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MEMOIR ON TURNING, AS AN ALTERNATIVE FOR CRANIOTOMY AND THE LONG FOR- CEPS, IN DEFORMITY OF THE BRIM OF THE PELVIS, &c. &c.*

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SECT. V.—RELATIVE PERIODS OF THE LABOUR AT WHICH THE LONG FORCEPS, PERFORATION, AND TURNING, ARE RESPECTIVELY EMPLOYED: VALUE OF AUSCULTATION IN OPERATIVE DELIVERIES.

In the preceding section I have attempted to shew the comparative advantage of turning over the employment of the long forceps or crotchet, on the ground that we could thus accomplish the delivery much earlier in the course of the labour, and hence much more safely for the mother. In fact when the long forceps are used in instances of arrestment of the head at the brim, they are in general never applied till the cranium is thrust and wedged down into the upper pelvic aperture to as great an extent as can possibly be effected by the unassisted uterine efforts, and till symptoms of local irritation, or constitutional re-action or exhaustion offer to appear. But before all this state of matters is brought about, both much expenditure of muscular and vital exertion on the part of the mother, and also much expenditure of time is usually required; and the walls of the maternal passages are liable to have become injured by irritation and compression. Before the assigned conditions are produced, many long hours commonly elapse, each one of them directly and rapidly adding to the chances of danger to the mother. On the other hand, in the same set of cases, if artificial delivery by turning were adopted, it might and would be practiced as early as the passages were adequately dilated, before the head were pushed down into the pelvic brim, and long before any symptoms of local lesion or general irritation and exhaustion presented themselves.

But it is principally as a substitute for craniotomy that I venture to suggest the operation of turning in instances of arrestment of the head at or above the brim of the pelvis. And when we contrast the different times as far as regards the duration of labour, at which

these two modes of delivery (craniotomy and turning,) would be respectively followed in the same class of cases, we shall perceive still more strongly the advantages of the alternative practice. For turning, as I have just now stated, would necessarily be performed early in the course of the labour, and so far at a period when the danger would be comparatively slight, according to the law of duration which I have attempted to establish. Commit, however, the same morbid cases to the usual rules of management, by which they would be treated under the prospective idea that they would in all probability ultimately become cases of craniotomy, and mark the difference. The labour is allowed to go on from hour to hour, and possibly for one or two long and weary days, in order to give the child every legitimate chance of being, at last, expelled alive, or, at least, expelled without operative mutilation. In the meantime, however, as the preceding tables abundantly prove, the chance of immediate or ultimate danger to both mother and infant increases fearfully in proportion as the labour drags on its duration. How long then shall we allow it to continue before we perforate and break up the child's head? Most modern authorities would answer that question by earnestly inculcating the propriety of not applying the perforator till the child were distinctly and certainly dead, (unless indeed the appearances of danger to the mother were extremely marked and imminent,) for almost all eagerly and properly declare their abhorrence at the idea of "plunging an iron instrument into the centre of the skull of a living human being."

But how long must we probably wait before the child really dies? We have seen, (Table III.,) that the infantile, like the maternal, mortality increases in a ratio progressive with the increased length of the labour; and that out of all cases in which, in the Dublin Hospital, the process of parturition was prolonged beyond thirty-six hours, one in every two of the children was lost. But still the labour may go on to the fortieth, fiftieth, or sixtieth hour, and yet the child live. Out of twenty-seven cases in all, reported by Dr. Collins, in which the labour was prolonged to sixty hours and upwards, in sixteen the child was ultimately born dead; and in the remaining eleven it seems to have still survived and ultimately to have been expelled

* Continued from page 60.

alive. Whilst, however, we are thus waiting and watching for the certainty of the child's death *before* we operate, the chance of the mother's death increases with the lapse of every hour. Out of these same twenty-seven cases of labour prolonged sixty hours or upwards, seven of the mothers, or one in every four, perished. We may thus wait with the expectation of the infant's death, till at last we run the imminent hazard of also losing the mother; and even then, when at last we find ourselves driven to have recourse to craniotomy in order not to place the parent in greater jeopardy, we may be unwillingly compelled to practice the operation while the child still really lives, goaded on by a dire but now irresistible necessity to attempt to save the life of the mother by taking away the life of her child.

Auscultation is the criterion upon which all modern accoucheurs properly and mainly depend for ascertaining the death of the infant, and fixing the date at which it threatens to perish, or actually does perish, during a protracted labour. And certainly, in the progress of a prolonged case, auscultation is, as Dr. Collins states, of "immense value in ascertaining the life or death of the child." "I know (he remarks,) of no case where the advantage derived from the use of the stethoscope is more fully demonstrated than in the information it enables us to arrive at with regard to the life or death of the fœtus, in the progress of tedious and difficult labours. It is, in my opinion, one of the greatest improvements made in the practice of midwifery."* The whole evidence of Dr. Collins' general remarks and individual cases shews, that in protracted parturition the special advantage which he has found, and expects others to find, from the employment of auscultation, is a far more precise and certain knowledge than we could otherwise possess, of the life or death of the infant, and of the exact time at which it does die, with a view of fixing more exactly the time at which we should deliver it by craniotomy. Actuated by the best and most humane feelings, Dr. Collins believes that in tedious and difficult labours obstetricians should rarely or never perform craniotomy upon the head of a *living* child, and that auscultation will enable us to eschew this otherwise unavoidable error. For, in one set of cases, it will shew us the propriety of postponing the operation, by shewing us that the child's heart is still beating. In another set of cases it will shew us the propriety of practising it earlier than we would otherwise do, by shewing us that the child is already dead. At the same time we must still not use our perforator immediately after the fœtal heart ceases to be heard by the stethoscope, or indeed for some hours afterwards, lest life be not perfectly and entirely extinct in the child. "It is totally contrary (says Dr. Collins,†) to every rule of practice, to deliver

the patient with the crotchet when the fœtal heart's action *first* becomes inaudible. It is only after frequent examinations, with some interval between each, that this is ever resorted to, except where the mother's life is in *very imminent danger* indeed."

Such is the use and value of auscultation in protracted labours, according to the opinion of Dr. Collins and of the Dublin school generally; and certainly, while for one, I most gladly and gratefully acknowledge that it is to that school that British midwifery stands indebted for the first introduction of auscultation into English obstetric practice, still I cannot help declaring my conscientious conviction here, as I have often done in lecturing upon the subject, that the preceding application of it in tedious labours is so far undoubtedly erroneous in two most important and fundamental points.

For, *first*, according to the principles upon which the Dublin practitioners use auscultation in tedious labour,—viz., in order to fix the fact of the death or life of the child, with a view to the immediate performance or future postponement of craniotomy, they altogether leave out of consideration the great influence which the mere duration of the labour exerts upon the maternal constitution and life. They forget that whilst they are delaying for the death of the child, the very delay is rapidly destroying the mother;—whilst they are waiting and watching for the fœtal life becoming extinct, the maternal life is every hour becoming placed in greater and greater danger. Under proper management, argues Dr. Collins, the death of the child takes place in laborious and difficult labours, before the symptoms become so alarming as to cause any experienced physician to open its head for the sake of the safety of the mother. But I believe his own facts totally and sternly contradict this argument. When for this or other causes he waited till the labour had continued from twenty-five to thirty-six hours from its first commencement, one in every seventeen of the mothers died; (see Table No. II.) when he waited for twelve hours longer, allowing the labour to be prolonged from thirty-seven to forty-eight hours, then one in every six of the mothers was lost; when he waited for twelve more hours, (namely, forty-nine to sixty hours,) then one in every five of the mothers was lost; and when interference was not adopted, or delivery completed, till the labour had gone on for sixty hours or upwards, then one in every four of the mothers perished; and that too, although, as we have already seen, in eleven out of twenty-seven cases, or in about one in two-and-a-half of these very same protracted labours, the child was still living, and was indeed ultimately expelled alive, thus *still* contra-indicating craniotomy, as far as its life was concerned, notwithstanding that the life of the mother was reduced to such an extreme degree of danger and hazard.

But, *secondly*, the opinions which Dr. Collins and

* Practical Treatise, p. 18.

† Dublin Medical Journal, Vol. xiii., 1838, p. 423.

others of the Dublin school profess with regard to the application of auscultation as a valuable aid to the management of tedious and instrumental labours are, I conceive, still more objectionable in another point of view. In cases of protracted parturition they use the stethoscope, as we have shewn, in order to ascertain the life or death of the child, and in order to decide and determine the proper time at which embryotomy should be performed. For this purpose they employ it with the special object of fixing the fact that the child is dead; and fixing, when requisite, the true time when it does die. But I am strongly of opinion that the mighty boon which auscultation offers us in protracted parturition is quite different, and far more important. For it is not by any means so valuable in thus often affording us evidence that the child is dead; it is not so much of real and practical use in shewing us that we may now perform embryotomy upon a dead infant, as in shewing us *when*, in protracted cases, we ought to extract the child by the forceps or other safe means, if we wish to *preserve* its life, as well as the life of the mother. In this way I have repeatedly found auscultation of incalculable benefit in protracted labours, and been, I believe, enabled by its evidence alone to save several times the life of the child by the timely application of the long and short forceps. And though the principle upon which I have thus acted in the management of tedious labours is not acknowledged by Dr. Collins under that subject, yet, certainly, the very same principle of using instrumental delivery for the sake of the safety of the child is acknowledged by him under another head, and in dependence upon another form of evidence of the danger of the infant. In speaking of the treatment of cases of prolapsus of the umbilical cord he observes:—"The forceps I consider highly desirable when the child is so situated that the head can be reached with safety; but as the funis generally descends at the commencement of labour, it is very seldom that this instrument is applicable till foetal life is extinct. We should not fail, however, to apply them when practicable, should any delay occur in the delivery likely to *endanger* the life of the child, or if we find the *pulsation in the cord becoming gradually slower and more feeble.*" Now, exactly on the same principle, when in tedious labours in which there is no contra-indication, we have evidence that the life of the child is becoming endangered, when by the stethoscope we learn that the pulsations in the foetal heart are becoming gradually slower and more feeble, it is in my opinion equally our bounden and solemn duty to interfere by the same means in order to attain the same end, viz., the preservation of the infant's life. For I hold that neither in principle nor in practice does it make any difference whether with this view we ascertain the imminent danger of the child, and the fact that the pulsations of its heart are

becoming slower and more feeble, by *feeling* the pulsations of the cord, or by *listening* to the pulsations of the heart itself. The sense of hearing affords us precisely the same evidence in the one case as the sense of touch affords us in the other, and it indicates also precisely the same line of treatment.

The bearing of this long discussion and digression upon the practice of turning in contracted pelvis, &c., is sufficiently evident. Over both the operations for which I propose it as a substitute,—viz., delivery by the long forceps and crotchet, it possesses this great and weighty advantage, that it can be practised at a far earlier, and consequently at a far safer, period of the labour. But it is principally as an alternative for craniotomy that I feel anxious to introduce the operation of turning to the consideration of my professional brethren; and over craniotomy it possesses, in addition to the above, this other all-important advantage, that it offers the child a chance of life, while craniotomy implies the very certainty of death; and that while the existence of the sounds of the foetal heart, and the continuance of the infant's life, would determine us to postpone, and postpone almost indefinitely, the delivery by embryotomy, the existence of these sounds, and the evidence they give of the continuance of the infant's life, would determine us to adopt, and form indeed, *ceteris paribus*, the very strongest reason for adopting delivery by turning. In the one operation we would delay, and perhaps delay long, and hence dangerously, the delivery of the mother, because the child was living; in the other operation we would promote and hasten the delivery of the mother on exactly the same grounds on which we postponed it in the first,—viz., because the infant was still living, and might still be extracted alive.

Perhaps the detail of one or two cases may impress this view more strongly than any more lengthened remarks. I shall select the two first from the Clinical Report of Dr. Lee, of London, who, like Dr. Collins, rejects the employment of the long forceps when the head is delayed at the brim, and prefers the extraction of it by the perforator and crotchet.

CASE IX.—In a woman whose pelvis and extremities were distorted by rickets the labour began on the 9th of February, 1842.† "The membranes," to quote Dr. Lee's own words, "*ruptured on the 10th.* On the 11th, the os uteri was not dilated to the size of half a crown, the head was wholly above the brim, and the base of the sacrum easily felt. Active pains came on and lasted during the night, and till two p.m. of the 12th. The os uteri was still very imperfectly dilated. The head *entirely* above the brim now much swollen. It was clearly right to interfere, which I did, (by craniotomy,) and she recovered without a bad symptom, though I now feel persuaded that she ought *not* to have been left so long in labour. The danger (he adds,) of rupture and fatal contusion of the uterus is great in

* Practical Treatise, p. 344.

† Clinical Midwifery. Case 113, p. 51.

all such cases and delivery should be effected as soon as it is evident that the head cannot pass. I knew from the first, in this case, that it would not pass through the brim, but was prevented from interfering in consequence of hearing the pulsations of the fetal heart."

In the preceding case Dr. Lee states his conviction that the patient ought not in reference to her own safety, to have been left so long in labour. The continuance, however, of the pulsations of the fetal heart prevented him for some time, from interfering and delivering by craniotomy. It is not stated whether the child continued alive or not when that operation was at last adopted. But the circumstance which thus directly deterred him from earlier delivery, viz., the life of the fœtus, would have directly urged him to the new practice which I am here venturing to propose in such cases. The reason he had for longer postponing the operation of craniotomy, would have been the strongest of all reasons for at once preferring the operation of turning, and giving so far, a chance of life to the child, and at the same time preventing the continued duration of the labour, from placing the mother in greater danger and jeopardy.

I quote the following case from the same author for the purpose of shewing, what I have omitted to insist upon in the course of the preceding remarks, that in instances in which the brim of the pelvis is contracted, the protracted duration of the labour may occasionally lead to the most deplorable morbid consequences on the part of the mother, even though it do not actually destroy her life. An earlier delivery by turning would, I believe, as has been already often stated, not only enable us to avoid these results to the mother, but offer a chance of escape and life to the child.

CASE X.—The patient* had borne nine children; all her labours had been difficult, and the two last so much so that artificial assistance was required, and the children were still-born. Her tenth labour commenced on the 3rd of December, and the membranes were soon after ruptured. During the 4th the pains were feeble and irregular. Thirty-five drops of laudanum were given. On the morning of the 5th they returned, but again feebly and irregularly. At ten o'clock of the evening of the 5th two doses of the ergot were given, and soon several strong forcing pains were experienced. "The movements of the infant were not felt after this," and the uterine contractions appear to have ceased. When Dr. Lee visited her next forenoon,—viz., at eleven o'clock on the morning of the 6th, (three days after the labour had commenced, and the membranes had been ruptured,) the state of the patient was as follows:—"The discharge from the parts has become offensive; bladder filled with water; the vagina is swollen and tender; the head greatly swelled and compressed, and firmly fixed in the brim of the pelvis, and the finger

cannot be passed around it without giving great pain; the ear cannot be felt, the greater portion of the head being still above the brim." Dr. Lee opened the head, and two hours elapsed before he could complete its extraction with the crotchet. He thus continues the report:—"December 7th. A bad night; retention of urine; great swelling and tenderness of the parts; pulse rapid; tongue loaded; headache; rigors. Sloughing of the vagina took place, and on the 14th a fistulous communication had been formed between it and the bladder. This unfortunate woman (adds Dr. Lee,) was soon after deserted by her husband, and has led a life of great indigence and misery ever since."

In offering some general concluding remarks upon this and sixty-five other cases* of "difficult labour from distortion of the pelvis, &c., &c., in which delivery was effected by the operation of craniotomy," contained in his second report, Dr. Lee observes,—"In thirty-eight of the cases in this report, the labour continued from forty to seventy hours."—"In a very large proportion of the cases the difficulty arose from distortion, or a contracted state of the pelvis. Rupture of the uterus took place in three before perforation, and the inflammation and sloughing of the uterus, vagina, and rectum, which proved fatal to eight others, were chiefly or solely produced by the long-continued violent pressure on the soft parts by the head of the child before it was opened and extracted. In those who recovered with vesico-vaginal fistulæ or contractions of the vagina from cicatrices, the unfortunate occurrences arose from craniotomy being too long delayed."—"In several, had the delivery been sooner effected, the fatal consequences which ensued would have been wholly prevented."

In some of the following cases from Dr. Collins' report, the delivery of the patients by craniotomy was evidently postponed till such time as the child was ascertained by the stethoscope to have died. The state of the fetal heart is not mentioned by Dr. Collins in all, but the omission was probably made in order to avoid unnecessary repetition; and except for this counter-indicating circumstance (the continuance of fetal life,) the mothers would probably not have been allowed to have their sufferings protracted, or so much constitutional excitement created, before resorting to artificial delivery. In the last or last two cases, the state of the mother probably ultimately necessitated delivery, independently of any considerations relative to the life of the infant. I shall quote the cases in Dr. Collins' own words.

CASE XI.—"Was admitted in labour of her eleventh child; uterine action very frequent and strong; the os uteri dilated to the size of a crown, and the fundus very much inclined to the right side. In twenty-four hours after admission, (the head not having made any progress for the last eight,) the fetal heart having ceased to act for some time, it was thought advisable to lessen the head, and deliver with the crotchet."†

* *Cholera Midwifery, Case 84, p. 40.*

* *Clinical Midwifery, p. 50.*

† *Collins's Pract. Treatise on Midwifery, p. 460, No. 1032.*

CASE XII.—“Was admitted in labour of her seventh child; she had been delivered artificially in her previous labours, and had but one child born alive. She had been ill a considerable time before she was brought to the hospital, and in nine hours afterwards, there being no progress made, the pulse 132, her strength much exhausted, and the child *dead*, she was delivered by the crotchet.”*

CASE XIII.—“This patient was admitted in labour of her first child; uterine action was feeble, and continued so for seventy-two hours after she came in. As the *fœtal heart had ceased to act for some time*, and the pulse became hurried, it was considered advisable to deliver her. The *os uteri was not fully dilated*; the head was *high*, and resting on the pubes; it was lessened, and cautiously brought down with the crotchet.”†

CASE XIV.—“Was reported to have been in labour two days before admission; the head was high in the pelvis, and pressing strongly on the pubes. It remained in this situation for twenty-four hours after, during which time she suffered great distress, uterine action being almost constant. This was her tenth child; she had been twice force-delivered in this hospital; dreading every moment rupture of the uterus, the head was lessened and brought down by the crotchet, as it had still remained so high as to be scarcely within reach of the finger.”‡

CASE XV.—“Was reported to have been twenty-four hours in labour before admission. About twelve hours after she came in, it was discovered that the face was turned towards the pubes, and pressing so strongly on the urethra the catheter could with difficulty be passed. The pains continued strong for fifteen hours from this time, yet the head did not advance. It was deemed advisable to lessen it.”§

CASE XVI.—“Was thirty-three hours in labour of her third child without having made the least progress for the last twelve. The bladder was forced down before the head. Her pulse became much hurried, and strength greatly exhausted, rendering immediate delivery necessary. The head was lessened, and the child brought away by the crotchet. It was very large; all her former children were still-born.”||

CASE XVII.—“S. B. was forty hours in labour; it was her fourth child; all still-born. The head not having made any progress for the last twelve hours, and the *fœtal heart having ceased to act*, the delivery was effected with the crotchet; the face was turned towards the pubes. She had been force-delivered in this hospital two years ago, when the face presented; (see ‘Observations on Still-born Children,’ No. 441;) pelvis very defective. The placenta in the present instance had to be removed by the hand, in consequence of hæmorrhage; it was firmly adherent to the fundus of the uterus. She died on the ninth day, and on examination, extensive ulceration of the vagina was

found, forming a communication with the rectum. At one point the vagina presented the appearance as if a laceration had taken place.”*

In these cases delivery by turning, instead of by craniotomy, by being performed earlier, would, I believe, have preserved the patients alike from the sufferings and the dangers which the continued duration of the labour entailed upon them; and the children, instead of being necessarily sacrificed by the operation adopted, and the delay attending upon it, might possibly have been saved by the adoption of turning, and by the earlier period at which delivery could thus have been practised. But it has been doubted whether the object I have just alluded to, namely, the preservation of the infant's life, could ever be the result of forcible extraction of the child through a contracted pelvis by turning. I shall next therefore notice this and other objections to the proposed practice on the allegation of danger to the mother, and disarrangement of the mechanism of parturition. The investigation of the objections urged on these several grounds will, I believe, leave us only with higher and more certain ideas of the real advantage of the proposed practice itself.

* Collins's “Practical Treatise,” p. 136, No. 79.

(To be continued.)

SHORT NOTES OF THE OPINIONS AND PRACTICE OF THE LATE JOHN PEARSON ESQ., F.R.S., ON SYPHILITIC DISEASE.*

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Ulcers on the Tonsils.—Ulcers on the tonsils are generally the first evident proof of the syphilitic poison having entered the system. When the poison has had a silent introduction, the ulcers are longer in appearing; but even in this case the intervening period seldom exceeds four months; and although there are instances where it has not been possible to trace the ulceration of the tonsils to any previous disease, yet it cannot be doubted that it must have been derived from a chancre. A sense of pricking in the act of swallowing usually precedes these ulcers. The ulcer is deep, and penetrates into the substance of the part; the surface is irregular, and is covered by a whitish slough; the gland is seldom much enlarged, and has a dark red circle surrounding the sore, which is most painful at night. These ulcers do not prevent deglutition, but they sensibly affect the voice, obstruct the hearing, and cause a disagreeable taste in the mouth. The ulceration does not proceed rapidly, even when mercury is not employed. The tonsils are more frequently affected than the soft palate, its arches, or the uvula, and these are not always affected by the spreading of the ulcers from the tonsils.

* Collins's “Practical Treatise,” p. 490, No. 1005.

† *Ibid.*, p. 481, No. 1038.

‡ *Ibid.*, p. 477, No. 808.

§ *Ibid.*, p. 470, No. 526.

|| *Ibid.*, p. 470, No. 509.