Observations

ON THE

CÆSAREAN SECTION AND ON OTHER OBSTETRIC OPERATIONS.

BY

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CHAPTER V.

Other Obstetric Operations.

THE other obstetric operations which require to be now considered are reduced into two classes, one of which includes those measures which are to be adopted compatibly with the preservation of the lives of both the mother and the infant. This division embraces the Employment of the Long Forceps, Turning, and the Induction of Premature Labour. The other class of obstetric operations are those by which the life of the infant, or that of the embryo, as the case may respectively be, must be sacrificed; namely, Craniotomy, Embryotomy, and the Induction of Abortion.

I shall make a few remarks on a suggested plan for Dilating the Distorted Pelvis; and I shall also briefly mention Symphyseotomy.

The objects to be attained by these two classes of operations are very differently estimated by different obstetricians. Some consider that those measures by which the lives of both mother and child are preserved, are adopted solely for the purpose of lessening the too frequent employment of craniotomy; others consider them as applicable to prevent the performance of the Cæsaean section. But few practitioners would ever think of having recourse to this latter named operation in cases in which either the long forceps, turning, or the induction of premature labour, could be successfully employed. The latter class of operations are performed with the express object and intention, as far as possible, to supersede the Cæsaean section.

CHAPTER VI.

*Operations intended to save the Life of the Mother,
and also that of the Infant.*

I.—*On the Employment of the Long Forceps.* This instrument most justly takes a high position in obstetrics, because its sole employment is for the preservation of life. It is intended, within a certain range of protracted labour, to supersede craniotomy. In the hands of a discreet and judicious practitioner, it is both a safe and a very powerful instrument. Before its introduction into practice, whenever turning could not be performed, the child was doomed to destruction by craniotomy. The employment of the long forceps in this country has been very tardily recognised. When I commenced (1817) my professional career, this instrument had never been used in Manchester; but, having heard the valuable remarks of Dr. Haighton upon its use, I availed myself of the first opportunity of making trial of it. I employed his instrument; but, after repeated trials, I abandoned it, and contrived one of my own, with blades of equal length, but with parallel shanks. This in-

strument I also found tended, in its embrace and compression of the infant's head, to produce disagreeable effects upon it, which I endeavoured by a second contrivance to obviate. This instrument is so constructed that only a limited degree of compression can be exercised. It has very short handles, and consists of blades of an unequal length: one, the long one, to lie over the face; the other, the short one, to be placed over the occiput. By this arrangement, the head of the infant is placed in the most favourable position within their grasp, and none of the injuries are inflicted upon it which are found when forceps with equal blades and long compressing handles are used. This instrument is employed mainly as a tractor, and very limitedly as a compressor.

To save the life of the child by the use of the long forceps is, doubtless, the object of every obstetrician; for, unless this were his intention, it would be better at once to have recourse to craniotomy. The head of the child cannot bear more than a certain degree of pressure compatible with its life; and, although it is wisely ordained that it can safely bear a greater degree of pressure before than after birth, yet there is a limit even here, beyond which it cannot be carried without the destruction of the infant's life. The head can also bear a greater degree of pressure when the force is applied in one direction, than it can in another. Much greater compressing force can be more safely used when exercised in the bi-parietal, than when applied in the occipito-frontal diameter. As the long forceps are usually placed on the head of the infant so as to embrace it in its long diameter, we ought therefore to consider whether our instrument is so constructed as to permit such an undue degree of pressure as may prove unfavourable to the life of the infant.

The head of the infant, when it is situated at the brim of the pelvis, usually lies with its fronto-occipital diameter corresponding to one of the oblique diameters of the pelvis; the vertex or face being placed towards the right or towards the left acetabulum. But when the antero-posterior diameter of the pelvis is shortened by the sacrum projecting more forwards, the head assumes a more directly transverse position. Now, in this position of the head, it is most desirable to place the two blades of the forceps on the sides of the pelvis, so that one blade lies over the face, and the other over the occiput of the infant. In this case, the instrument embraces the head in the most unfavourable direction for its safety, if forcible compression be made. But the lateral pelvic position of the blades of this instrument is much safer for the maternal pelvic organs than if, as recommended by some practitioners, they were placed in the conjugate diameter. To add the bulk of the instrument to the already diminished capacity of this part of the pelvis would be unwise. In all our artificial appliances, we ought to endeavour to produce similar changes on the head of the infant, which nature accomplishes, if left unaided. The head is lengthened, and its rounded shape changed; whilst its bi-parietal diameter is lessened. The former change we ought to obtain by having the instrument so formed as to allow the head to elongate when traction is used, and by the pressure it receives from the anterior and posterior parts of the pelvis. Notwithstanding the high opinions expressed of the great advantages of compression, I am convinced it is mis-

chievous. This statement is not theoretical, but rests on facts derived from the use of the long forceps both as a strong compressor, and, as now recommended, a tractor with very slight compressing power. In truth, I cannot understand how effective compression can be made, unless the blades of the forceps are applied on the sides of the head, and on the anterior and posterior parts of the pelvis. The tractive power of my instrument is increased by having a handkerchief passed through an opening in the shanks, which is formed by nearly a semicircular curve in each shank near the handles. The handles should be only slightly tied, to maintain their position. A pendulum, or side-to-side movement, must be combined with the traction; taking care that the range is regulated by the line of the axis of the pelvis, and that no pressure be thrown upon the maternal pelvic structures.

This instrument is sometimes required to rectify the position of the head of the infant, when its long diameter lies parallel with the antero-posterior diameter of the pelvis; the face lying either towards the pubes or towards the sacrum. In such cases, the blades of the forceps should be introduced along the sides of the pelvis, but should be placed over the parietal bones of the head. (For a further exposition upon these questions, I refer my reader to essays on various subjects connected with midwifery.)

There are no statistics published which afford any truthful information either as to the frequency of the application of this instrument, or as to the mortality of those women who have been delivered by it. In my own practice, I have used this instrument very frequently; and I can most conscientiously assert that I never had a death as a result of its application. In cases in which craniotomy had been performed, in some once, in others several times, under the management of different practitioners, I have delivered the women by this instrument, and saved the children. It is the duty of the obstetrician to keep constantly before his mind the dangers of protraction, and recollect that these increase in a ratio (already stated) proportioned to the length of time the labour is prolonged.

If this instrument is to fully accomplish its capabilities of saving life, it must be used before those dreadful mischiefs are produced by delay. If we calculate to bring a head through a fixed pelvic space, we ought to remember that this space is considerably lessened by the effects of long continued pressure.

The dogmatic injunctions of present and former authors, that the forceps ought not to be used before the os uteri is fully dilated, or until the woman has been in labour a certain number of hours, or until the ear of the child can be felt, are highly dangerous. They are delusive, and would, if acted upon, altogether prevent the use of the long forceps.

If these alleged conditions are required to exist to guide the practitioner when he ought to have recourse to this instrument, these rules are tantamount to a complete interdiction of its use. In fact, they are too absurd, unfounded, and dangerous, as indications of the propriety of even using the short forceps.

To wait for the dilatation of the os uteri after the rupture of the membranes is a great mistake; for, in the great majority of cases which require aid by the long forceps, this organic change cannot take place.

The obstacle being at the brim of the pelvis, the head of the infant cannot be pressed down upon it; so that, before this change happens, irretrievable mischief may be inflicted by the continued pressure which the pelvic tissues must, under such circumstances, endure. Therefore, as soon as the time has arrived for delivery, we must not hesitate to apply the long forceps, provided the os uteri is so far dilated, and further dilatable, to enable the practitioner safely to introduce the blades.

If the instrument is in the hands of a discreet and judicious obstetrician, no mischief need be dreaded; for the blades of a well-made instrument will rest as safely within the uterus as the hand of the practitioner.

Time ought never to be considered an element of calculation, especially during the second stage of labour, for the use of instruments, except in creating an anxiety to be on the watch, and to take timely steps to deliver the patient.

An early use of the long forceps, when the necessity of the case is established, will prevent those serious constitutional and local mischiefs (already mentioned) which are produced by the long continued pressure of the head of the infant upon the pelvic organs and tissues. Those who are opposed to the use of instruments, and advocate time and patience, attribute to their application those structural and organic lesions which are really the effects of delay.

It has been already stated, that the head of the infant can only safely bear a certain amount of compression by the forceps; but it must also be understood, that the infant is frequently destroyed by injury inflicted upon the head during protracted labour. Procrastination beyond a certain limit is highly hazardous to its life; and, as its preservation is an important object to attain, the long forceps should be immediately applied (if safe to the mother), if the stethoscope indicates danger.

In convulsions occurring during labour, these instruments may be of essential benefit, if they can be safely used.

In cases of accidental, and also in some cases of partial, attachment of the placenta over the os uteri, this instrument has great advantages over other means, if the os uteri is dilated and dilatable, when the vital powers are very considerably depressed.

In some cases of rupture of the uterus, in which the child does not recede, and if there is sufficient pelvic space, and if all other requisite changes exist for their safe introduction, then there may be a remote chance of saving the infant's life by their use.

In cases of arrest from exhaustion, and even in fatal syncope, this instrument may be usefully employed. In some cases of face-presentations, and other unfavourable positions of the head, the application of the long forceps will be found most advantageous. The want of relative proportion between the infant's head, being abnormally large, or too firmly ossified to allow a necessary diminution in its size, in order to pass into and through the pelvis, are causes of protracted labour; and, when the obstacles are so great as to oppose the head passing through the brim of the pelvis, the long forceps will be required to effect the delivery. When the pelvis is relatively too small in its general conformation, from premature defect of development, or when it partakes too much of the male conformation, or in the

slight oblique-shaped pelvis of Nægele, or when the pelvic bones have been fractured and there has been irregular union (I have a cast of a pelvis which had been fractured, and which in character now resembles the oblique of Nægele), or when small sized exostoses or loose or fixed tumours occupy the pelvis, the long forceps may be requisite and effectual in the delivery; but, in all these cases, the practice must be determined by the available space which exists in each case.

Those cases in which the value and powers of this instrument are most conspicuous are those in which the brim of the pelvis is diminished in its antero-posterior diameter, either by rickets or by mollities ossium.

In the slighter pelvic deformities produced by rickets, the brim is often considerably lessened in its conjugate diameter, whilst the cavity and outlet are not very much altered either in size or in shape; so that the obstacle to the descent of the head is chiefly confined to the brim. But, in a pelvis distorted by mollities ossium, the diminution in its capacity is not confined to any one portion, but the brim, cavity, and outlet suffer in a greater or less degree; so that, when delivery by the long forceps is contemplated, the character of the distortion must be well considered.

It must be obvious to every well informed obstetrician, that the head of the infant can be more easily brought through a pelvis distorted by rickets, than through one distorted by mollities ossium; assuming that the antero-posterior measurements are the same in both. Opinions as to the space required to bring the head through the pelvis by the long forceps differ very considerably; and, on reflection, this variation is not to be wondered at. It is at all times difficult to arrive at an arithmetical accuracy by a vaginal examination of the different character of distortion just alluded to. The difference in the size of heads of infants, and likewise the different degrees of ossification, must all tend to influence the result. But, notwithstanding these uncertainties, it is desirable that I should state my opinion as to the smallest space at the brim of the pelvis through which the obstetrician would be warranted in attempting to extract the infant by means of the long forceps. Knowing as I do the great responsibility I incur in making positive assertions on practical points of such importance, yet, as I have by trial proved the truth of my statement, I hope I shall not be charged with temerity. I have the more confidence in giving my opinion on this point, because it is certain that, if this instrument cannot be successfully used, the life of the infant would have to be sacrificed. I would, therefore, rather run the risk of committing a venial error by leaning to the side of mercy, by recommending, in the first place, a cautious trial of the long forceps where there was the least doubt in the mind of the practitioner as to the precise pelvic measurement, and thereby give the benefit of the doubt to the unborn babe. With this feeling, I then say that, where the distance from sacrum to pubes is three inches, and a fraction under, and there exists sufficient space in the transverse diameter, an experienced practitioner ought to make a cautious and persevering trial of the long forceps before he has recourse to craniotomy. This opinion is advisedly given, because it is quite impossible to compute either the positive and relative space of the pelvis, or the size, compressibi-

lity, or other conditions of the head of the infant, with such mathematical certainty as to warrant any person to destroy life.

II.—*On Turning in Cases of Slight Distortion of the Pelvis.* Turning, in cases of slight distortion of the pelvis, justly ranks as a conservative operation. Turning was formerly had recourse to in all difficult labours in which craniotomy was not performed, because the use of the forceps was not known at that time; but, after Chamberleyn's discovery, this practice gradually sank in the estimation of obstetricians.

The thanks of the profession are due to Professor Simpson for the revival of this operation, and for the clear and lucid manner in which he has enforced his opinions both by argument and statistical data. He advocates turning in cases of slight distortion of the pelvis, and considers that the base of the head of an infant will pass with more facility and through a smaller aperture, when brought first, as in footling cases, than when it passes last, as in ordinary head-presentations. This doctrine, however, I ventured to differ from (see *Provincial Medical and Surgical Journal*, vol. ii, p. 3); and it has been more recently doubted by Dr. McClintock (*Obstetrical Transactions*, vol. iv, p. 175). At that time, I considered perforation, if required after turning had been performed, would be more difficult and more hazardous. This opinion has been also lately expressed by Dr. McClintock.

Notwithstanding my former opinion, above referred to, and the opinion I now hold, that turning in cases of protracted labour, from the slighter contractions at the brim of the pelvis, cannot ever become an alternative operation for the use of the long forceps. There are, doubtless some cases in which turning would deserve a preference; and, in the hands of some practitioners, it might be more safely undertaken.

The merit of the professor, in trying to establish this as an alternative operation, is in the intention to abolish, as far as possible, craniotomy.

"This practice of turning, in cases of pelvic deformity, is one of the agitated questions of the present day, which requires the sober and dispassionate consideration of all who are interested in the establishment and advance of obstetrics."

This question can only be settled by a long accumulation of practical facts and comparative trials. Mere opinion can make no approach towards its settlement.

The danger of turning will be considerably diminished when the plan of internal and external version, as recommended by Dr. Hicks, is adopted. (Vide *Obstet. Trans.*, vol. v, p. 219; also his essay.)

In the performance of turning, I prefer and recommend the operator to seize one foot or one knee, for reasons set forth in my essays on various midwifery subjects. The funis is thereby better defended, and the egress of the head is rendered safer and easier by a partial breech-case having preceded it.

Dr. McClintock, "after having seized one leg and brought it into the vagina, could not, with all the force he could use, make the child revolve." He quotes the opinion of Madame La Chapelle, who speaks of the difficulty of effecting version by one leg when the head presents. She says the difficulty is produced by the head being pushed into the brim

before the breech. It is quite evident that the cause which opposed the revolution of the child was, not taking hold and bringing down one leg, but the result of protracted labour after the rupture of the membranes. The head was forcibly pushed down upon or partially into the pelvis; and the uterus was doubtless violently, and perhaps spasmodically, contracted upon the infant's body, moulding and applying itself to all its hollows and projections.

As turning, in the cases of slighter distortion of the pelvis, is intended to save the child, this operation ought to be early performed—before, or as soon as possible after, the discharge of the liquor amnii. In cases which have been unduly procrastinated after this event has happened, and when the uterus is strongly embracing the infant, violent attempts to turn ought not to be made until some plan has been adopted to lessen the irritability of the uterus, and relax as far as possible its tonic and alternate contraction. Venesection and opiates are appropriate remedies. Does chloroform relax the uterus?

The death of the infant after the operation of turning (if it be living when this operation is commenced) is most frequently caused by the practitioner hurrying too rapidly its delivery after the revolution has been made. Time should be first given for the uterus to adjust itself to the changed position of the infant. When extractive force is used, it should at first be slow and gentle, and, if possible, in cooperation with uterine contraction. If the infant be rapidly and forcibly dragged through the pelvis, the chin leaves the breast, and is tilted upwards, thereby creating an unfavourable relative position between the diameters of the head and those of the pelvis. A great difficulty is now found to exist, which opposes an easy entrance of the head into the brim. Another mischief happens from attempts to draw the infant too quickly along by bringing the too bulky part of the infant (the head) to press upon and distend the os and cervix uteri before these parts are prepared to bear the change; and, consequently, spasmodic retention takes place, which is often so violent and obstinate as to cause the death of the infant.

[To be continued.]

A SENSIBLE REMARK. Mr. Shillcock at the Pharmaceutical Society exhibited a "Poison Bottle." A short discussion on poison bottles in general followed, in the course of which Mr. Morson sagaciously remarked that the best of them was but a clumsy substitute for the care and intelligence which should always be exercised when dealing with such important matters as remedies and poisons.

FAILURE OF THE METROPOLITAN GAS REGULATION ACT. The first prosecution instituted under this Act has failed. The prosecution was instituted by the City Sewers Commission. The lighting of our streets and houses in some districts of London is at present disgraceful. The Gas Regulation Act was a great legislative mistake; but its complete failure in improving or even maintaining the quality of the gas supplied by the companies must be ascribed to causes into which we dare not particularly enter. But we have no hesitation in saying that district medical officers of health, sometimes in large practice, can hardly have time to devote to the duties of a gas inspectorship, even if they had the knowledge to qualify them for the post. (*Chemical News.*)

Original Communications.

ILLUSTRATIONS OF THE DIFFERENT FORMS OF INSANITY.

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IN the last paper was given a case of general paresis. The importance of the disease warrants a report of another case of the same; and this will be given in the words of the case-book, with omissions only for the sake of brevity.

A. M., married, aged 40, had had one child; she was a lace-cleaner. Her education had been plain. This was her first attack. She was admitted Sept. 12th, 1861. She was married twenty years previously, but never lived with her husband. She was in partnership with a female, and they lived together many years; and, about two years ago, the partner took to drinking, and ever since had been the cause of great trouble and annoyance to the patient.

About April 1861, A. M. shewed the first indications of insanity. One Saturday night, she bought three or four shillings' worth of "sweet-stuff", and scattered it and half-pence to the children in the street, and acted in a strange manner in several other ways. A short time after this, she became involved in a dispute with a cabman; after which event especially, her mental aberration became more marked. She began to squander money; talked of her wealth and her importance; and, within a week of the dispute with the cabman, she began to talk of erecting a chapel at her own cost, and made numerous extravagant purchases.

Her natural disposition, as described by her brother-in-law, was rather penurious; at all times economical and careful. She was quiet in her dress, and retiring in manner; was kind and cheerful; of rather warm temper; fond of the company of her own family; and she went often to the public amusements (her relations were employed at theatres).

No hereditary predisposition was known. Her habits had always been temperate; on this point, the informant spoke positively.

Her previous health had been good; but she had complained of headaches during the last twelve months. She was first sent to Camberwell House Private Asylum, and remained there five months; and was then transferred to Hanwell.

On admission. She was five feet in height; her figure square and well developed; her head was long, and slightly contracted across the forehead. Her hair and irides were grey; teeth regular and well developed. The bodily condition was pretty good. Articulation was indistinct and confused. In protruding the tongue, she made one or more ineffectual efforts before she succeeded. The gait was unsteady. In taking anything with her hand, she made several catches at the object before she could seize it. She was restless; not noisy; was cleanly in habits.

Sept. 12th. She said, she was twin-princess with Queen Victoria. On the 24th of next May, she was going to be crowned. She was the eldest daughter of the Virgin Mary, and was going next year to Jerusalem by telegraph to be crowned. She had been in the world hundreds of years.