

Report of the Obstetric Practice of the Wellesley Female Institution during the year 1832. By HENRY MAUNSELL, M. D. Member of the Royal College of Surgeons in Ireland, Accoucheur to the Wellesley Female Institution, Assistant-Physician to the Magdalen Asylum, and to the Institution for the Diseases of Children, and Lecturer on Midwifery, &c. at the Medical School, Park Street, Dublin. (Read at the Surgical Society of Ireland, May 3, 1833.)

IN drawing up the report of the obstetric practice of the Wellesley Female Institution during the year 1832, which I have

now the honour of laying before the Society, I have endeavoured, in the *first* place, to present, in an available form, as much information of a statistical character as I have been able to collect from the books of the Institution. In the *second* place, it has been my object to give brief, but candid, abstracts of any cases remarkable for difficulty or other peculiarities, which were met with during the year. In this way, although the number of cases is not very large, yet, as the registry has been kept with considerable accuracy, it is hoped that some information, not unimportant to an inquirer into statistics, may be communicated; and at the same time, that a few practical sketches of some of the more difficult portions of the subject may be exhibited, which, being faithful delineations from nature, may perhaps be acceptable to a young practitioner.

The total number of cases attended from the 1st January 1832 to the 1st January 1833 amounted to 442. Of these 19 were abortions, leaving a balance of 423 actual labours. From these were produced 431 children, there having been eight cases of twins, or one in 52 $\frac{1}{2}$. The proportion of the sexes among the children was 211 males and 220 females,—numbers remarkable, as being nearly the reverse of the calculations of Mr Finlayson, the celebrated actuary; that gentleman estimating the average production of births at 105 males to 100 females.* The number of children dead-born, amounted to forty-three, or one in ten, apparently a very large average, but to be accounted for by the fact, that a considerable proportion of these children were premature, and either themselves manifestly syphilitic, or the offspring of parents who had previously aborted, or had premature labours in consequence of a syphilitic taint.

The ages of the 442 women attended were as follows:—

Under 20 years,	-	23 women.
Between 20 and 25,		121 ———
———— 25 and 30,		175 ———
———— 30 and 35,		80 ———
———— 35 and 45,		43 ———

The duration of labour in the 423 labour cases, was according to the following table:—

* Dr Rutty, in his Natural History of Dublin, gives three tables of births during consecutive periods. In the first, (from 1699 to 1723,) the males are to the females as twenty to sixteen: In the second, (from 1723 to 1757,) the proportions are nearly equal, being 24,274 males, and 24,239 females: In the third table, however, (from 1757 to 1770,) the proportion of females is remarkably increased, being 13,607 to 12,467 males. This remarkable diminution of males Dr Rutty attributes to the increase of the use of spirits, which he states to have taken place in 1724, and thinks to have been very unfavourable to vigorous propagation. Information upon this subject is desirable, as it has been made by Mr Finlayson a ground for difference in the value of annuities upon male or female lives, which has also been acted upon by at least one Insurance Company.

Of 6 hours and under,	-	200 cases.
Between 6 and 12 hours,	-	146 ———
———— 12 and 18 ———	-	35 ———
———— 18 and 24 ———	-	24 ———
———— 24 and 48 ———	-	15 ———
Of 60 hours,	-	2 ———
— 72 ———	-	1 ———

In the 415 cases of single births, the presentations were,—

Natural 401, including two face presentations, and six with the face to the pubis.

Of the lower extremities 7, or 1 in $57\frac{6}{7}$

—— upper ——— 4, or 1 in $103\frac{3}{4}$

—— placenta - 2, or 1 in $207\frac{1}{2}$

—— funis - 1, or 1 in 415

In the eight twin cases, the presentations were natural in four cases.

First child, natural; second, of the lower extremities in two cases.

First child, of the lower extremities; and second, natural in two cases.

The sexes in these were,

In 3 cases both males.

In 3 ——— females.

In 2 ——— one of each.

The perforator was employed twice, or once in $211\frac{1}{2}$ cases.

In three cases there was severe hemorrhage after the birth of the child; but in all the women recovered.

In six cases, or one in $70\frac{1}{2}$, there was retention of the placenta, requiring manual extraction.

Of the whole number of 442 women entered upon the books, seventy are marked as having had previous abortions; and this number, although in the very large ratio of nearly one to six, I believe to be considerably under the average of abortions occurring among the lower classes in this city. The extraordinary frequency of the accident may, no doubt, be in some degree accounted for by the dissolute habits of the poor, and the numerous privations and hardships to which they are subjected. It must, however, though not noticed as such, operate as a considerable check upon the natural fecundity of the species.

Crotchet Cases. *—Of the two cases in which the perforator was employed, one recovered without a bad symptom. The

* For valuable assistance in these and other cases, I have to acknowledge myself much indebted to the kindness of Drs Darley and Gordon of this city.

woman was considerably deformed, and had been in labour seventy-two hours. The only remarkable circumstance, was a frequent and copious discharge of gas from the uterus during and after the delivery.

In the second case, the result of which was unfavourable, the face was toward the pubis, and the child remarkably large ; but as the patient was well-formed, only thirty-three years old, and had borne four living children, no apprehension of the result was entertained at the commencement of the labour. The only unfavourable circumstance was the existence of obstinate costiveness for several days, which to the last resisted the full employment of enemata and purgatives. The operation was performed about thirty hours after the commencement of labour, the woman having then become suddenly restless, with a quickened pulse, sunken countenance, acute pain of abdomen, and vomiting. The head was so high as to be out of the reach of the common forceps, the use of which was also forbidden by the irritable condition of the vagina. Nothing material occurred during the operation. It was not, however, followed by any relief: the symptoms above enumerated became more urgent ; no evacuations could be procured from the bowels, and she died in twenty hours after delivery. The after-treatment consisted chiefly in the application of leeches to the abdomen, and the exhibition of purgatives, with, in the latter periods, calomel and opium. No inspection could be obtained.

In the cases of *presentation of the lower extremities*, little worthy of remark was observed ; they all terminated favourably as far as the mother was concerned ; the greater number of the children, however, were lost ; several being premature births.

In the four *arm cases* the mothers did equally well. In two turning was performed, the children being dead before the patients were seen. In one, which was at first under the care of a very ignorant midwife, the arm had been protruded from the vagina for sixty hours before application was made at the institution. All pains had ceased, but from the closeness with which the uterus had contracted upon the child, very great difficulty was experienced in getting up the hand. By persevering in very gentle efforts, however, this was at length accomplished, and immediately upon the bringing down of the foot, pains occurred, which at once finished the expulsion. In the second case, the membranes had been for some hours ruptured, with very violent pains ; sixty drops of laudanum were given, which somewhat diminished the uterine action, and turning was then with some difficulty effected. In the other two arm cases, spontaneous evolution took place. In one, which was seen by Dr Churchill, the child appeared to be of the natural size, the mother asserting that she was within a fortnight of her full time.

In the second case, the child was born alive. From its size it appeared to be early in the seventh month, the mother supposing herself to be six months pregnant. At the time of my being called to this case, the arm was hanging from the vagina, and had been in that position for some hours; it was cold and livid. Soon after my arrival smart pains came on, the breech was pushed down, and the child expelled double in the usual manner. Before there was time to divide the *funis*, the *placenta* followed, and no sign of life appearing, both child and after-birth were thrown into a corner of the apartment. Happening, however, in some time afterwards to look at it, we found to our great surprise that the heart was pulsating. Measures were, of course, instantly resorted to for the purpose of restoring animation, and life was prolonged for about twenty-four hours. It is needless to make any comment upon the necessity of attention to the appearances of a new-born infant, and of perseverance in our attempts at resuscitation, so forcibly inculcated by this singular lesson.

The two instances in which the *placenta* presented were both remarkable. In one, the woman was in the eighth month of pregnancy, she was of delicate appearance, and had aborted twice. About five weeks before her application at the institution, she had a smart hemorrhage, which she attributed to a fit of crying. While engaged at her work, which obliged her to observe a standing posture, she had subsequently frequent slighter returns of bleeding. On the evening of the 24th May, when she first applied at the institution, a considerable discharge of blood took place, which lasted for more than an hour. She was then hot, with a quick pulse, and without the slightest uterine pain. The vagina was excessively tender, so much so, that it was with difficulty she could be prevailed upon to submit to an examination. The *os uteri* could not be felt. Perfect rest was enjoined,—cold applied to the *vulva* and lower part of abdomen, and the red acid mixture administered.

By these means the hemorrhage was entirely restrained for some hours, until, upon making a slight exertion, a large mass of coagula came suddenly away, attended with slight pains in the back. Immediately after this the pulse became weak and accelerated to 130, and she sank rapidly, although scarcely any discharge took place during the following day and night of the 25th. On the morning of the 26th, a very slight return of hemorrhage occurred, and was soon followed by death.

Examination was obtained, and disclosed the child placed in the natural position, surrounded with scarcely a pint of *liquor amnii*. The centre of the *placenta* was attached over the *os uteri*, and presented a laceration of slight extent, such as might be produced by something being thrust into its sub-

stance through the mouth of the womb. This opening was itself very slightly dilated, and the vagina contracted to a considerable extent.

I confess that I entertain much doubt as to what should have been the practice in this case. The extraordinary tenderness and rigidity of the vagina, which was so great as very much to embarrass an ordinary examination, together with the extreme irritability of the patient, deterred us from any attempt at introduction of the hand; and as the bleeding was but trifling after the period of her application, the same circumstances prevented us from employing the plug. Were a similar case to occur to me now, I should be much inclined to adopt the latter measure, as, from a case which lately came within my notice, I am disposed to think that the plug acts beneficially, both by restraining the hemorrhage for a time, and also by exciting in the *os tincæ* a disposition to dilate.

The second instance of placental presentation had a more favourable result. Sarah Duncan, æt. 24, was visited by Mr Morton, one of the pupils of the Institution. He found the *os uteri* fully dilated, and the water evacuated. An edge of the placenta presented with one foot between it and the margin of the *os uteri*. Through the substance of the placenta could be felt a solid resisting body, which afterwards proved to be the other foot. Pains succeeded so quickly, that Mr Morton had not time to send for assistance to the Institution; and almost immediately after his arrival, the foot which he had felt above the placenta was driven through it with a considerable gush of blood, not a drop having been lost before. Another pain quickly succeeded, and the placenta was entirely expelled, with the limb passed through its substance. The breech then filled up the *os uteri*, and there was no farther hemorrhage until the complete expulsion of the child, which was born alive, but very shortly afterwards expired.

The twin cases had little remarkable. In one, which was premature, there was an acephalous foetus; in another, five hours elapsed between the two births. In this case, the membranes of the second child were ruptured, and ergot of rye administered.

The three cases in which any thing like severe hemorrhage occurred, did very well under the employment of external pressure and friction over the uterus, the introduction of the hand not being required in any of them. In one of these cases, the hemorrhage came on three hours after delivery, the placenta having been naturally expelled, and the uterus well contracted. One case of *hydatids* was met with during the year. The patient was a woman of the town, æt. 28. She applied at the Institution on the 21st December, on account of a hemorrhage to

which she had occasionally been subject during nine weeks previously. She supposed herself to be three months pregnant. Shortly after she was visited, labour pains came on, and upwards of a pint of hydatids, enveloped in a membrane, and having attached to them something like a degenerated placenta, were expelled.

Three cases are noted in which a species of *menstruation* occurred during pregnancy. In one, a discharge of blood, which the woman could not distinguish from the menses, took place regularly every twenty-eight days. She was thirty-six years old, and had borne children before; but nothing satisfactory could be learned as to the state of the function during her former pregnancies.

An instance of early discharge of the waters came within our notice. A woman was sensible of the breaking of the membranes during a violent fit of coughing on December 15th, a rush of waters followed, and continued dribbling until December 23d, when labour set in, and in four hours a living child was born.

Only four deaths of mothers are recorded during the year. Two of these have been already noticed. Of the other two, one was from apoplexy, under the following circumstances.

A young woman, who, we had reason to believe, was unmarried, and the subject of considerable mental depression, was taken in labour of her first child. The pains were rather severe, and she was safely delivered in less than twelve hours. Towards the latter period of the labour, she complained a good deal of pain in the head, but, when it was completed, inquired respecting the sex of the child, &c. and shortly afterwards fell asleep. In two or three hours from this time, her friends observed that she was breathing stertorously, and that they could not awaken her. She was bled, but without any effect, and died after a few hours. An examination was made, and both ventricles of the brain found distended with coagulated blood. A large quantity of serum was also effused into the base of the skull; the ruptured vessel could not be traced.

The fourth fatal case was from cholera, and was remarkable as being the only decided one which we met with in a parturient patient, notwithstanding the sufferings of the city from that pestilence, during the whole summer and autumn. It was the patient's eighth labour, and her husband had been carried off by cholera four or five days previously. Cramps and vomiting occurred during the expulsion of the child, which was completed in about eight hours; she then immediately began to sink. No uterine effort for the expulsion of the after-birth took place; her extremities became cold and blue, and she died in about four

hours after delivery. The child was born dead. The evolution of heat after death, which has been remarked in cholera, was very striking from the body of this patient.

The *ergot of rye* was frequently used, and when sufficiently fresh was almost invariably found to produce uterine action. Several examples in illustration are noted, but as they would be only repetitions of what has been already published on the subject, it is unnecessary to detail them. The mode of administration which we generally adopted was an infusion of half a drachm of the powder in a tea-cupfull of boiling water, given with a little milk, and about a third of the infused powder.

Upon two points connected with the circulation of pregnant women, I attempted some investigations. In the first place, I was anxious to ascertain whether or not physiologists are correct in stating that the blood during gestation uniformly presents a buffed appearance. Every opportunity which presented of examining the blood of *healthy* pregnant women was accordingly embraced, and although my observations were not sufficiently numerous to warrant me in affirming positively that the circumstance mentioned does not usually take place in health, still I have seen enough to enable me to state that buffing is very far from being a usual occurrence.

The other point related the state of the pulse during the period of gestation. Among forty-eight healthy women taken indiscriminately, mostly in the eighth or ninth month of pregnancy, the pulse was in thirty-two of them above 100, in many 120, and in one 144. This extraordinary rapidity, of course, evinces considerable excitement in the circulating system. It has also, I think, a practical bearing worthy of being attended to. We are told by some gentlemen, in whom, I fear, a very praiseworthy enthusiasm has been the means of sharpening to an unusual degree a natural sense, that we have in the stethoscope a certain means of ascertaining the death of a foetus during labour, and so of being guided to the proper moment for the performance of necessary operations. As it is universally admitted that the placental soufflet is not sufficient evidence of foetal life, we have only left for our information the pulsations of the foetal heart. To distinguish this from the various pulses that may be heard in the abdomen of the mother, it is said that we have merely to listen to the double beat of the foetal organ, and that we can also count its pulsations, and ascertain them to be double in number those of the vessels of the mother. Now, I should be glad to know what ear, except that of the imagination, could make observations upon, or, indeed, even hear the feeble sounds of a heart *in utero*, beating at the rate of 288 strokes in a minute? Yet, one of the

48 healthy women whom I examined had a pulse at 144 ; and consequently, if it be meant that the foetal pulsations are double the actual number of the mother's, they must in this case have reached the incredible amount stated. If, however, it is to be understood that the child's heart beats only twice as frequently as the mother's ordinarily does, we would have in this instance the sounds of the abdominal arteries equal in number, and liable to be confounded with those issuing from the chest of the foetus.

In making these remarks, I would wish to be distinctly understood as in no way undervaluing auscultation in midwifery practice. In many instances, it affords most valuable aid in investigations into the condition of the uterus. I think, however, that very serious practical errors would be committed, were practitioners to adopt or act upon the notion, that in difficult labour, the death of the child can always be positively ascertained by the employment of the stethoscope ; and, as this view has been frequently advanced, it will probably not be without advantage to consider the matter a little more fully.

In addition to the sources of confusion already indicated, it is to be recollected that instances occur, and are acknowledged, in which the most expert stethoscopists cannot hear the foetal heart at all. The answer given to this is, that, if you have once heard the pulsations, and afterwards lose them during labour, the sure and irrefragable conclusion is, that the child has ceased to exist. In opposition to such a conclusion, I have only to declare, that I have frequently heard the sound in question ; and, after the lapse of a few hours, or even upon the change of the woman's position, have completely lost it ; and, upon another alteration of circumstances, heard it as distinctly as at first.

Where such uncertainty exists, and that it does exist, I apprehend few practical men will deny, it appears to me much better when we are able to decide upon the propriety of a destructive operation, altogether to dismiss the stethoscope from our counsels, and to fix our attention upon the state of the mother, which we have the paramount authority of Denman for looking to, as our only safe and warrantable guide. By adopting such a line of conduct, it is not likely that we shall very often risk the woman's safety by unnecessary delay ; while on the other hand, were a young practitioner to make auscultation his sole or even chief guide, it is all but unavoidable, that, in one case, a real or fancied cessation of the heart's action would lead him to an unrequired and too hasty interference ; while in another, scruples kept awake by stethoscopic evidence of foetal existence, would induce him to postpone his operation until the destruction of the child would not be rewarded by the safety of the mother.