Notes of a complicated case of labour : with remarks on the postural treatment of prolapsus funis and the management of the third stage of labour / by Alexander R. Simpson.

NOTES

OF A

COMPLICATED CASE OF LABOUR,

WITH REMARKS ON THE

POSTURAL TREATMENT OF PROLAPSUS FUNIS, AND THE MANAGEMENT OF THE THIRD STAGE OF LABOUR.

BY

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OBSERVATIONS

ON A CASE OF

COMPLEX LABOUR.

THE case which I wish to bring before the notice of the Society presents some features of interest in respect,—1st, of the diagnosis of pregnancy; 2d, of the duration of pregnancy; 3d, of the painlessness of parturition; 4th, of prolapse of the umbilical cord, and its remedy by the postural treatment; 5th, of the employment of the forceps; and, 6th, of the management of the third stage of labour.

1*st*, *Diagnosis of Pregnancy*.—Mrs A. B. was in full process of parturition when she arrived at the Infirmary on the 29th of November; but she had left home by the advice of her medical attendant, who saw her the night before, and told her she was labouring under a dropsical ovarian tumour. And yet nothing in obstetrics is more easy, when we are on our guard, than to distinguish between a gravid uterus at the full term and a dropsical tumour of the ovary. There may be a common sensation of fluctuation, a common smoothness of surface, even a common situation in the abdominal cavity, but it needs only the application of the stethoscope to detect the distinct placental and cardiac sounds, or the touch of the finger per vaginam to recognise the hypertrophied uterus with the moving body in the interior. In the present instance, the mistake was made by a very able and accomplished practitioner, simply from his omitting duly to examine the case. He found the woman seated on a chair when he was summoned to see her, and, having already made up his mind that she could not be pregnant, he contented himself with putting his hand over the abdomen, and feeling the tumour through her dress. He then told her that she should go off to Edinburgh and have something done for it. And when she asked him for a line to secure her admission into the Infirmary, he added, that they were all interested in this kind of tumour at present, and that no recommendation was needed, for her case would commend itself. Now, the prejudice in his mind may have arisen from the circumstance that, when the patient, who is forty-four years of age,

and the mother of seven children, had miscarried at the fifth month two years ago, he had been led to form the opinion, which he then expressed to her, that she could never again become pregnant. But he was further led astray by the circumstance that more than ten months had elapsed since the date of her last menstruation; and it seems not to have occurred to him that the case might be, as indeed it was, a case of,

2*d*, *Protracted Gestation.*—The patient menstruated in the beginning of January; but the period lasted only two days, instead of four, as usual, having ceased on the 3d or 4th of the month. It was not till she felt "stirrage" in May, however, that she imagined herself to be pregnant, and began to think of making preparations for her confinement. She expected herself to have been delivered about the close of September or beginning of October, but it was not, as I have stated, till the end of November that the event took place. Supposing her not to have become impregnated till the period succeeding that at which the catamenia so abruptly ceased, she could not have carried the child less than 300 days; and if, as is in the highest degree probable, both from the shortened menstruation and the date of quickening, she became impregnated at the period in January, we have a term of utero-gestation extending in this case to 329 days. The condition of the child at birth, and especially of its head, indicated a corresponding degree of development. It measured 21 inches in length, and weighed over 10½ lbs. The head measured 14¾ inches in circumference; the anterior fontanelle was small, and the membrane firm; and the posterior fontanelle was so far obliterated, that the corner of the occipital could not be depressed below the parietal bones.

3*d*, *Painless Parturition.*—Our patient having had all idea of pregnancy banished from her mind, set out from home, and reached the Infirmary without experiencing any uneasiness; and it was only whilst she was sitting in the nurse's room, explaining the cause of her arrival, that a sudden gush of water from the vagina restored her to the conviction that she was after all to give birth to a child. The uterine contractions were going on, although she was unconscious of any pain; and they must have been going on for some time, for when the clinical clerk, Dr Watson, saw her, almost immediately after this rupture of the membranes, he found the os uteri already fully dilated, and the head exposed. The woman had given birth to all her former children easily enough; but with all of them she had, like other women, been conscious of the pain usually attendant on the uterine contractions. On this occasion, however, the first stage of labour was completed, not only without any suffering having been experienced on her part, but also without her ever being conscious that labour was in any degree in progress. And throughout the whole progress of the labour the uterine contractions seemed not to be accompanied with the

slightest pain; for before the head entered into the pelvic brim, the patient was unconscious of any sensation of suffering when the hand over the abdomen could feel the uterus distinctly contracting; and afterwards, when the head was passing through the pelvic canal, there was no kind of pain, only a feeling of fulness resulting from the pressure of the head on the soft parts of the pelvis. The histories of such painless labours have from time to time been related to our Society; Jourdain,[1] Chailly,[2] Montgomery,[3] and many others, have published similar cases; and their importance in a medico-legal point of view calls for a due notice of them in works on Medical Jurisprudence.[4] I had never before met with a case of absolutely painless parturition; but Dr Von Ritgen, the venerable professor of midwifery at Giessen, told me some years ago, that in the course of his practice he had seen seventeen women who passed through the parturient process without any pain; and from his observation of these cases he had been led to form the conclusion that the act of parturition is normally and physiologically a painless one, which only becomes painful and pathological in consequence of the abnormal and artificial mode of life led by the great mass of civilized womankind. His conclusion I have sometimes advanced as an argument in answer to those who object to the use of anæsthetics in midwifery, on the ground of the fancied physiological character of the pain.

4*th*, *Prolapsus Funis, and its Replacement by the Postural Treatment.*—I first saw the woman on going to visit, for my uncle, the patients in his ward in the Infirmary, at one o'clock P.M., about a quarter of an hour after she had been seen by Dr Watson. On making an examination, I found that a complication had occurred, from the falling down of a loop of the umbilical cord, of four or five inches in length, opposite the left sacro-iliac synchondrosis. The umbilical vessels were pulsating vigorously, and the prolapsus must have taken place very shortly before, as there was none to be felt when Dr Watson made the examination.

We can easily understand the occurrence of prolapsus of the funis in cases of preternatural presentations and mal-presentations of the head, or where, from contraction of the pelvic brim, the presenting part of the child is prevented from adapting itself closely to the lower segment of the uterus; but the conditions of its descent in cases of normal head-presentation have not yet been accurately ascertained.

In the present instance, we have a concurrence of three of the conditions that have been more especially insisted on as favouring the occurrence of this accident. *First*, The patient was a multipara, with a very relaxed and dilatable cervix uteri; and, perhaps, there

[1] Velpeau, De l'Art des Accouchemens, vol. i. p. 451, Paris, 1835.

[2] Chailly-Honoré, Traité pratique de l'Art des Accouchemens, p. 244, Paris, 1842.

[3] Signs and Symptoms of Pregnancy, p. 607, London, 1856.

[4] *e.g.*, Wharton and Stillé, Philadelphia, 1855, p. 307.

was a want of tonicity in this part of the organ, associated in her with the absence of sensation during uterine action. *Secondly*, The placenta was placed very low down on the uterine wall, for the opening in the membranes was bounded in part by the placental margin; while, *thirdly*, the umbilical cord was inserted into the placenta within an inch of that part of its border;—two conditions the importance of which have come to be abundantly acknowledged since the younger Naegele specially called attention to them in a an essay on the subject.[1] I might add, that the cord was of more than average length, and measured 21 inches, for this too has been noted in connexion with prolapsus of the cord; but what exact share is to be attributed to each of these elements in the production of the complication, it would be difficult to decide, for it is a kind of case in which the mind of the accoucheur is for the time less taken up with the cause than with the cure; he is more anxious to avert the consequences of the accident, than to determine how it was produced.

And here, let me observe, that the great variety of expedients that have been adopted for the remedy of this complication, and the vast variety of instruments that have been contrived for the reposition of the descended cord, are a sufficient indication of the imperfection and unsatisfactoriness of each and all of them. And when we look to the recorded results of these various forms of treatment, and find that, even in the best hands,[2] little more than two-thirds of the children are saved, while the average mortality in the general mass involves more than the half, we are prepared to welcome a suggestion so simple and safe, and to adopt a measure so satisfactory as that described in 1858 by Dr T. G. Thomas of New York, under the designation of "the Postural Treatment." The history of the operation, and the mode of carrying it out, will be at once understood if I quote the words and copy the illustrations of the ingenious author.[3] He says, "In a course of lectures on obstetrics, delivered by me in the University Medical College of this city, about two years ago, I closely investigated this subject, and came to the following conclusions:—*First*, That the causes of the persistence of this accident (whatever may at first have produced it) reduced themselves to two, the slippery nature of the displaced part,

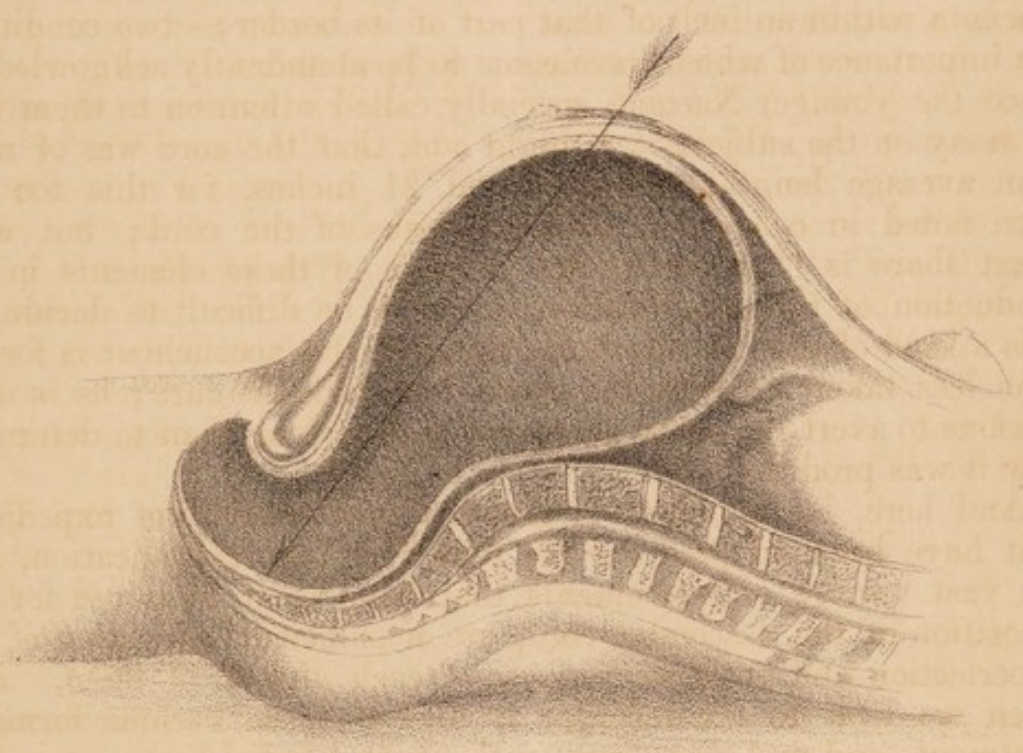
[1] H. Fr. Naegele, Commentatio de causâ quâdam prolapsus funiculi umbilicalis in partu, non rarâ illâ quidem, sed minus notâ, Heidelb. 1839.

[2] Professor Hecker, of Munich, in the recently published second volume of his very instructive work on Clinical Obstetrics, gives the statistics of twenty-nine cases of head presentation complicated with prolapsus funis; and, after stating that nineteen out of the twenty-nine children had been rescued, he uses these words:—"I do not believe that we can in general achieve much more, for we have too many difficulties to contend with, and there are too many eventualities that may render the results nugatory.—P. 184 of *Klinik der Geburtskunde*, ii. band, 1864.

[3] See the accompanying lithograph, showing the axes and positions of the uterus, relatively, (1.) in the usual posture on the back, and (2.) in the reversed posture upon the knees and elbows.

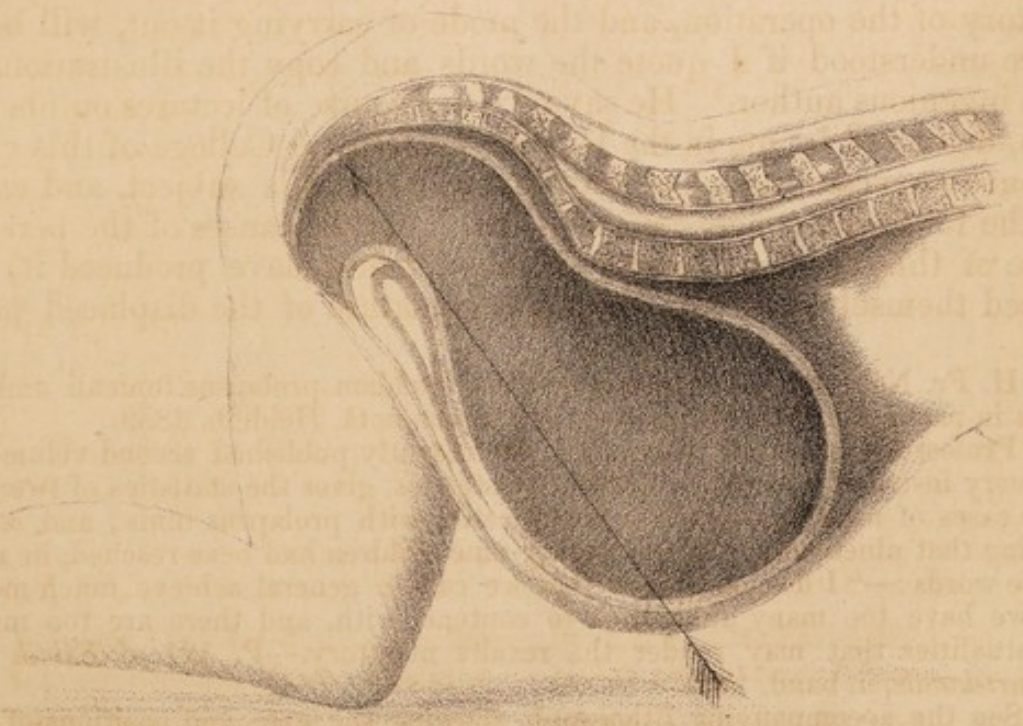
Prolapse of the Funis.

Fig 1.



In Fig.1 the arrow represents the direction of the uterine axis, which is forwards and downwards; the woman being on her back.

Fig. 2.



In Fig. 2 this axis is represented inverted by the change of position.

and the inclined plane offered it by the uterus, by which to roll out of its cavity; and *second*, That the only rational mode of treatment would be inverting this plane, and thus turning to our advantage not only it, but the lubricity of the cord, which ordinarily constitutes the main barrier to our success. This, I found, could be readily accomplished by *placing the woman on her knees, with the head down upon the bed*, in the posture assumed by eastern nations in worship, and now often resorted to in surgical operations upon the uterus and vagina. Let it be remembered that the axis of the uterus is a line running from the umbilicus, or a little above it, to the coccyx; and it will be seen that by placing the woman in this position, it will be entirely inverted."[1] Although six years have already elapsed since Dr Thomas read his Essay before the New York Academy of Medicine, the proposal is not yet widely enough known, or, at least, the results of the practice have not yet been recorded in sufficient abundance to allow us to make a statistical comparison of it with the multiform methods of treatment which it promises to replace. But, I am well assured, that when it shall come to be adopted as the common method of treating cases of prolapse of the cord, when interference is required, the high mortality of this complication will be found to be very materially diminished.[2]

In the special case before us the result was in every respect most gratifying. Having placed the patient on her elbows and knees, I passed the fingers of the right hand into the vagina, and carrying down the displaced loop of cord into the os uteri, I could feel it slip away past the presenting head into the dependent uterine cavity. Friction was then applied to the uterus to increase the contractions; and these having been still further stimulated by the administration of a full dose of ergot, and the head having fairly entered into the pelvic brim, the patient was made to resume the ordinary obstetric position in about a quarter of an hour from the commencement of the operation.

Dr Churchill[3] wonders that no one had ever *before* thought of this plan, "so simple, and so in accordance with common sense." But I have been informed by Dr Priestley, that Mr Bloxham, of St George's, London, had used this kind of treatment for years in cases of prolapsus funis, although he had never published any account of it. And in Canstatt's Jahresbericht for 1856, vol. iv. p. 514, reference is made to a case successfully

[1] An Essay on Prolapse of the Funis, with a New Method of Treatment. In Transactions of the New York Academy of Medicine, 1858, vol. ii. p. 26.

[2] Dr Thomas, with an easily intelligible confidence in the self-commendatory character of his suggestion, gave it to the profession supported by the results of only two cases. Dr Brandeis, of Louisville, has published three cases in proof of the advantage of the postural treatment, but avers that the operation will not succeed where the liquor amnii has entirely escaped, and the uterus is firmly contracted around the child. I have, however, been told of cases where the operation has succeeded admirably, although the waters had all escaped. See Medical Times and Gazette, 1860, vol. ii. p. 220.

[3] Theory and Practice of Midwifery, 1860, p. 459.

treated by the postural method by a Dutch obstetrician, Dr Kiestra, who recommends that, in cases where the patient cannot be kept long enough *à la vache*, she should simply be laid on her side, with the pelvis very much elevated.[1] The idea seems to have occurred afterwards independently both to Dr Thomas and Dr Theopold. In the *Deutsche Klinik*, No. 27, 1860, Dr Theopold suggests that in cases of prolapsus funis we should place the patient on her knees and elbows; or if there be any obstacle to the assumption of this position, that we should make her lie on the side down which the cord has escaped, and then, by placing some pillows under the pelvis, the plane of the uterus would be again inverted, not to the same degree, but still sufficiently to allow the cavity of the organ to have a level so much below that of the os as to favour the reposition of the cord and its retention in utero.[2] Are not the differences which have been observed in the relative frequency with which prolapse of the cord occurs in France, England, and Germany, to be in some degree explained by the different positions in which parturient women are placed in these respective regions? In France, where, though the patient is laid on her back, the pelvis is kept elevated, the complication occurs, according to Churchill, only in 1 in 373 cases; in Britain, where the patient is kept on her side, on a nearly level surface, it occurs in 1 in 210⅓ cases; in Germany, where the patient is placed on the back, with the shoulders higher than the pelvis, it occurs as often as 1 in 162⅔ cases.

5th, Application of the Forceps.—The uterus continued to contract regularly and steadily, though painlessly, but the advance of the head was so very slow, in consequence of its large size and extreme ossification, that after the lapse of an hour and a half, or two hours, I deemed it right to act on the principle, which has ever received the hearty sanction and support of this Society, that we ought to interfere to avert the evils of delay, rather than to wait till nature has done her utmost, and left the patient prostrate, and, perhaps, after all undelivered. The woman was accordingly brought under the influence of chloroform, when Dr Watson applied the forceps, and speedily effected her delivery. With the birth of the child in this manner, all peculiarity in the history of the case terminates. But I may still be permitted to add a few sentences as to the way in which we conducted,

6th, The Management of the Third Stage of Labour.—With the left hand over the abdomen, I followed down the contracting uterus, as the body of the child was being expelled from its cavity; and then grasping the uterus, at first gently, then with more force, I compressed it until, within five or six minutes, the placenta, with the membranes, was driven into the vaginal orifice and removed. At

[1] Niederl. Weekbl. von Geneesk. April 28, 1855.
[2] Monatsschrift für Geburtskunde, vol. xvi. p. 394.

first sight it will be averred that there is nothing new in this kind of procedure; and it is not as a novelty in practice that I mention it now. Yet I apprehend that though a few practitioners amongst us[1] are in the habit of following out this plan in most of their cases, the ordinary practice of the profession in Britain materially differs from it, and consists, as we find it laid down in all our text-books, of waiting ten or fifteen minutes till the return of uterine contractions may have detached and expelled the placenta, then examining to discover the position of the afterbirth, and removing it; and when it does not come away at once, making gentle traction on the cord, while the uterus is stimulated to more energetic action by occasional friction, but not with such a forcible degree of compression as would suffice to separate and squeeze out the contents. Or if, in the practice of some obstetricians, the external manipulation of the uterus is insisted on as *the chief* element for successful completion of the third stage, yet even with them the internal interference with the cord and placenta is not entirely laid aside.

It was only by degrees that the present practice developed itself out of the expectant kind of treatment that followed the rough measures so much in vogue in the early part of the last century; and we find Dr Wallace Johnson,[2] who seems to have been the first to publish instructions for the treatment of the third stage with the aid of external pressure, recommending that the compression be made at first by the two hands of the parturient woman, and only subsequently by the practitioner. Then Charles White, of Manchester,[3] states more precisely, that when after the birth of the child a pain comes on, "the secundines will be easily extracted by gently pulling the navel-string, and here an easy pressure upon the abdomen, by assisting the uterus to contract, will be of service." Subsequently, Dr Clarke, of Dublin,[4] rendered the practice still more perfect, by insisting on our "pursuing, with a hand on the abdomen, the fundus uteri in its contraction until the fœtus be entirely expelled, and afterwards continuing for some time this pressure, to keep it, if possible, in a contracted state."

But in Germany, up till within the last few years, interference in the last stage of labour has been directed rather to extraction of the secundines by traction upon the cord from below than by pressure upon the uterus from above, as may be seen by a

[1] Dr Newman on the Management of the Placenta.—*British Medical Journal*, 1860, p. 356. I hope to be able to lay before the Society, in the course of this session, the statistics of 200 cases conducted under the superintendence of Dr Newman, and kindly drawn up by Mr Alfred Watson.

[2] A New System of Midwifery, 1769, p. 200. In a note he speaks of the propriety of his practice being "confirmed by Dr Hunter and Dr Harvie, the latter of whom appears to have been the first who recommended it in his lectures."

[3] On the Management of Pregnant and Lying-in Women, 1772, p. 110.

[4] Collins' Midwifery, p. 121.

reference to the standard works of Scanzoni,[1] of Würzburg, Braun,[2] of Vienna, etc. Even Professor Spiegelberg, of Freiburg, who has taken an active and important part in the advance that is now being made in this direction in German practice, gives in his text-book,[3] published in 1858, more prominence to the traction by the cord than to the compression of the uterus. At the meeting of the Association of Physicians and Naturalists, held in Königsberg, in September 1860,[4] Dr Credé, the distinguished Professor of Midwifery in Leipzig, brought prominently before his professional brethren the results of his experience, and proposed as the general rule, in the treatment of the last stage of labour, that the practitioner should seek to effect the expulsion of the after-birth and membranes from the genital cavities by external manipulation alone, without interfering with the cord, or introducing the fingers into the vagina. He had already recommended this kind of practice in his Clinical Lectures on Midwifery,[5] some years before; but his observations seemed to have exerted no widespread influence till he came forward at the meeting referred to, and, after showing the well-known dangers attendant on the common practice of pulling at the cord, and the great success of his own, made the bold allegation, that when the new plan of treatment should have come into general use, "the spectre of the adherent placenta would be scared away" from the domain of midwifery.[6] Then the profession took the matter up, and Abegg, in Danzig,[7] Strassman,[8] in Berlin, and others,[9] published successful results from the adoption of the new practice. We may judge of the improvement effected by the introduction of Credé's plan of treatment by the statistics of Bossi,[10] who states that, in these clinical wards at Vienna, where the new method was in all cases adopted, the cases of post-partum hæmorrhage only amounted to 1·47 per cent., while in the other wards, where the old line of practice was followed, these amounted to 3·52 per cent. In the former, the hand had to be

[1] Lehrbuch der Geburtshülfe, 3d edition, p. 253.
[2] Lehrbuch der Geburtshülfe, Wien, 1857, 194.
[3] Lehrbuch der Geburtshülfe, p. 120.
[4] Monatsschrift für Geburtskunde, vol. xvi. p. 337.
[5] Klinische Vorträge über Geburtshülfe, 1853, p. 599.
[6] It ought, however, to be noted that Dr Credé has somewhat modified this statement in a more recent article, "Ueber die zweckmässigste Methode der Entfernung der Nachgeburt," in the next volume of the same journal, p. 274; and also in a note to his abstract of Bossi's paper in the twenty-second vol. p. 310.
[7] Monatsschrift für Geburtskunde, October 1861, p. 264.
[8] Verhandlungen der Gesellschaft für Geburtshülfe in Berlin. Sitzung von 26 November 1861. In Monatsschrift, vol. xix. p. 132.
[9] *e. g.*, Some of the members of the Berlin Obstetrical Society, at the meeting referred to. An article by Van Rooyen, in Donder's and Berlin's Archiv, vol. iii. p. 211, in favour of the new method, is noted in Canstatt's Jahresbericht for 1862.
[10] Wiener Medicinische Wochenschrift, 1863, Nos. 30-32.

passed into the uterus to separate the placenta only once in 315 cases; in the latter, once in 78. Then we find Goschler[1] averring that incarceration of the placenta is most frequently due to an inflexion of the uterus, resulting from its relaxation after labour, and that this can be most effectively treated by Credé's method; and the results of the practice in the wards of the Berlin Maternity, as given by Dr Winckel,[2] are all in favour. In the new edition of Naegele's Text-book, the editor, Dr Grenser of Dresden,[3] states that he "has introduced this practice into the lying-in hospital at Dresden during the last two years, and has likewise employed it extensively in private practice, so that he can commend it on the ground of the fullest experience." The name of Professor Spiegelberg[4] has been associated with that of Professor Credé in connexion with this improvement in German obstetric practice, although his practice differs from that of his Leipzig colleague, in that he does not seek to effect the complete expulsion of the secundines from the genital canals by external pressure, but rather follows the British practice of following down the uterus with the hand, and then aiding the contraction of the uterus in the expulsion of its contents by external pressure.[5] Doubtless the result of all these discussions will be to bring the German practice more into correspondence with ours; but perhaps we also may have something to learn in the way of trusting more than we have been in the habit of doing to uterine compression, and less to tractions on the cord.

Let me add, that in trying to follow out the process of Credé, we may require to exert very firm, steady pressure on the uterus with one or both hands. In the first cases in which I attempted it, I failed to effect the extrusion of the placental mass from the vaginal canal,—which is an essential point in the procedure,—simply from not making the compression with sufficient vigour.

[1] Allgemeine Wiener Med. Zeitung, 1863, No. 37, in Monatsschrift für Geburtskunde, vol. xxii. p. 313.

[2] Zur Entfernung der Nachgeburt, in Monatsschrift für Geburtskunde, vol. xxi. p. 365.

[3] Naegele's Lehrbuch der Geburtshülfe, von Dr Grenser, 1863, p. 246.

[4] Erfahrungen und Bemerkungen über die Störungen des Nachgeburtsgeschäftes, in Wiener Med. Zeitschrift, ii. 1861, p. 39. See Canstatt's Jahresbericht for 1862.

[5] See an excellent article on the subject in the Monatsschrift für Geburtskunde, vol. xxii. p. 15. Bemerkungen zur "Behandlung der Nachgeburtsperiode," von Heinrich Schüle.

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