjugate of over 3 1/2 in and the latter when under that measurement.

To sum up: the induction of premature labour may be done by any practitioner with a clean catheter.

Nepean Longridge - Vide Tracts on the Obstet. Society of London Page 87 Volume 49. (1908)
If the practitioner has an impacted head due to a contracted pelvis, there is usually no difficulty in breaking it up; as I have seen practitioners during their first year of career do it. But it is not always easy to do it because in some instances one may meet a very narrow pelvis, with the head of the fortiss a considerable distance away. and in such a case it is almost easier—may be it is actually much easier—to perform Cesarean section. But usually the breaking up of an impacted head is very simple.

If the uterus needs to be opened in an emergency, the Rüthes bag is not difficult to use.

It follows then that if the General practitioner can use his midwifery forces and the Rüthes bag for quickly dilating the uterus in a case of perineal laceration or placenta previa; if he can produce corner and pinches ‘operahns of general practice’.
premature labour and also perform Caesarean section, he should not fear hi...ing in an isolated posbin.
And these operations are such that he should be able to do and before electing to choose his home in a region where it may be difficult to obtain assistance, or impossible to get it, then he should be of a surgical turn of mind and be well able to do any emergency operation—midwifery or general surgery.

Professor Kynoch, in speaking of Dr. Dewar's paper on the use and abuse of the forceps, states that the ability to use these instruments by medical student was very unsatisfactory, and expressed the wish that practical midwifery should be taught. It made compulsory just as practical surgery now is. This would be well if the teaching were attended to obstetrical operations as well— not that the general practitioner should always do such operations but that he might well be able to perform them in the absence of any
special operator and in such a case one might also be taught clinical midwifery e.g. pelvimetry and it is essential to know before the commencement of labour the condition of the pelvis. It was only yesterday (Nov 26. 08) that I got a telling instance of this. I was asked at 2 pm to attend a young wife at her second confinement. She had been ill since the early morning & when I arrived, found the Anterio-posterior diameter of the pelvis only 3 in. While the foetus was fully an average sized child, if not more. I suggested she should go to hospital for Caesarean section at once, but neither the patient nor her friends would listen to it. Very soon the membrane ruptured & the cord came down into vagina & I told the people there was not much hope for a living child. Very quickly the pulse in the cord ceased. The pain then became very severe and the vertex was still far away. Then the husband was sent for and after some difficulty he was persuaded to allow his wife to be taken to the maternity,
Where this fact has been taken away from her by S. H. B. soon after very much difficulty. This case is No. 1391 in my book but I quote it as it occurred at the time of my writing this; and also to emphasize the fact, viz. that people are so very careless in not sending word in time to their doctors and that the lay mind is not yet prepared to accept Caesarean section. The people fear opening up the abdomen and think it is a great risk. I have moved my patients always willing to suffer much to save themselves or a precious asset for their children whom they have seen, but will not venture much for the unseen. I have now two patients whom I expect to be attending soon who have narrow Antero-posterior dimensions of the pelvis, but neither will undergo this operation for Caesarean section. Hence not all my practice have I had this operation done. Looking backward on the 2300 cases, I
find I had two deaths in all and both these were due to puerperal fever with a very adherent placenta. The number of deaths was certainly small and is accounted for mainly by my having a very healthy and youthful class of people to deal with.

I can go on from one hundred births to another, meeting with no difficulty in the least. The one necessity in my practice is to leave matters to nature and there is no fear of the result. Occasionally an anxious case does crop up but by careful attention the matter ends satisfactorily.

I have never done any injury to the child in forceps cases except one where the facial nerve was slightly paralyzed for a few days but which ended in recovery.

I had six cases of very excessive haemorrhage (post-partem) but there was no need for anxiety. There were 29 cases of post-partem haemorrhage to a less extent. According to the record of my last 1000 cases the only record of any puerperal fever
was the case (page 126) when a prolapsed cord which I afterward found to be septic was replaced in the uterus. However with care this case also did well.

I have lost in all four children, as Caesarean had to be performed owing to a contracted pelvis. Would it not then be possible to get patients more especially those of the working class to submit to Caesarean Section so that the loss of infant life could be reduced.

In conclusion I may say that the subject of my thesis has an intense interest for me, and I have the satisfaction of knowing that my honest endeavour to do the best for my patients has met with their approval and continued confidence.