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Observations in Midwifery with special reference to the use of the Forceps.

The subject in the sphere of Midwifery has given occasion for much discussion and elicited more divergence of opinion than the question of the employment of the forceps. Men whose ability and experience entitle them to be considered authorities and to whose judgment it would be reasonable to defer widely in their opinions as to when and under what circumstances the accoucheur is justified in using the instrument to assist and supplement the efforts of nature. That the invention of the forceps has proved a blessing to humanity is admitted without doubt and more appreciated by those who have been relieved from danger and whose sufferings have been diminished or extinguished by their proper and timely application, notwithstanding the du-

Cæsarean sect. been taken place in medical circles and in the professional journals the difference of opinion appears to be as decided as ever - yet however let statistics - and after careful consideration of the cases the bewildered practitioner is compelled to rely upon his individual judgment and the treatment of each case must be dependent upon the phenomena which may occur.

In glancing over some statistics of British private practice (in private practice) in the County, and in the London Hospitals as well as in the city it is surprising to note the different ratio of forceps cases. In the celebrated Rotunda Hospital in Dublin there is a similar difference under a different management. For example during the mastership of Dr Collins from 1826-33 the proportion of forceps cases to the total number of confinements amounted to 1 in

60ˢ - under the management of Dr Johnson the proportion was 1 in 102 from 1861 to 1865. Upon comparing this of the London Maternity Hospitals such as Queen Hospital Bethnal Green, and the Royal Maternity, the ratio of forceps cases in the former amounted to 1 in 192 - in the latter to 1 in 109. In the general practice of Dr Dunn in the metropolis the proportion of forceps cases amount 1 in 202 ½ among the well provided and respectable class of the same city in 1850 as attended by Dr Cooper Rose he used the forceps nine times & in the proportion of one in 140 cases. while in the rural district of Watford Dr Bailey employed the instrument in 112 out of 6421 cases i.e in the proportion of 1 in rather more than 57. In the practice of one surgeon a change of practices may also be noted by a reference to the statistics of his cases published by Dr Gordon in his exercises of his profession

for 35 years attended alone 2206 cases using the forceps in 1 in 66 & in Portland Place he had 1020 in which the ratio increased to 1 in 9. Smellie a gentleman states that he used the forceps 10 times in his first thousand cases 48 times in his second thousand and 80 times in his third thousand cases. Dr Malins of Birmingham in a discussion on his subject at the meeting of the Obstetrical Society of London related that in a report of 806 cases attended by him 1870 he had used the forceps once in 25 cases while in the last five years the ratio increased to 1 in 5

To a critical and impartial observer, if not to the public, some explanation is necessary for such disparities in the use of a recognized operation. While science is exact the art of midwifery must be relative to the patient and the accoucheur.

Doctors differ in theory as well as in practice and the symptoms and circumstances of every individual case must be considered; regard being paid not only to the safety of the mother but also of the child. Rupture or other engagement of placenta praevia may be urged as an excuse for the improper acceleration of the rate of labour.

It is fortunate for the credit of the profession that the ratio of stillborn children and the maternal mortality after natural and instrumental deliveries do not show a corresponding difference. In the language of Dr Sams "the forceps is not employed as a matter of necessity but is frequently in a matter of election." In many instances the state of the mother indicates no cause for arrest while there is reason to doubt the propriety of delaying when the application of the forceps would probably have saved the life of the child.

In the rural works upon the practice of Mid-
wifery no directions have been made to de-
duce rules for the guidance & accordance
in the proper employment of the forceps.
A distinction is drawn between what are
called the high and low operations ac-
cording as the head of the child is above
the brim of the pelvis, or within its cavity.
For this distinction we are indebted to
Dr Hamilton of Dublin. The high opera-
tion which is sometimes subdivided ac-
cording as the head is above, or at the
brim is usually a difficult operation,
owing to the early stage of the labor and
the unexpected expansion of the os. The low
operation is comparatively easy and is,
evidently the operation to which Dewees
& Osborne and Denman have reference
in their recommendations. According to
Denmans law we are enjoined to wait
until the head has rested six hours on the

Occurring before our interference, and no case was deemed an eligible one for the forceps unless the ear of the child could be distinctly felt.

Generally speaking it may be said that the Forceps are better employed in cases of tedious or lingering labour, but the causes of tedious labour are variable and the results are not always disappointing even though the first stage has lasted from 24 to 48 hours, so that it is difficult to define accurately where the border line between normal and lingering labour is to be drawn. There is a coincidence of opinion between Churchill and Denman that there is no danger to be apprehended for mother or child in the first stage of labour, no matter how tedious it may be, unless in cases of haemorrhage or convulsions according to Denman. Influenced by such views one should have good reasons for undertaking the high operation, at all events before the

complete dilatation of the os; and yet it is undoubted that lingering labour does occur under such circumstances whether due to subjective causes, as paralysis, or disordered actions of the uterus or to objective causes as the child being dead &c.

In the early part of my practice I was often at a loss to distinguish between true and what are erroneously called false pains. I failed to derive a satisfactory test from information given in any text book to which I referred. Several times I have spent hours, days, & even nights, in attendance on a patient who considered she was at the full time of gestation, and had regular pains, and yet the symptoms have diminished and gradually disappeared and the birth has not occurred for a subsequent period of one, two, three, or four weeks. The result of attention to, and observation of, these

cases enabled me to note the following peculiarities or conditions existing when such abnormal uterine pains occurred.

1. Their situation: viz, low down in the front of the abdomen - accompanied by a desire to urinate frequently - with sickness and flatulence.

2. On examination the vaginal canal was not moist or lubricated, and in some cases the os tincæ was not wholly expanded.

3. What I considered a pathognomic feature during a pain, while the patient digresses he uterus and its contents, no distension or protrusion of the membranes was felt by the finger introduced into the os, cervix as the case may be.

Supposing however that the "pains" are true in what circumstances & at what time should the forceps be employed." This is the question sought.

In a short and general sense I think

in a ten a period of ten years during four
of which I attended the University I have
been called to attend 446 cases of labour.
In 12 of these cases I was grateful when
my father had occasion to use the For-
ceps. During the last four & a half years I have
personally attended 336 consecutive cases
in 45 of which I considered it my duty
to terminate the labour by the use of the
Forceps. Some authorities may consider this
a little meddlesome. Midwifery and I am often
asked in regard the question what would have
been the result had I left the case to nature
on the other hand I have regretted
in some cases that I had delayed the
operation so long. In every case I have
been guided by observations made at the
bedside, and habitually noted for future
reference, which I have found useful, having
been in the charge of a practice, where one is
frequently far from assistance, and is

forced to rely on his own judgment and resources.

In analysing those cases which have been terminated by the use of forceps I have been induced to interfere with the progress of the labour by the following circumstance.

I Where the liquor amnii has been discharged and the presenting part has been arrested for a period of more than two hours.

In a normal case of bringing it is a common occurrence for the pains to cease and labour to be arrested for a considerable time. The patient may even fall into a tranquil sleep, which may continue for two or three hours, the pains returning with increased severity and the progress of the labour being rapidly finished. In this circumstance an inexperienced attendant may leave the case to find the birth accomplished before he can be in attendance. The arrest of the labour, external pains, while the membranes remain intact is not

usually inferior to the life of the mother
& child. The case is different when the li-
quor amnii has escaped with or without
the subsequent complete dilatation of the
os. The vaginal canal become hot and dry
and the ineffectual efforts of the mother to
relieve her pains render her irritable and
despondent while the life of the child is en-
dangered in proportion to the duration of
the arrestment of the labour. Should the head
advance until it rests on the perineum and
remain there it seems to me that two hours
(I have sometimes seen one hour stated) is the
limit of time to delay if the birth of a
living child is an essential consideration.
It is not within the scope of the present
essay to enumerate the causes by which
the progress of the labour is impeded. They
may be physiological or physical-whatever
the cause I have reason to presume that the
mortality in infants would be less were

the efforts of the mother, when the Labour has arrived at this stage recited to the use of the instruments. The following case is interesting on this point

Mrs. L. primipara sent for me on the evening of October 11th. I learned that although she had not menstruated since last January she had not considered herself pregnant.

On examination the head presented the Sinciput anni had escaped previous to my being summoned. After waiting for some time, the pains being weak, little or no progress was made although her position in bed was changed and she was also encouraged to walk about the room. At 12 the progress was still unsatisfactory, although the os was dilated, and I was inclined to recommend the use of the forceps, but being counselled to delay, I left the patient and did not see her again till about nine in the morning, when I found some progress had been made

and the expectant succedaneum could be resorted. During my absence in the country the labour was completed by my father by means of the forceps, in the forenoon of the same day, but unfortunately the child was still born.

In primipara where the vulva is narrow, and the perineum tending to rigidity, complete dilatation usually occupies about two hours. If this is delayed longer, it is advisable, particularly in patient who are about, or above thirty years of age, to use the forceps. By cautiously employed, and plenty of time allowed, little traction may be necessary to overcome the rigidity, and no laceration may be caused.

This rule does not refer to those cases in which the liquor amnii has been discharged at the commencement of labour, or in other words precedes the pains by an indefinite period even after the lapse of two days.

this frequently occurs in Primiparae and is not of serious import. In the case of primiparae one would expect the case to be: dious on account of the labour being consider. ed long. The presenting part must be within the pelvic canal and this so sufficiently dilated to permit the introduction & the instruments - it must also be ascertained whether the pains continue or not. There is little difficulty in applying the forceps under such conditions and if traction is made regularly, simulating as much as possible the normal pains, no laceration of the perineum may result.

The child being dead is a frequent cause of the labour being assisted, and when one is certain of this fact, much time and anxiety may be saved by the use of the forceps. The absence of the caput succedaneum, the coldness of the scalp, the firmness of its skin, and the terminal distinctness of the cranial

bones which form the pelvis, may be useful in guiding us to a proper decision as to the vitality of the child in conjunction with the testimony of the patient and the absence of foetal pulsation. Besides the risk to the life of the child the arrest of labour is not without danger to the health of the mother. The vagina becomes dry and inflamed, and when the pressure is long continued sloughing may take place and may be productive of septicæmia & absorption of the decayed organisms. It has been said that vaginal fistula occur more frequently after tedious & unnatural than after instrumental confinements. Laceration of the perineum is another result of tedious labour the presenting part being expelled through the attenuated & rigid tissues which form its floor, in some cases the laceration not affecting the vulva — but the use of the forceps in time this might have been prevented

II When by examination or appearance of parts labours we diagnose some contraction of the pelvic canal.

In our remarks under the I rule it is presumed that the pelvic canal is normal i.e. not contracted in any diameter. In a country district it is not anticipated that many cases occur where here is contraction of any of the diameters of the pelvis experience however does not verify this expectation. There is no reason to suppose from the appearance of the patient that there is any deformity excepting it may be a contraction of the antero posterior diameter due to the projection of the sacrum the result of that very common constitutional affection, Rickets. In some cases the liquor amnii is discharged before the head is engaged, or shortly after it enters the brim, and although the pains are severe the progress is very slow and the dilatation of the os very tedious. When the

head is situated in the pelvic cavity, the finger may be introduced into the os and must attend that part of the ~~uterus~~ uterus which is called the parturient ring without any advance being recognised. On directing our attention to the condition of the os it is disheartening to find no dilatation taking place, & mind it seems to me to the pressure of the head or the dilated cervix or lower segment of the uterus arresting the transmission of the expulsive force from the fundus and body of the uterus. In short the head is impacted and a tedious labour is may be predicted, pregnant with danger to mother and child. Once arrived at this decision it would be folly to delay. In one unit two hours had elapsed since progress had been noted. The pains are usually severe and most irritative in character and as we are ignorant of this difficulty yet to be overcome, no time should

be lost in interfering. Except in such a case is dangerous to prescribe and delay may produce rupture of the uterus in time all it may cause inflammation and elongation of the vaginal canal.

The introduction of the forceps under such conditions is often a matter of much difficulty, especially if the os is imperfectly dilated, in addition to the impaction of the head. I have had considerable trouble and have spent much time before I could adjust the upper blade, and, as a rule, it has to be gently but firmly insinuated between the head and the pelvis. One blade considerable dis a point may be necessary to move the head, but when forceps is applied it gives confidence + encouragement to the operator. In one exceptionally severe case which I am bound now to confess should have been a case for craniotomy, I employed traction regularly with the assistance of Dr. Shaw and the husband conjointly. For a

period of one and three - quarter hours before the labour was completed. being in the case by and receiving at night no assistance was employed. the child was dead, and the mother exhausted by the violent efforts to extract the child, but she recovered satisfactorily, with the exception of some sloughing of the vagina receiving, with subsequent oedema of the leg.

In cases of contracted pelvis there are two other alternatives than the forceps viz. craniotomy and version. I have never had occasion to perform either operation although it may be urged in the case last quoted such should have been the proper treatment. In an experience extending over more than half a century I never heard my father referring or seeing a case of craniotomy and I know he had not a perforator in his possession. by some professional men such an operation is considered barbarous and

of late a decided reaction against the use of the perforator has arisen. Dr Lyle I trust I hope to see the day when it shall be banished. The evidence of Dr Madge in a speech which he made at a meeting of the Obstetrical Society of London is decidedly unfavorable to the advocates of Craniotomy. He says that he never saw a case of Craniotomy during a residence of six years in a district with from 400 to 500 midwifery cases in the year, and that while in Edinburgh for four years during part of which time he was attendant at the lying in hospital he never saw a case - also in a practice of 9 or ten years since he has not needed a case. In the two cases in which version was performed the child was still born, and the operation was chosen on account of the difficulty in adjusting the forceps, the head being above the brim. When the head is low in the pelvis and the liq: Amnii has been discharged for some time version is not an easy operation

Of the 45 patients delivered by the Forceps, six have required the operation on two, and two on three occasions. The history of one case is very instructive and shows the benefit that is sometimes derived from the timely application of the instruments. I was D. S. t. for one in the afternoon of April 29 1880. Having six miles to drive I did not reach her house till after six. On examination I found the os patulous, lips thick, and turned to sacrum. I could feel the membranes during a pain and they were ruptured shortly after seven o'clock, but the head remained at the brim and the presentation could not be recognised. The pains continued frequent and severe, and the head descended slowly widestly in the left Oblique Diameter. As she had been delivered on two previous occasions by the Forceps I thought I should now be able to apply them. The lower blade was easily introduced, & after great perseverance I succeeded to get the upper in spite of the woman resisting. After

traction during two pains, the head evidently passed the contraction at the brim, as the cavity of the pelvis appeared to be roomy, and the foetus was able to complete its delivery by the guidance of the forceps. The umbilical cord was four times round the neck of the child and only two coils were disengaged at the birth. The appearance life was gone but the heart still beat and after using artificial respiration and friction with warmth for about twenty minutes the child moaned a little. The child took breast afterwards but ultimately became sickly and died. The obstetrical history of the mother is as follows

First confinement three days in labour child dead
Second " no medical assistance - child dead
Third " Forceps late in the Child dead.
Fourth " " easy labour child living
Fifth " " " "

In more than one case the head appeared to be arrested by an appreciation of the tuber

cervix of the uterus, or an undue rigidity of the recto sciatic ligaments, but here the breech is not very attenuate to overcome. When the head of the child is large, the mother a primipara, and about or above thirty years of age, a difficult labour may be anticipated although from the configuration of the mother the contraction of the pelvis may be supposed to exist should either parent have a large head the difficulty resulting from rigidity or diminished elasticity of the tissues becomes greater. Of the 60 cases completed by the use of the forceps 26 were primiparae 10 of whom were about or above thirty years of age.

III In cases of Puerperal Convulsions when it is advisable in the interests of the mother that the birth of the child should be accelerated.

Of all the accidents which occur in Midwifery Convulsions is one of the most

alarming and is probably only secondary to Haemorrhage. These may occur at any period of gestation, any time in the course of labour, & during childbed. The causes of such are either physical i.e. due to pressure on any superincumbent maternal structure; or chemical produced by some alteration in proportion, or change in the constituent parts of the blood. As a rule there are premonitory symptoms, which, if recognised, may enable the physician by appropriate treatment and regimen to mitigate the spasms or even abort them. Should the usual remedies fail to accomplish our intention or desire, it may be necessary to induce labour in cases where there is much oedema of the abdomen and lower limbs.

The convulsions is ushered in by dimness or imperfection of sight with knowing-then fixity & fixation of the eyes, with elongation of the neck, and tension of the skin of the face, causing dilatation of the mouth & eyes.

the wrists become flexed, with the fingers and thumbs turned in - the body begins to shake, the lips and eyelids to quiver, and general convulsions of the whole frame ensue. In the latter part of the fit, the features are altered, the face becomes livid and the breathing stertorous. Three cases of convulsions have occurred since I commenced the practice of Midwifery one of which was the most painful I ever attended and the details of which I shall now submit.

On June 19, 1878, I was sent for to see Mrs B. primiparæ aetat: 28, but I could not visit her till the following day, when I learned she was seven months pregnant, and that she had got very sick two or three weeks previous to her coming to Largs, vomiting commenced on the 16th June and was very severe on the 17th, with headache & restlessness On examination I found the feet leg and abdomen oedematous the enlargement of the

Letter extending as high as the xiphoid Cartilage causing one to suspect she was more than seven months pregnant. The left leg was considerably swollen and the lower eyelids had been puffy. Little urine had been passed and there was albumen - Pulse 84 - tongue foul, countenance intelligent and trustful. I was struck by the contour of the abdomen in its upper part it seemed to enlarge abruptly with an angle at each side - not symmetrically rounded as is usual. About the umbilicus on either side I felt the limbs of the foetus most unusually distinctly conveyed to the hand. The abdomen pitted on pressure and she had dyspnoea on exertion. I gave her a diuretic mixture and recommended her not to go home as she intended to Priddy on the 22d. I was called to see her at 4 a.m. on the 22d as she had taken a fit. I learned from her husband she had had intense headache the night before, and had been very restless. The bowels had

been moved twice and she had vomited about half a teacupful of frothy greenish fluid but had passed no urine. When I arrived she was semi-conscious but did not know where she was - she was under the impression she had fainted and had been sleeping. One drachm of Rochelle Salts was prescribed every half hour until six ounces had been given. Shortly before 7 she had another attack and vomited. An injection of Castor Oil and Turpentine moved the bowels freely. As I was giving the injection she had another convulsion. After recovering from this she became very restless and could with difficulty be kept in bed. Fifteen grains of Chloral were administered and three hours elapsed before she had another attack. She regained partial consciousness and wished repeatedly to pass urine and make water but could not pass any. One ounce was obtained on passing the catheter which on boiling became white and turbid. At ten-forty and 12 o'clock she had other attacks which I be-

lined were contracted or modified by administering Chloroform whenever turning in of the wrists or increase of the snoring was noticed. During my absence for an hour she had other two attacks and as the features assumed a death like greenish appearance in the later stage and on examination I was able to dilate the cervix as far as the internal os I resolved to induce labour. I introduced a gum elastic catheter into the uterus, and, when the os was dilated, ruptured the membranes in the afternoon. Hitherto she was in a somnolent state and the os insufficiently dilated and as the convulsions continued. I sought the aid-ance of my father who bled her from the arm to about eight ounces. This caused the os slightly to relax and with difficulty I was able to introduce the lower blade of the forceps which caused such haemorrhage that I considered it prudent to withdraw it. Version was attempted but the feet could not be secured. After one or two other attempts followed by a gush of blood on each

occasion, the forceps were adjusted and traction made. The head advanced, but, upon being withdrawn from the vulva, to our intense chagrin, the neck came away, as did also the arms which were afterwards brought down. During all this time there had been free hemorrhage. An attempt was again made to turn and as the patient continued to take convulsions and her strength was greatly diminished Dr. K. was called in & recommended another attempt at version. I found the abdomen of the child turned to the front and distended like a drum — beyond this I could not go but could not turn on account of the muscular spasm of the uterus and the patient died exhausted in a short time. The convulsions in the latter stage were totally unaffected or modified by any remedy employed and thus terminated the most melancholy case I ever attended. On reflection I had made the induction of labour being unsuccessful although under the circumstances justifiable.

In neurotic or hysterical women if the head of the child rests for some time on the perineum which may be in a hyperæsthetic state especially if dry and rigid and the patient not very young the occurrence of convulsions is not at all rare and may call for the immediate application of the forceps.

IV In cases of rigid os without the occurrence of sickness and vomiting; and the patient is exhausted.

The condition of the os and cervix is the most important guide in forming a prognosis in a case of labour; yet it is a remarkable fact that many students are licensed to practise who have never diagnosed the os. It is unjust to conclude that they have been negligent in their duties - the fault consist in the want of time and opportunity for attending cases while studying at the University.

The lips of the os may be thick, hard, and granular in some patient - in others they (and more rarely) as thin as paper. At the commencement of labour the os may be turned towards the sacrum, and detected with difficulty by the fingers - or retracted so high as to be out of reach. In primiparae the dilatation of the os usually occupies some hours but I have attended two cases in which the duration of labour was

much shorter than I anticipated. The mothers were cousins, and as the os was only dilated to the size of a florin I thought it safe enough to leave the case for a little — the result being the birth of the child during my absence. The circumstances peculiar to each case was noted by though the os was so small the pains were severe and occured frequently i.e. every three minutes. Rigidity of the os frequently occurs when the membranes have ruptured prematurely and in primiparous patients above twenty five years of age. The pains are tearing and inefficient, the vagina becomes dry, and both the mother irritable. Marked relaxation of the os occurs after sickness and especially after vomiting. Should they be absent the uterus with its content may descend but the os may remain undilated. even in some instances when prolapsed and outside the vulva. I have often during the pains introduced my finger into the os and swept it round the inside with the in-

tentions of stretching it, often without any beneficial effect. Enemies, benesection, baths, and other remedies recommended I have had no experience of. The administration of alcohol in any form seems to me to be contra indicated by the increased temperature of the vagina and I have sometimes regretted giving it to the nervous. Worried and worried, the strength of the mother diminishes, the accouchement is disturbed and the result to the child may be disastrous. If Ergot has been given in such a case the unfortunate condition is aggravated by the unnecessary pain which is produced without any corresponding benefit. And I have often noticed the face & lips of the child color when the head is born, to be congested & livid consequently I have adopted the rule of applying the forceps after a delay of half an hour after Ergot has been administered provided under such circumstances no progress has been detected. On certain

occasions I have had reason to believe that the death of the child was due to the toxic effect of the drug in a tedious case of labour. I would two hours elapse without further dilatation of the os (when Ergot has not been prescribed). I believe it is not good practice to use the forceps when it is possible to introduce the hand without any risk of rupturing the cervix or that part of the womb which corresponds to it. Once locked, traction forcibly dilates the os forcibly then may be a little foetus in the os produced which if neglected cause much trouble in after life - giving rise to pain in the left iliac region accompanied by more or less Leucorrhoeal discharge. Some authorities in case of protracted labour due to rigidity of the os recommend an incision to be made in the cervix. I believe the employment of Barnes bags might be useful in such case but as they are often not at hand the forceps are more frequently applied.

Dr Roper mentions a case in which the midwife had given Ergot seventeen hours after the discharge of the liquor amnii with the result of greatly intensifying the pains while the labour was not completed until two and a half hours had elapsed after the first. The child was dead and to all appearance death had occurred only a short time previous.

In cases of rigidity of the os. I have found it preferable first to relax the force of extraction entirely after the pain has ceased so it is the continuous traction which overcomes the muscular contraction of the lips of the os, this method was adopted in the following case.

Mrs D. Dunipace sent for me at 6 a.m. on the 4th Sept 1878. On examination I could introduce my finger into the cervix but the external os was not dilated. The liquor amnii had escaped the previous night. After waiting for two or three hours as the pains were but

frequent and inefficient. I left. I called in the afternoon but little progress had been made. During the next day the advance was very slow and another night passed without relief. Next morning I was sent for about 6 a.m. the pains were still inefficient and the mother anxious but calmed. On examination the os was about the size of a crown piece, the head presented in the cavity then being no overlapping of the bones of the cranium. The pains were unable to dilate the os, and after waiting, I determined to apply the forceps. Some difficulty was experienced in introducing and adjusting the blades and considerable effort was required to overcome the rigidity. In the latter stage of extraction the mother was able to render some assistance. The child gave one or two convulsive movements of extension of the body but could not be resuscitated.

I have regretted in one or two instances when the pains were not sufficiently severe

when she was about the age of a flour
rupturing the membranes with the view of ex-
pediting the labour. She as to my surprise
instead of dilating has contracted and
become rigid and eventually I had to use
the Forceps.

V. In abnormal presentations.

The practice of Midwifery is frequently of such
a routine character that there is a prevalent
idea it might be undertaken by less educat-
ed persons whose time and services are not
so valuable as those of a professional man.
It is alleged, with great reason, that the time
of the doctor is often wasted and his energy
dissipated in attending cases of labour which
might have been deputed to the care of a mid-
wife. There is much truth in this declaration
for not a disease, it is a natural act, and
no complications should justify the young
accoucheur when sympathy for the suffering
has ceased often patient, and appreciation of

the possible results of the labour shake and undermine his courage. Cases do occur however - fortunately not often usually not singly where the presence of the doctor is indispensable to a living mother & living child especially when the presentation is not normal. This is marked by the patient and her friends and no question is more frequently addressed to the doctor during the progress of labour than this, Is the child coming all right? To diagnose this at first is almost impossible but it is a matter of great consequence that it should be recognized at an early stage One of the most common abnormal presentations is when the face presents towards the pubis. I have attended seventeen cases of this kind in 446 labours thirteen of which were terminated by the use of the forceps. In the other four cases the state of the parts and the vigorous character of the pains enabled the mother to deliver with any mechanic

cal resistance. Of course the progress was very slow, and the pains more irritating than in normal cases according to the testimony of the mother, if not in pain-pains. It is not any easy matter to determine in some cases the position of the head although the text books indicate clearly what should guide us in our diagnosis. There are several phenomena associated with this abnormal position of the head which I have found useful in concluding that one has such a case to deal with or if.

The pains are not intermittent, they never cease absolutely, and are more irritating & cutting in their character & perhaps owing to the pressure of the forehead on the pubis are mostly complained of in front.

2 The most dependent part of the presentation is situated anteriorly - is similar in conformation to the two membranes in an ordinary case and is rested usually for some time on the inner side of the pubis acting as a pivot.

while the head rotates more slowly on its transverse axis, since the forehead is not so well adapted as the occiput for sweeping under the arch of the pubis.

3 If in doubt, and the forceps have been applied - when traction is made the posterior wall of the vagina bulges in front so as almost to occlude the passage.

Having resolved to interfere, the introduction of the forceps is usually an easy matter if we suppose the head take in the cavity of the pelvis. I have never employed them to rectify the abnormal position on account of the fallibility of any diagnosis made.

(6) In four cases the funis presented one being a premature confinement. In two the child was born alive.

The presentation of the cord may not be suspected in the early period of labour and until the hope of saving the life of the child is slender. It may not fluctuate or the pulsation may not

of the quantity of liquor amnii be great, and the presenting part not easily made out, be detected until the membranes are ruptured. It is important in every case to satisfy oneself that there is no prolapse of the cord before the discharge of the liquor amnii. When prolapsed, a choice of two methods of treatment is possible — to interfere or not with the progress of the case. If the membranes are still intact, and the os wide, it may be advisable to introduce the hand and turn the child, a proceeding which may save the life of the child but may produce inflammation of the uterus and risk the life of the mother. In one case I adopted a different plan — having diagnosed prolapse of the cord by the peculiar dependent sinuous lateral character of the membranes I allowed the labour to progress without much examination until the os was well dilated, and the head low down. I explained the state of matters to the patient and her husband, informing them of the probable death of the child under. I had observed in foreign

the mother had been relieved by the forceps on two previous occasions and did not fail alarmed. On the rupture of the membranes I placed the cord in the succeeding pains so as not to be pressed upon by the head in the pelvis. When, during a pain, the pulsations were almost abolished I adjusted the instrument and delivered rapidly the child which was soon resuscitated.

In another difficult case with contracted pelvis I ruptured the membranes before detecting a coil of the cord which did not pulsate and which could not be replaced. Strong efforts were required to extract the head, and when delivery was completed the child seemed to have been dead for some time. If the prolapse takes place with little dilatation of the os or discharge of the liquor amnii the application of the forceps is impossible.

A case is reported in a recent number of the Medical Journal where a loop of the cord prolapsed as the head was on the perineum and the life of the child was sacrificed — the forceps not being at the command

of the accouchement.

(c) Presentations of the pelvis and inferior extremities, being infrequent, occurred in fourteen out of 4425 labours. Of these the breech presented seven times, the breech & foot once, the foot four times and the knee twice. Five of the children were still born, one being premature and about the sixth month, and two the subject of hydrocephalus - the remaining three died during the progress of a tedious and difficult labours. In two out of the latter cases the pelvis was contracted and in previous confinements the forceps required to be employed; in the third the mother was a primipara. As I could not hook the leg a pass a skein of worsted round it I desired the effort of the mother by adjusting the forceps on the pelvis of the child without feeling the handles. The deaths of the children occurred before the head entered the pelvic cavity, and was diagnosed by the change in temperature of the presentation.

V

When the inferior extremity presents, and the head is disproportionate in size, as in a case of hydrocephalus, the forceps may be applied after the expulsion of the trunk which is flexed upon the abdomen of the mother. A silk handkerchief or towel tied round the neck of the child may be pulled by an assistant. In one case the head was as large again as usual and nearly an hour was spent in extracting it. When delivered there was a rent six inches long antero-posteriorly along the vertex. The cranial bones were soft and detached and on opening the dura mater the base of the skull was covered by a soft jelly like substance, the only representation of a brain — the fluid had escaped on the collapse of the head.

VI In plural births, or in cases where the strength of the mother is insufficient, from weakness or disease, to complete the labour. In the former case this arises from uterine

inertia the result of over distension, then is no obstruction in the maternal parts; what is absent is the vis a tergo. I have at the urgent desire of a patient and after a reasonable delay terminated a labour by means of the forceps, in the case of a mother who had experienced eleven natural confinements. Where the mother has been fatigued by sleeplessness and worn out with tearing pain or where exhaustion has succeeded over action and anxiety, the cessation of the uterine contractions may be so prolonged, or our apprehensions regarding the effect of delay on the mother may be so great, as to induce us, when the head is well down in the cavity, to interfere and accelerate the delivery. In patients of a tubercular diathesis this is sometimes justifiable especially where disease has already made some progress. It is remarkable how rarely some women of a delicate habit, or even delicate, pass through the

different stages of labour, although the liability to hemorrhage after delivery seems in them to be greater. In anæmic individuals, or those in whom the action of the heart is irregular or intermittent, probably the result of rheumatism or chronic bronchitis, if the labour is prolonged, any pallid or livid condition of the lips, or signs of impending syncope, may be indications of the limits of prudence in delaying the application of the forceps. In one case of bilateral adhesions to my astonishment the patient became pregnant and was conveyed of twins who are still alive and healthy. No undue delay in the progress of the labour was permitted - being instrumental. The mother, after several attacks of collapsing dizziness, succumbed about nine months after being conveyed home, recovering sufficiently to be raised out of bed. In two of the cases of twins the forceps were employed to expedite the labours, notwithstanding the normal condition of the mothers. The men into

friction of the blade of the instrument was effectual in stimulating the uterine fibres. In another case of instrumental delivery the patient had not been pregnant for a period of seven years from her first confinement and the ability to relieve herself in the last stage seemed to have been forgotten. In another case in which Chloroform had been administered in two previous labours the same absence of voluntary effort was observed.

The dangers of delay in cases of Midwifery have been incidentally alluded to with the different divisions. These are—

1 Inflammation and sloughing of the vagina.
2 Rupture of the Uterus, and other accidents due to long continued pressure of the head on the soft parts, when the liquor amnii has escaped prematurely as e.g.
3 Pressure of the head on the "Retraction ring" or lower segment of the uterus with the os undilated and 4 Absorption of the putrid

secretions from the inflamed passage.
Should the child be born alive the caput succedaneum may be transformed into a blood tumour, which may afterwards suppurate, burst, and cure the health of the child from exhaustion.
The employment of the Forceps is not without risk to the mother and child - on the contrary in unskillful and inexperienced hands much damage may be committed. Rupture of the perineum is one of the most frequent accidents - this may often be prevented by more cautious employment of the instrument. Vesico or Recto vaginal fistula may be produced by neglecting to evacuate the contents of the lower bowel and bladder before operating. Rupture of the Cervix has already been mentioned as a result of the forcible dilatation of a rigid os by the forceps. Metritis occasionally occurs even in the day of Antiseptic Midwifery from irritation produced by the introduction of a foreign body into the uterus.
The injuries which I have observed, to the child resulting from the use of the Forceps in my

own as well as in the practice of others have been

1. Laceration of the scalp
2. Compression, and fracture of the skull
3. Convulsions and Asphyxia
4. Exophthalmic condition.

It is remarkable that the mortality in children after instrumental delivery is so small, considering the force sometimes employed in compressing the head before it can be extracted. In one case in which I was consulted, protrusion of one of the eyes with dilatation of the pupil and blindness was observed the results of instrumental expedition of delivery.

The maternal mortality in the practice of Dr Dunn was 67 per 100 in that of Dr Bailey about 28 per 100 in that of Dr Collins 1 per cent in Dr Rambotham's 14 and in Dr Johnston's practice 2·3 per 100.

Four deaths occurred in 446 labours to which I was called. In two of the three the birth of the child had occurred before my ar-

wind, a person of experience being in attendance, the midwife who had charge of the first sent for assistance some days after the birth during which time there was haemorrhage and the patient succumbed from the resulting exhaustion. In the second case the patient had jaundice before her confinement was attended by labour by a person of intemperate habits who I suspect had not extracted the whole of the placenta. Death occured from coma subsequent to delirium on the second day. Full details of the third case in which death resulted have already been given under the first heading of Placenta Conclusions with Premature Induction of Labour. The last was a case of puerperal fever occuring in a person confined for the first time when thirty years of age. Labour was tedious and the head persistently required forcible extraction by means of the Forceps. This was a matter of much difficulty. The placenta was adherent

and the uterus in a state of hour glass contraction. My assistant who had confined a patient a few days before was present at the birth and both mothers became ill with Puerperal Fever and died. As we had been in attendance on a case of pneumonia Erysipelas for some time previous and my assistant had gone, without knowing he was the cause of the death, from a child ill with Scarlet fever to the case of confinement the cause of the infection remains uncertain being due to one of the two viz Erysipelas or Scarlet fever. In both cases an Erysipelatous blush appeared; in the one on the buttock and thigh in the other there was great pain down the right leg in front with redness and oedema on the outer ankle and part of the leg. The character of the bowels & fluid was at first greenish like grass - latterly it was dark. Having taken some precautions to prevent the spread of the infection no other case happened.

The method in which the instruments are introduced and employed is as follows. Having dipped the blade in tepid water & tested it on the hand or cheek, that it may not be too hot, two or three fingers of the left hand, previously dipped in hot water & covered with any lubricating material are introduced into the vagina with the palm of the hand towards the abdomen. The instrument is directed along the palm and fingers into the cavity of the uterus, & depressed or elevated according to the blade of the forceps and swept round the head pressed home in the direction of the axis of the pelvis, using a little leverage action in case where there is inflection of the head or contraction of the diameter of the pelvis. Until the instruments are locked no traction is employed, and then only during a pain; or should the pains have ceased at regular periods bearing in mind the possibility of the instrument slipping, & the need being considered dispensed in the case of convulsions. The patient is placed on her left side

across the bed with the pelvis close to the edge of the bed. Two pillows are placed under the head. A sheet or counterpane is put in front of the bed and the accoucheur may don a towel or an apron. An attendant supports the woman in bed while another elevates the right leg. In case of vitiated vulva, light from a candle or lamp is thrown upon the pelvis to enable the operator to determine the presentation of the case. If the case is difficult, and the operator cannot overcome the obstructions, the assistance of a sensible matron is entitled and may also grasp the forceps behind the hands of the surgeon, or better by turning a towel in her hands and getting her to pull the considerable force may be obtained. If the head is at the brim or high in the cavity the handle of the forceps are well directed backwards towards the anus then gradually downwards and forwards until the head is rotated round the pelvis as an centre. During traction the tip

of the forefinger of the right hand may be kept on the presenting part of the child's head, and at the end of each pain, the progress made may be determined. Bulging of the posterior wall of the vagina occurs frequently when the labour is tedious and the presentation of vertex. This may be prevented by pressing it backward, with the forefinger of the left hand of the operator or that of an assistant before commencing to pull. Venous oozing occurs in some cases. Prolapse of the anterior wall may take place but not to the same extent as the posterior; it is to be kept in its situation by a similar use of the finger. The traction ought to be intermittent to allow dilatation of the soft parts and time for the uterus to contract on the body of the child. If much compression is required during the period of rest the handles of the instrument are relaxed or even unlocked to obviate any damage to the scalp. When the head rests on

the placenta unless delay may be dangerous to the child the cord is allowed to be divided, especially in primipara, by two or three pairs, and in normal cases the forceps are directed forward, and may even be disengaged before the birth, to avoid any laceration of the perineum. As soon as the head is born the mother is placed in the usual position in bed and, after a short rest, if there is no expulsive effort the head is turned and the body extracted. During the latter the left hand is kept firmly applied to the uterus to assist the detachment of the placenta. Unless much haemorrhage should occur no examination is made for ten minutes and the bandage and abdominal pads are not applied until after the lapse of half an hour. The petticoat and soiled cloths about the bed are removed and a folded sheet or blanket placed underneath the patient. Any part of the linen soiled is wrapped in a dry towel and kept at one side of the bed. The after

head and is single. Should an incurable abscess be present on entering the department an injection is given of Lukewarm water with one Drachm of Condys fluid – and the soiled clothes removed. Castor Oil is given on the third morning and Beef-tea ordered which assists its operation. In the evening of that day all the bodily clothing and sheets are changed. I apply usually two pads the under one being triangular consisting of a folded diaper – the upper one being square. The loose end of the bandage is placed below the trochanter which prevents it from slipping upwards.

The diet consists of the traditional bread berry, tea and unbuttered toast – with milk and corn flour or arrow root at night until after the Castor Oil has done its duty – when beef tea or chicken soup is ordered – then eggs or fish and minced butchers meat. In favourable cases the mother is allowed on the sixth night to sit on the edge of the bed with limbs dependent

and the soles of the feet touching the ground, which method seems to prevent giddiness. First night she is permitted to get out of bed and sit for some time unless there is much oozing. On the eighth day she sits up to take tea. Sometimes the mother suffers greatly from after pains which may be relieved by prescribing an opium pill at bedtime or by giving some sweet spirits of Nitre and syrup of poppies three times a day. If troubled with Haemorrhoids nothing seems to give so much relief as an enema of warm starch with forty minims of Tincture of Opium.

Sugar and water is the baby's best nourishment and if not early applied to the breast it may have milk and water in the proportion of one to four. If the cord is thicker than usual the nurse is instructed to examine twice or thrice within two hours after birth to detect any hemorrhage, which frequently occurs by the ooleation of part of the cord and the cover

(60)

quent slackening of the two ligatures.

William Alexander Baskie
M. A., M. B., M. C. et
Lang.