

*On Obstetric Practice of the Vienna Lying-in Hospital.*—Dr. ARNETH read the following interesting communication to the Edinburgh Obstetrical Society at the meeting April 9th, 1851:—

I have now been connected for three years with the Lying-in Hospital in Vienna, as assistant to one of the Professors of Midwifery in that institution, in whose wards more than 10,000 women have been confined during that time. In the other midwifery clinique, in the same hospital, the number of labours during the same period was still greater; and, through the kindness of my colleagues, I had an opportunity of observing all the important and interesting cases which occurred in their department.

In a woman affected with *abnormal vertical inclination of the pelvis*, there occurred a *central laceration of the perineum* during labour, and through which the child was born. The fourchette anteriorly, and the anus posteriorly, were uninjured.

In the cases of two women, there occurred *prolapsus* of the womb at the full term of pregnancy—in the one complete, in the other incomplete. In both cases reposition of the mass was effected, and labour soon supervened.

There were forty cases of face presentation, and in these thirty-five children were born alive; but of these last, four died in the first days after birth. Two of the mothers died. In no case was instrumental interference resorted to; and for fifty years such has been the practice in this hospital.

Twice (once after a very easy forceps case, and once after a natural confinement) a small part of the os uteri, covered with exudation, was expelled with the discharges. In the second case alluded to, the woman was examined on the ninth day after confinement, and there was found a sharp edge in the os uteri, indicative of the spot where the portion had separated. Both mothers did well.

A patient, in whom the portio vaginalis had been amputated two years previously, became pregnant. The os uteri did not open spontaneously at all when labour came on. Incisions were made in different directions, and shortly afterwards delivery took place. The mother sank ten hours after birth. Post-mortem examination showed old adhesions of the uterine peritoneum.

Incision of the cervix uteri was required only in a single other case, one of carcinoma of the cervix. In this case the mother did well.

Two cases of carcinoma uteri occurred. Living children were born, and the mothers made very good recoveries.

Cæsarian section was never performed, except in cases where we believed the narrowness of the brim of the pelvis to be so great as to render it impossible to drag the perforated child's head through it with safety to the mother. So strictly has this rule been kept, that out of somewhat upwards of 200,000 confinements that have occurred in the Lying-in Hospital of Vienna, between the years 1789 and 1851, the Cæsarian section has only five times been resorted to. All the five mothers died. The children survived the operation, and of some of them there were accounts some years afterwards. Professor Dubois has informed me that he had performed the operation twelve times without having had any successful case; nor is he aware of any practitioner in Paris having been more fortunate. Professor Stoltz, of Strasburgh, lately informed me that he had operated four times out of six with good success—nay, in one case, he was even fortunate enough to see a mother twice surviving this dreadful operation. Everywhere, on the Continent, it is an established rule to perform Cæsarian section in every case of a mother dying pregnant in the seventh month, or later. The essay of Bouchut, which has lately been crowned with the prize of the French Academy, proves that with the last pulsation of her heart the mother dies, and that, consequently, the operation of Cæsarian section may be performed immediately afterwards. In four cases, children were saved by the operation in the Vienna Lying-in Hospital. Two of the mothers died of phtthisis, one of eclampsia, one of gangrenous inflammation of the cellular tissue of the neck.

It is a curious fact that—whilst in all cases of midwifery we are bound most carefully to save the lives both of mother and child, and, when that becomes impossible, to do everything in our power for the benefit of the one life we hope to save; that in cases of mortal wounds inflicted upon the mother, or of her being in articulo mortis *for a considerable time* (where the mother is unconscious, and where there is not the least hope to see her restored)—accoucheurs too often delay the operation till unfortunately the child in utero is dead. We are of opinion that, in such cases, and more particularly if we ascertain that the child's pulse is becoming slower and weaker, the Cæsarian operation ought immediately to be performed.

A very frequent cause of the child's death during labour is prolapsus of the funis. We are of opinion that, under certain conditions, the following mode of management has been, generally speaking, much neglected; we mean the artificial replacement of the funis. When the head is presenting, and still movable on the brim, and the os fully dilated, the best plan is to push the funis back, and lay it down in the hollow of the neck of the child. The registers of the Vienna Lying-in Hospital contain forty-three cases of this reposition of the funis. In these, thirty-eight children were born living; and it is only fair to state that, in three out of the five cases of failure, there was scarcely any pulsation in the cord at the time when it was pushed back; and in one other case where the operation had been performed, the labour proved so slow that the forceps were applied for inertia uteri. No hospital report, as far as I know, affords better results of the treatment of a large number of cases of prolapsus of the funis.

The whole prolapsed loop of the funis is taken in the hand, and, pushing the child's head a little back, we lodge it in the hollow formed by the child's neck. It is not necessary to say that the funis is in this way protected on one side by our hand, and on the other by the hollow of the neck, in which it is allowed to lie. There is no reason to fear the occurrence of any injury from compression of the child's head. This operation does no injury to the mother; and, by exciting the uterus to fresh contractions, it sometimes renders the confinement much shorter.

In the cases which have come under my care, the funis, after being replaced, has prolapsed again in only one instance. It was again replaced with complete success. I know, however, the particulars of one case of frontal presentation, where the funis so tightly embraced the forehead of the child that reposition was found impossible.

Sometimes, when it is impossible to feel any pulsation in the prolapsed funis, the child may be still alive. Four such cases came under my notice, where the funis had been pulseless for so long as half an hour, and the children were born living. As there is rarely time, in such cases, to make use of auscultation, my opinion is that, in all cases fit for reposition, it should be performed, unless the funis be very cold and discoloured, or other decided symptoms of the child's death be present.

In the 6608 cases that were under my care, operative interference was resorted to 95 times—that is, nearly once in every 70 cases; 11 of the 95 mothers died—that is to say, 1 out of every 9.

62 children out of the 95 were born living, and 49 survived the ninth day after their birth—that is to say, the day when they used to be dismissed from the institution; so that we lost sight of them after that time.

Turning was resorted to 44 times, or once in every 150 cases; the forceps were used 45 times, or once in every 146 cases; the child's head was perforated 4 times, or once in every 1652 cases. Premature labour was induced twice.

In the post-mortem examinations of some women who died of spontaneous rupture of the uterus, we are at once struck with the immense increase of the size of the fundus uteri, whilst there does not appear to be a similar state of the cervix. It is highly probable that, in such cases, the rupture is brought on by the immense force exercised by this hypertrophied part of the fundus, and which the cervix is unable to resist. The direction of the laceration laterally speaks for this view. The occurrence of rupture is much favoured if the texture of the mucous membrane has been softened by a previous inflammation.

In one case of rupture, the peritoneum alone was affected. The laceration was situated over the fundus of the uterus, and was several inches in length.

One case occurred, in which a woman complained so much of violent burning pains in the abdomen, and was so affected with dyspnoea, that the use of the forceps was deemed necessary. The operation was easily performed. The peculiar characters of the dyspnoea, the complete arrestment of the action of the diaphragm, and the similarity of this symptom to what had been witnessed in a previous case of rupture of the uterus, led us at once to diagnose this as also a case of rupture. For some days after delivery these symptoms almost disappeared, and the pulse improved in character; only a minor degree of asthma persisted. On the seventh day after delivery she commenced to sink, and died suddenly. The uterus was found ruptured at the cervix, but the peritoneum was entire.

There were thirteen cases of eclampsia; four of the mothers died, eleven children were born living. Only one breech presentation occurred; it was in a twin case. All the other children presented with the head. In six cases we resorted to the forceps; the other cases were terminated without artificial interference. We cannot agree with the opinion of Ramsbotham, that the disease occurs most frequently in hot seasons, as there was only one case in May, two in April, four in February, one in December, two in November, two in October, and one towards the end of September. Most of the children (ten) were males; the mothers were, generally speaking, young females, pregnant for the first time. In the post-mortem examinations no morbid symptoms were discovered in the brain. Our treatment consisted in bloodletting, cold water dressings on the head, and the use of tartar emetic. It is worth notice, that very generally after the coma that follows the convulsions, and lasts occasionally for many days, there is to be observed a state of forgetfulness, being sometimes the only remainder of this dreadful disease. I repeatedly saw women who had not the least desire of denying their being pregnant, who could not recollect at all the particulars of their confinement—nay, even of their having been pregnant. This circumstance is most interesting also in a medico-legal point of view.

In the following case chloroform proved very useful. A recently confined woman, who, as she told us, had never suffered from spasms of any kind, complained, a few days after natural labour, of fever and pains in the abdomen. These symptoms, however, subsided in a short time. A few days afterwards she suddenly began to howl like a dog, to contract her face in a most ridiculous manner, and to be exceedingly restless. As often as we put some chloroform under her nose, she regained her consciousness, and, when asked, complained of no pains at all; but the aforesaid symptoms reappeared immediately when the chloroform was removed. These symptoms lasted for three hours, when we put her, by means of chloroform, into profound sleep; at once all the symptoms yielded, but re-appeared in a few minutes after she awoke. I applied chloroform for a second time, and allowed her to remain under its influence for about one hour and a half. After that time she remained entirely free from the symptoms of threatened mania.

From the few cases where chloroform was used in our midwifery practice, and these were all cases of long-lasting and exhausting operations, it would appear that this medicine has a particularly soothing influence on the vascular system; for in all these cases the heart's pulsations were, after delivery, scarcely quicker than in a healthy person; and I may here observe that, in the Vienna Hospital for the last two years, nearly all surgical cases have been anæsthetized when operated upon.

In cases of hemorrhage after delivery, if there are no clots or portions of the afterbirth in the womb, contractions are, if possible, excited first of all by frictions. In the very rare cases where the frictions have no effect, we resort to cold water dressings externally; and if these prove inefficient, we inject cold water into the uterus. This treatment has been so successful that, out of more than 20,000 cases that occurred in the clinique since 1833, there are only two cases on record of women dying of post-partum hemorrhage; that is to say, one of a woman where assistance was only resorted to when she was already mori-

bund, and the second a female taken with small-pox, where every means proved inefficient.

In the period extending from 15th October 1847 to the end of October 1848, only one out of 128 mothers died. The mortality increased in November, and still more in December, when one mother died out of every fifteen delivered.

These unfavourable results were undoubtedly caused by the political events of that period. It is not necessary to state how depressed in the mind the most of the women confided to our care must have been at a time when their friends, fathers, and brethren fought either in the ranks of the rioters or in those of the soldiery. But, moreover, one of the wells that supplied some of the yards of the large hospital with water was destroyed by the troops. The consequence was that that cleanliness could less effectually be looked for which we may boast is maintained at other times in our hospitals. The supplies of straw, coverlets, and so on, were also intercepted.

Towards the end of October, when the stores were almost exhausted, and no fresh provisions arrived, many women were confined, and the consequent disease became more fatal in December.

The first cases of puerperal fever that came under our care, showed in their beginning no other symptoms than sores near the fourchette that extended widely into the vagina, and over the perineum. They appeared about the sixth day after confinement, were uneven, of a grayish colour, and covered with a corroding matter; they bled very seldom. Sometimes they healed by granulation, but this went on very slowly, the patients meantime becoming extremely emaciated. Other cases proved fatal, the post-mortem examinations showing inflammation of the mucous membrane of the uterus and of the peritoneum, and, more generally still, of phlebitis.

In the subsequent course of this epidemic of puerperal fever, peritonitis, at other times peritonitis combined with pleuritis, were the more general symptoms. In the course of three days I had the sad opportunity of seeing two cases of phlebitis, ending in the destruction of the eyeball by metastatic purulent deposits. In the first case, only two hours, in the second, eight hours, elapsed between the first symptoms of disease appearing in the eye, and the lamentable catastrophe. It was highly interesting to observe how entirely puerperal fever ceased in our wards after cholera made its appearance. During the month of May and the first days of June, eleven mothers died of puerperal fever; on the 10th of June we saw the first patient under cholera, and had occasionally cases of it till the 11th of August. During this whole period we had only very few patients complaining of the slighter puerperal symptoms, in no case ending fatally. Almost immediately after the disappearance of cholera, the cases of puerperal fever became somewhat more frequent, and decidedly more dangerous.

Prof. Kiwisch, late of Wurzburg, now of Prague, has recommended a new method of inducing premature labour, which, being decidedly the least troublesome and the least dangerous to the mother, has now been repeatedly resorted to, both by Professor Kiwisch and the leading men of the Vienna midwifery department. This means consists in the use of a douche of tepid water falling from a height of about ten feet, the stream being allowed to impinge upon the os uteri, and thus to open it in a short time. This plan is peculiarly adapted for cases of contraction of the pelvis, where you have sufficient time to use any advisable method to bring on premature labour. It is much less serviceable in cases of urgency, as it is quite impossible to state beforehand how many applications of the douche will be necessary for that purpose. The average hitherto has been about ten applications; we used to apply them twice a-day for a quarter of an hour each day.—*Monthly Journal Med. Sci.*, July 1851.