PART III.

HALF-YEARLY REPORTS.

REPORT ON MIDWIFERY AND DISEASES OF WOMEN.

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THE OPERATIVE TREATMENT OF PROLAPSUS UTERI.*

THE first attempt to cure prolapse by operative interference was made by Gérardin in 1823, who cauterised the vaginal wall. Fricke in 1832 vivified the posterior third of the labia majora on each side, including the posterior commissure, and brought them together with interrupted sutures. Phillips applied fuming nitric acid, and Dieffenbach, Henning, Kennedy, and Velpeau, the actual cautery, so as to destroy long strips of the vaginal wall parallel to the axis of the canal; quite lately Rokitansky has removed the folds of the vagina by means of elastic ligatures.

Marshall Hall was the first who performed colporrhaphia anterior, and a full description of the operation was given by Marion Sims in his book on uterine surgery. Nearly all modern German authorities have reverted to Sims's original plan—viz., the excision of an oval portion of mucous membrane from the anterior vaginal wall. Sims considered that the success of the operation was due entirely to the use of the metallic suture. We know, however, that the most essential points to secure success are, careful freshening of broad flat surfaces and the insertion at short intervals of alternate deep and superficial sutures.

The patient should be placed in the position for the operation for stone, and the operation is so little painful that Rokitansky,

* Winckel. *Die Pathologie d. weiblichen Sexualorgane*. Leipzig. 1880. P. 242.

who has operated 33 times, never uses chloroform. The vagina is first washed out with a five per cent. solution of carbolic acid, and from time to time during the operation the freshened surface is irrigated with a similar solution. The anterior vaginal wall is then fixed with a vulsellum, or bullet forceps, at the highest point to which it is intended to freshen the mucous membrane, and drawn downwards, so as put it on the stretch. Winckel has frequently effected this object by passing a ligature through the cervix uteri and drawing it firmly downwards. The mucous membrane it is intended to remove should then be marked out with a scalpel, and separated from below upwards—that is to say, from the cervix towards the orifice of the urethra. The freshened surface should extend from just below the cervix to within 2 cms. of the orifice of the urethra, and measure about 9 cms. long and 7 cms. broad (3·5 by 2·7 inches). It can to a great extent be separated by the handle of the knife. The whole surface of the wound should then be made smooth with a pair of scissors, and the ligatures—alternately superficial and deep—should be inserted at a distance of 1 cm. (0·39 inch) or less from each other. The deep sutures, moreover, should not go quite to the bottom of the wound, by which means the two surfaces are brought more accurately together. Winckel uses *fil de Florence* for the sutures, and inserts them at 5–7 mms. distance from each other. After the surfaces are brought together the whole wound is again disinfected, and then returned into the pelvis. If necessary the catheter is used afterwards, and any incontinence that may follow soon passes away. Winckel allows the patient to get up on the 12th–14th day, but the stitches are not removed for two or three weeks. He has never seen a bad effect from the operation, and the wound, with the exception of very small portions here and there, always heals by first intention.

This operation is not, however, sufficient by itself to prevent the recurrence of the prolapse, but requires to be supplemented by a somewhat similar operation on the posterior wall. Indeed some authorities consider that it is also necessary to amputate a portion of the cervix uteri, which is often lengthened by the dragging of the vaginal wall. Winckel, however, agrees with Rokitansky that this latter is unnecessary, as the elongated cervix rapidly returns to its normal size as soon as the prolapse is cured. In one case, given by Rokitansky, the uterus, which before the operation for prolapse measured 17·5 cms., became reduced in thirteen days to 10 cms.

During the last fifteen years there have been several methods of operating proposed. Three of these—viz., those of Simon, Hegar-Kaltenbach, and Bischoff—aim, first, at narrowing the vagina; second, at giving it a sudden bend forwards; and third, at strengthening the recto-vaginal septum. The method proposed by Winckel aims much more at obtaining the first two than the third.

Simon's operation (*vide* diagram, p. 435) consists in freshening, with the aid of his fenestrated speculum, a five-sided figure on the posterior vaginal wall, the base of which is formed by the junction of the skin and the mucous membrane of the vulva, and measures 5–6 cms., and which extends about the same distance into the vagina, but is less broad at the top than at the bottom by about 1 cm. The surfaces are then united with alternate deep and superficial silk sutures. There is often a good deal of blood lost during the operation, and the time occupied is from 2–3 hours; the stitches are removed from the 4th–10th day.

Hegar and Kaltenbach's operation (perineauxesis) (*vide* diagram, p. 435) differs from Simon's in the shape and length of the surface vivified, which is triangular and reaches from the posterior commissure to within from 2–3 cms. of the cervix. They use wire sutures, and do not pass the deepest sutures quite to the bottom of the wound. After the operation the vagina is washed out with chlorine water, but this is not repeated unless the discharge becomes offensive and profuse. The bowels are moved on the 3rd–4th day. The perineal sutures are removed on the 3rd–5th day; the vaginal ones not before the 14th–21st day.

The third method, that of Bischoff, or colpoperinæoplastis (*vide* diagram, p. 435), is much more complicated. This operation consists in first dissecting up a tongue-shaped flap of mucous membrane from the centre of the posterior vaginal wall. The point of this flap should commence 2 cms. above the fossa navicularis. Its length should be 4–6 cms., and its width at the base $2\frac{1}{2}$ –3 cms. It should be dissected off from below upwards, but should remain intimately united with the vaginal wall at its base. An incision is then made on each side, reaching from the extremity of the base of the flap to the centre of the labia minora, and the whole of the triangle of mucous membrane formed by this line, the middle line of the posterior wall of the vagina, and the line formed by the junction of the skin and mucous membrane of the labia majora, removed on both sides. The edges of the tongue-shaped flap are now united by deep

sutures to the upper side of this triangle on each side. The perinæal sutures are then introduced, the two upper ones passing through the tip of the tongue-shaped flap. After the operation the patient is kept in bed for a fortnight, the bowels being moved daily. At the end of this time the perinæal sutures are removed, and those in the vagina at the end of three or four weeks. This operation is often most difficult, requiring as a rule from one and a half to two hours for its performance. There is considerable hæmorrhage, but good union is obtained, and the results are most satisfactory.

Winckel thinks that though such operations may be successful in retaining the prolapse, they might lead to dangerous rupture high up in the vagina in any subsequent labour. His operation, therefore, extends only from 2-2·5 cms. upwards from the remains of the hymen. First of all, the woman being in the position for the operation for stone, a metal catheter as thick as the thumb is passed into the vagina, with which the anterior wall is pressed forwards and the posterior wall drawn upwards. The labia majora are then separated by two assistants, and an incision is made on each side along the border of the hymen from the mesian line posteriorly to within 3-4 cms. of the orifice of the urethra anteriorly. A second incision is then made parallel to this one and 2-2·5 cms. above it. The mucous membrane in the mesian line posteriorly is now divided between these two incisions, and the flaps of mucous membrane dissected off from below upwards till they remain attached to the vagina by their narrow upper border only. The length of each of these flaps is about 6 cms., and they are then both shortened to about 3 cms., and their lower borders brought together by two to three sutures, thus forming a sort of bridge over the freshened vaginal surfaces. These surfaces are then brought together in the mesian line by means of deep sutures, beginning posteriorly. The edges of the flaps of mucous membrane forming the bridge are also joined to the edges of the freshened vaginal surfaces, so that finally the lines of junction form the letter T. The sutures are not removed till the 12th-16th day, during which time the patient is confined to bed. Winckel claims for this method that it is the least bloody of all such operations, besides being easier, requiring only about an hour for its performance; also that it changes the direction of the vagina more than any other operation, which he thinks is the chief factor in retaining the prolapse. The posterior vaginal wall is, however, only strengthened

for about 2 cms. of its length. Two of his patients have borne children since being operated on. In each case an incision was made in the mesian line in order to allow the child to pass, and the cut surfaces were brought together again after the child was born, and united completely.

At the meeting of German Gynæcologists at Baden, in 1879, it was evident that opinion in Germany at least was almost unanimously in favour of operating on prolapsus uteri, and the favourite operation was that of Hegar, which he himself has performed in 136 cases with almost invariable success.

Besides these operations Prof. Seyfert has proposed to cure cases of prolapse by artificially producing retroflexion; and Prof. P. Müller, of Berne, has quite recently endeavoured to obtain the same end by making an incision through the abdominal walls, then elevating the uterus through this incision by means of the sound, amputating the body of the uterus, and fixing the stump of the cervix by means of a clamp, as is done in ovariectomy, in the abdominal wound. The objections to this last operation are sufficiently obvious.

In order to render more certain the healing of the deep portions of the surfaces vivified in these operations, Dr. Werth, of Kiel,^a has proposed to unite the bottom of the wound by means of sunken catgut ligatures (*versenkten Ligaturen*). These are introduced below the level of line of ultimate union, the ends tied and cut short, and then the edges of the wound brought together so as to include them entirely between the freshened surfaces. This method certainly aids us in obtaining union of the entire surface by first intention, and is therefore most deserving of notice. All these operations are, however, condemned by Dr. Galabin as being usually too serious for the object in view.^b

In France Dr. Lefort's operation has lately been performed several times successfully. It consists in freshening a surface measuring 6 cms. long and 2 cms. broad on the anterior and posterior vaginal walls, and bringing them together with sutures, thus dividing the vagina into two parallel canals. This operation nearly obliterates the vagina, and is therefore quite unsuited for younger women. It is, however, by no means a new operation, for the late Prof. Spiegelberg had performed an exactly similar one as long ago as 1872.

^a *Centralblatt f. Gynäkol.* 1879. No. 23.

^b *Obst. Journal.* No. LXVI. P. 349.

Winckel is convinced that the proper method of operating on cases of prolapse when complicated with marked cystocele and elongation of the cervix uteri is by a combination of colporrhaphia anterior and posterior. This he has himself done in fifteen cases, in eleven of which the result was perfectly satisfactory.

This subject has also been ably and exhaustively handled by Prof. A. Martin, of Berlin,^a who, however, is not contented with any of the operations already described, but has introduced a method of his own. The chief modification is that he freshens two parallel longitudinal flaps from the posterior wall of the vagina—one at either side of the posterior columnæ rugarum. His object is to leave the latter intact, as he thinks it one of the chief supports to the uterus. The perineal portion of the operation differs very little from those already described. If the uterus be enlarged, it should be reduced by appropriate treatment before operating. The best method of attaining this is often by amputating the elongated cervix; and, as he considers the first step in prolapse of the uterus is its being dragged down by a relaxed and hypertrophied anterior vaginal wall, he recommends that the operation on the posterior wall should be preceded by colporrhaphia anterior. This may, however, be performed at the same time as the posterior operation, the whole thing requiring from one and a half to two hours. He has always used silk as material for the ligatures, but considers that the proposition made by Werth, of bringing the deep surfaces of the wound together by sunken catgut ligatures, is in every way worthy of our attention.

The after-treatment is most simple. The catheter is used if the patient cannot make water easily while lying on the back. The bowels are moved daily from the second day on, and the wound washed externally with carbolic acid solution, but no vaginal injections are made for some days. The patient is not allowed out of bed for three weeks, and the vaginal sutures are not removed till considerably later. Martin is of opinion that the large majority of cases of prolapse should be operated on, the operation of colporrhaphia posterior being preceded, when necessary, by lessening the size of the uterus itself, and removing the redundant portion of the anterior vaginal wall by the operation of colporrhaphia anterior.

For further details of these operations the reader may consult Fritsch's work, "*Die Lageveränderungen der Gebärmutter*,"

^a Volkmann's Sammlung, klinischer Vorträge. No. 183-84.

Stuttgart, 1881, p. 194; and for the operation for simple or complicated rupture of the perinæum, Hildebrand's "Krankheiten der äusseren weiblichen Genitalien," Stuttgart, 1877, p. 83.

The accompanying plate gives the shape and comparative size of the surfaces freshened by the different operators, whose names are placed against them. It shows very plainly that one set of operators hope to cure the prolapse by restoring the perinæal body, while the others, represented by Winckel, trust almost entirely to changing the axis of the lower third of the vagina.

Heugebauer has lately published^a the results of twelve cases of prolapse he has operated on by a method of his own. This consists in freshening a surface, 4 cms. long and 1·8 cms. broad, on the anterior vaginal wall, and a similar one corresponding to it on the posterior wall, and bringing these together by means of sutures. A similar operation has been extensively performed in France by Lefort.

The writer of this report has lately, through the kindness of Dr. Kasprzik, had the opportunity of seeing Hegar's operation performed in his own clinique. The points that seemed to him most striking were, first, the great ease with which colporrhaphia

^a Centralblatt f. Gynäkologie. No. 1. 1881.

anterior was performed by drawing down the anterior wall of the vagina with an American bullet forceps, and catching the fold of mucous membrane thus formed between the blades of a pair of long forceps, then passing the sutures below the forceps, and finally cutting it away with the portion of vaginal wall still between the blades, and tying the sutures. This resembles very much Ricord's operation for phimosis. The operation on the posterior wall, or Hegar's own operation, was wonderfully simplified by fixing the three points of the triangular flap of mucous membrane that was to be removed with American bullet forceps. In this way the point furthest up in the vagina was drawn down to a level with the orifice of the urethra, and the whole surface to be vivified thus came to lie almost on a level with the orifice of the vagina. The greatest importance was placed on having perfectly smooth surfaces, and of allowing no hæmorrhage to take place between them once they were brought together. With this object the sutures, both superficial and deep, were inserted at very short distances (about $\frac{1}{4}$ inch) from each other, and if, on squeezing the parts, any blood oozed out between two sutures, an additional deep suture was immediately introduced. The operations on the anterior and posterior walls were done at the same sitting, the woman being under the influence of bichloride of methylene, which is the anæsthetic now used by Hegar almost to the entire exclusion of ether or chloroform. The perinæal sutures are not now removed till the 8th day, and the vaginal ones not for a month or six weeks, the patient being generally sent home in the interval.

However, even when the freshened surfaces have united by first intention, they sometimes again separate from the amount of traction that is put on the cicatrix. This result may be generally avoided by freshening a large enough surface, and passing the sutures deeply. In order to obtain a still firmer cicatrix, Fritsch^a has lately introduced a new method of operating on the posterior wall, which is nothing but the application of Sims' original operation for cystocele to the prolapse of the posterior vaginal wall. The great advantage Fritsch claims for it is that in cases where there is a hypertrophied vaginal wall the redundant portion is excised, and as the whole thickness of the wall is removed, the subsequent cicatrix is much firmer. The portion of vaginal wall to be removed is caught up in a forceps, made similar to the one for the anterior vaginal wall, the finger in the rectum preventing

^a Centralblatt f. Gynäkologie. 1881. No. 18.

any of the rectal mucous membrane being included, the sutures are then passed, and the rest of the operation carried out almost exactly like that for colporrhaphia anterior, already described. A good deal of blood is lost during the operation, but as it is quickly performed, the patient probably loses less than in the more common operation. If done under antiseptic precautions, there is not much danger involved, even if Douglas's space should be opened by mistake.

ON THE PROPER METHOD OF CONDUCTING THE THIRD STAGE
OF LABOUR.

This question, which is of so great importance to every practitioner, and about the best method of conducting which there are, even in this country, very different opinions, has lately been engrossing the attention of the profession on the Continent. The starting-point of this was a paper by Prof. Dohrn,^a of Marburg, in which he maintains that the most modern investigations as to the manner in which the placenta becomes separated and expelled, if left to nature, show that Credé's method requires modification and limitation. He holds that the placenta is not separated by the last pain, but that it is pressed gently towards the os by the formation of a clot above it, during which process the membranes are gradually detached without being torn and left behind. During this time Credé's method can only do harm, for external pressure should not be used to expel the placenta until the greater part of it is well in the os. This process requires at least a quarter of an hour, during which time the uterus should be controlled by the hand laid gently on it, which quite prevents any danger of internal hæmorrhage.

This paper soon elicited a reply from Dr. Fehling,^b in which he accuses both Dohrn and also Runge^c of having made the mistake of supposing that the essence of Credé's method consists in the rapid expulsion of the placenta. This, Fehling says, is not the case, and quotes Credé himself as follows:—"I have always succeeded in from a quarter to half an hour in exciting powerful uterine contraction," and then only, as the text shows, does Credé grasp the uterus and press out the placenta. Everyone, moreover,

^a Deutsche med. Wochenschrift. 1880. No. 41. Centralblatt f. Gynäkologie. 1880. No. 23.

^b Centralblatt f. Gynäkologie. 1880. No. 25.

^c Berl. klin. Wochenschrift. 1880. No. 44.

who has been at Credé's clinique knows that he was not there taught to express the placenta immediately, but, as a rule, along with the third or fourth after-pain, by which time it is already separated. Ever since Fehling was appointed to Stuttgart, he has taught the midwives "Credé's," or, if anyone prefers to call it, "Spiegelberg's," method of conducting the third stage—viz., placing the hand on the fundus as soon as the head is born, and controlling it by gentle friction, while making no attempt to press off the placenta before the third or fourth after-pain. To carry out the method properly, the uterus should from time to time be examined after the expulsion of the placenta, and gentle friction made with the hand over the fundus, for one or two hours after labour. At the same time, there can be no doubt that too early pressure frequently causes some of the membranes to be separated from the mass of the placenta, and left behind in the uterus. This, however, often happens, even when no pressure has been used. Nor is it rare to see the placenta expelled immediately after the birth of the child, with the whole chorion torn off from it, and left behind in the uterus.

The question, therefore, to determine is, which is the better method—early expression, with the chance of some small portions of membrane being left behind in the uterus, or the purely expectant plan, with the risk of what is often a very considerable amount of hæmorrhage. It is greatly to be regretted, he thinks, that in the new Prussian official manual for midwives traction on the cord is still recommended, and the rule laid down that the midwife should wash and dress the child before seeing to the expulsion of the placenta, which practice, he considers, frequently leads to the most serious hæmorrhage. At the same time, he admits that he has frequently noticed that after expression of the placenta, the lochia, which ought, according to the text-books, to become serous from about the fifth to the eighth day, and from that time on thick and of a grayish-white colour, become red and copious about the eighth or tenth day, and remains so, in spite of treatment and keeping the patient in bed, for 3–5 weeks. He has assured himself by dilatation and digital examination, that this hæmorrhage is not due to retention of placenta or membranes, and is quite at a loss to what to refer it, unless it be the expression.

To this Runge* answers that he never spoke or wrote against

* *Centralblatt f. Gynäkologie.* 1880. No. 26.

Credé's method, but only against its being put into practice immediately after the birth of the child, as Fritsch has recommended in the second edition of his "Midwifery." He is glad to find that his (Runge's) practice is almost identical with that recommended by Fehling. For it is almost the same thing to express after fifteen minutes, as he does, as to express with the third or fourth after-pain, the essential point being that the expression should not immediately follow the birth of the child. He welcomes Dohrn's paper as most opportune;^a for he thinks that, though Credé's method has been almost universally adopted, there are still very important differences of opinion as to the exact time when it should be put into practice. Thus Credé and Schroeder recommend expression soon after the child is born, while Fritsch would allow no pause at all between the birth of the child and the expression of the placenta. For some years Runge followed Fritsch's directions implicitly, with the result that some portions of the membrane were usually torn off and left behind in the uterus, leading to all sorts of subsequent complications. In more recent years the placenta has not been expressed for about 15 minutes, and all such complications have ceased. The great advantage of expression is that it makes any introduction of the hand or fingers into the lately wounded vagina unnecessary.

This controversy, in the course of which the accuracy of Prof. Schultze's theory of the manner in which the placenta is expelled came in for considerable criticism, naturally led to his entering the lists in its defence.^b He denies that Dr. Matthews Duncan has disproved his theory, but thinks, on the contrary, that he fell into the mistake of considering that the most desirable way—that is, without hæmorrhage—was the only natural way. He does not deny that separation sometimes takes place in the way described by Dr. Duncan, but says it is rare compared to the other, which must therefore be looked on as the normal one. His views are supported by the investigations of Lemser^c on the position and shape of the placenta in the uterus in cases of spontaneous separation. Credé, he says, objects to the idea that the hæmorrhage should be looked on as playing any part in the separation of the placenta. But, if we admit the hæmorrhage

^a Berliner klinische Wochenschrift. 1880. No. 44.

^b "Ueber den Mechanismus der spontanen Auscheidung der Nachgeburt, und ueber der Credéschen und der Dubliner Handgriff." Deutsche med. Wochenschrift. 1880 No. 51 u. 52. Centralblt. f. Gynäkologie. 1881. No. 3.

^c Dissertat. Giessen. 1865.

itself, there can be no doubt of its being capable of affecting the separation and expulsion. He thinks the part of Credé's method which consists in making pressure on the uterus while it is contracting, in order to increase the force of the pain, and so press out the placenta, is logical and worthy of commendation. By such a practice the third stage is shortened and any serious hæmorrhage prevented. But the second part—viz., the forcing down of the uterus into the pelvis in order to drive the placenta along and out of the vagina—is not free from danger, and should not therefore be practised, being likely to lead to stretching of Douglas's fold, followed by parametritis posterior and all its consequences. To it is also chiefly due the extraordinary frequency with which portions of the membranes remain behind in the uterus; for when the pressure is taken off the fundus, on the placenta escaping from the vulva, the membranes which are still adherent to the uterus are drawn suddenly upwards in the direction of the axis of the vagina. Hence, Schultze recommends the old method of introducing two fingers to remove the placenta from the vagina, once it has got there, and does not think that in these antiseptic days there should be the least danger in such a proceeding. The Dublin method, which the late Prof. Spiegelberg so warmly recommended—viz., grasping the fundus firmly as soon as the head is born, and not removing the hand till the placenta is expelled—he considers most excellent. By it the uterine wall is made to follow down the child as it escapes and the placenta as it becomes detached, which lessens the hæmorrhage, and is perhaps able to bring about what Duncan has described as the most desirable method of expulsion of the placenta. This idea is supported by the results obtained by Dr. Salin at the Stockholm Hospital, where this method has been introduced, where the greater number of placenta are expelled in the manner described by Dr. Matthews Duncan.

To these criticisms Credé himself replied, first in the *Deutsche med. Wochenschrift*,^a and again at more length in the *Archiv für Gynäkologie*.^b He commences the latter paper by saying that the objections which have been brought forward do not apply to his method at all, and only serve to show how imperfectly it is understood even at the present day. The origin of his method was as follows:—Shortly after he was appointed to take charge of the

^a Deutsche med. Wochenschrift. 1880. No. 45.

^b Archiv f. Gynäkologie. Band XVII. P. 260.

cases at the Berlin Obstetrical Polyclinique, he happened to be called several times in succession to cases of hæmorrhage, supposed to be due to adherent placenta, and in which it could not be removed by any of the ordinary methods. In order thoroughly to understand these cases he examined the uterus first through the abdominal walls, and found it large, relaxed, and full of blood. The result of the tersely active manipulation of the fundus, however, was sufficient to excite powerful contraction which violently expelled the whole contents of the uterus.

Credé confesses that he was at the time quite ignorant of the importance laid by some English (he might have said Irish) obstetricians on exciting artificial uterine contractions by external manipulation in the third stage of labour; still no one had up to that time insisted on the importance in every case of effecting the expulsion of the placenta by external pressure alone. The very favourable result obtained in these cases determined Credé to apply it to every case of labour, and he soon found that the placenta might be expressed with the first or second after-pain, though more usually with the third. He was further in the habit of keeping the hand on the fundus for some time after the expulsion of the placenta, thus ensuring permanent uterine contraction. Soon *post partum* hæmorrhage and bad after-pains quite disappeared from his practice, as also those cases where fever in the puerperal state was due to the manual removal of the placenta for hæmorrhage or supposed morbid adhesions.

Credé first described this method in 1853 in his "*Klinische Vorträge über Geburtshülfe*" (v., p. 599) in the following words:—"The simplest and most natural method of expediting the expulsion of the placenta is by exciting the inactive uterus to contract powerfully. A single energetic uterine contraction finishes the whole matter." He thinks perhaps that this description was not sufficient to incite others to give the method a fair trial. However, after eight years further experience, both as director of the lying-in wards in the Charité at Berlin and also at Leipzig, he read a paper on the subject in the year 1860 before the German Association of Naturalists and Physicians, and afterwards published it in the *Monatsschrift für Geburtskunde*. "The most important point is to make the pressure exactly at the right moment. The hand is first laid softly on the hypogastric region and gentle friction applied to the fundus uteri over as large a surface as possible until the uterus is felt to contract under it. The fundus should then be grasped

by the hand with outstretched fingers, and, if that is not sufficient, with both hands, and when the uterine contraction is at a maximum firm pressure in the direction of the hollow of the sacrum should be made on the walls and fundus." This causes the expulsion of the placenta and any blood clots that may be present; but he continues—"To press on the uterus when it is not contracting, in order to expel the placenta, is altogether wrong, and moreover will not attain its object."^a He further lays it down that the uterus should expel the placenta entirely itself, the sooner after the birth of the child the better; if it fails to do it, it must be compelled—the manual removal of the placenta being, however, strictly confined to those rare cases where Credé's method, skilfully applied, has failed.

Dohrn's chief objection is that, according to Credé, the placenta is to be expelled as soon as possible—in fact, "the sooner the better," and that such a practice frequently leads to a portion of the membrane being left behind in the uterus. To this Credé answers that Dohrn's and Runge's imperfect way of carrying out his method and not the method itself are responsible for the bad results these authors have reported.

He further thinks that Schultze has not proved his case against Matthews Duncan with regard to the way in which the placenta is naturally detached. Indeed it is quite immaterial to his method how the placenta is expelled, if only we are not asked to consider the hæmorrhage as a most useful and necessary aid in the expulsion. To Schultze's objection to pressing the fundus downwards—viz., that it is likely to do harm, Credé answers that, as Schultze confesses he has never tried it, he can scarcely be considered a very competent judge. He also entirely disagrees with his idea that the introduction of either midwives' or doctors' fingers into the vagina is, in the present state of our knowledge of antiseptics, free from danger, but thinks, on the contrary, that we shall never attain to such a state of things. Every teacher should impress on his pupils the importance of avoiding every unnecessary manipulation of the genitals of a woman, whether during labour or in the puerperal state. His objections to the Dublin method are, that it is not always sufficient to cause the expulsion of the placenta, and that, as it requires more than two hands to be constantly employed, it is more suited to lying-in hospitals than to the exigencies of general practice, when the midwife has to depend entirely on herself. He

^a *Monatsschrift f. Geburtskunde.* 1860. Band XVI. S. 345.

still maintains that the placenta should be expelled *as soon as possible* after the birth of the child. The best thing that could happen theoretically would be that the placenta should be expelled by the same pain that expels the child, and that the uterus should then remain contracted. In reality, however, a state of relaxation and loss of excitability of the uterus follows the birth of the child, which is increased by the sudden cessation in the action of the abdominal walls. If we now leave the expulsion of the placenta entirely to nature it is very rarely that it takes place in a quarter of an hour, the time required being generally much longer; and not infrequently the natural forces entirely fail to expel it. During this period of relaxation and want of excitability there is great danger of hæmorrhage; and his experience, he regrets to say, differs entirely from Dohrn's on this point.

To the charge that his method favours the retention of portions of the membrane, Credé answers that it is by no means an uncommon thing to see the whole of the chorion left behind, even in cases where the expulsion of the placenta has been left entirely to nature; and this accident happens much more frequently in cases where the placenta is removed by the hand from the vagina than in those in which it is pressed out from above. Indeed the stronger the contraction of the uterus the quicker and more perfect will be the separation of the membrane; and, since his method causes firm contraction of the uterus, it must tend to the speedy and complete separation of the membranes rather than to their retention.

"Is it, however, a fact," he asks, "that retention of a portion of the chorion is really such a dangerous accident as Dohrn and Runge would have us believe?" To this question he has no hesitation in answering in the negative, and brings forward the results of his own experience in proof of this assertion. Thus his practice has been to permit the removal of those portions of retained membrane only which were readily reached by the finger, and which came away when gently pulled on. If they are firmly adherent high up in the uterus he lets them remain there, and has laid it down as an absolute rule in his clinique that the hand must never be introduced into the vagina, much less into the uterus, to remove any such retained portions of membrane. He endeavours, by friction over the fundus, the administration of ergot, and the use of frequent vaginal injections, to obtain good uterine contraction and to prevent infection; and has always found that the portions

of membrane left behind are expelled spontaneously during the first few days of the puerperal state, without having given rise to any bad symptoms. We may, perhaps, get foetid lochia, and a slight rise in the pulse and temperature, but the subjective and objective symptoms of the patient remains good. In proof of these assertions he gives the results of 2,000 cases thus treated, in 18 of which the whole of the chorion, and in 78 of which portions of the same membrane, were left behind in the uterus. In 91 of these cases the expulsion of such retained membranes was left to nature, while in 5 the whole afterbirth was removed from the vagina, on account of sudden hæmorrhage due to atony of the uterus. Of the 91 cases left entirely to nature, 81 left hospital on the usual day—viz., the twelfth, and the 10 others somewhat later, being kept on account of some complications which could scarcely be said to have any connexion with the retention of the membranes. In no case were there any symptoms of general infection. Slight rigors were often noticed, and in several cases slight hæmorrhage, but this latter cannot be set down to the retention of the membranes, but rather to the relaxation of the uterine walls, which caused the retention. Not one of these patients became seriously ill, not one was infected, not one died; and if the temperature and pulse had not been taken it would never have been supposed that there was anything the matter with them.

While the retention of portion of the membranes is thus free from danger to the patient, it is quite otherwise with the manual extraction of such retained portions, which may itself very readily lead to infection.

The average duration of the third stage in these 2,000 cases was $4\frac{1}{2}$ minutes; and in 1,979 cases the placenta was removed by external pressure alone. He has never seen the least bad consequence follow this practice, which, on the contrary, has reduced the number of cases of secondary hæmorrhage to a minimum, and made cases of severe after-pains quite the exception. Such has been Credé's practice now for more than 30 years.

This is not, I think, the place to criticise Credé's method or to defend the Dublin method from the charges Credé brings against it. Suffice it to say that the method of exciting the uterus to contract and expel the placenta by making friction and pressure over the fundus has been practised in the Rotunda Hospital in all cases of hæmorrhage or delay almost from time immemorial. Credé deserves the credit of having found out this fact for himself,

though it had been published long before he thought of it,^a and of having applied it to effect the expulsion of the placenta in every case; but his chief title to praise seems to me to be that he recognises the importance of avoiding all unnecessary introduction of the hand or fingers into the vagina immediately after labour, and thereby eliminating one great source of septic infection.

Before closing this subject I would like to notice the method at present practised in Prof. Freund's Clinique at Strasburg, which is as purely expectant as Hunter's, and an account of which was quite lately given by Dr. Kabiscke in the *Centralblatt f. Gynäkologie*.^b This practice is upheld on the ground that the expulsion of the placenta is as much a physiological act as the birth of the child, and consequently should be left entirely to nature. Indeed the accusation is again brought against Credé's method that it increases the danger of retention of portion of the membranes, which, however, as we have seen, Credé himself does not think very dangerous or important.

In proof that under the expectant treatment the separation of the membranes is more perfect than when any means is taken artificially to hasten their expulsion, he compares Schroeder's account of the appearance of the membranes when expelled with the result of their own experience at Strasburg. Thus Schroeder says that in favourable cases we find thick shreds of the decidua vera over nearly the whole of the external surface of the membranes, while at other parts it is entirely wanting; at Strasburg, however, they find that the decidua vera forms by far the greater portion of the entire membrane—indeed the thickness of the two decidua is three or four times as great as that of all the rest of the membranes put together. That in such negatively treated cases the placenta, amnion, and chorion are expelled perfect is taken for granted, the only question that is asked being as to the extent to which the decidua has been separated, and unless the decidua can be demonstrated as an entire membrane the case is looked on as one of imperfect separation of the membranes.

As to how the placenta is normally expelled he says that where absolutely nothing has been done to hasten the expulsion, and the case is a typical one, the placenta is always expelled through the os and through the vagina, with the fœtal surface coming first. It may, however, be expelled otherwise if any pressure has been

^a Collins's Midwifery. P. 121. Hardy and M'Clintock's Midwifery. P. 221.

^b Centralblatt f. Gynäkologie. 1881. No. 7.

used, and also under exceptional conditions as to position, shape, or morbid adhesion of the placenta. That this is the normal manner of expulsion is proved both by the results of the vaginal examinations made with this object, as also by the fact that when the placenta is expelled, after being a considerable time retained, the uterine surface is covered by coagula, the membranes turned inside out, and the placenta expelled through the place where they were ruptured.

Having thus shown that by this method the separation of the membranes is more perfect than by Credé's method, he next goes on to prove that the method is also free from danger. They can absolutely deny that it leads to either external or internal hæmorrhage, or that there is any danger to the mother from the long retention of the secundines. Thanks to the admirable manner in which labour is conducted by nature, the uterus, in a natural case, when it is healthy, and not mismanaged or interfered with by neighbouring organs, does not require to be grasped by the hand in order to prevent serious hæmorrhage. They have seen no *post partum* hæmorrhage when this expectant method has been strictly carried out. At the same time, if abnormal conditions are present, making hæmorrhage probable, they at once adopt measures to prevent it.

There is also no fear that the retention of the placenta or membranes, even for twelve hours, will in any way injure the mother, though at the end of that time they may be known by the smell to be already undergoing decomposition. The danger that has been hitherto set down to this cause is most probably due to want of cleanliness.

They find, moreover, that convalescence during the puerperal state is most rapid. The amount of the lochia is very small, and the discharge changes its colour very early. It is probable that the many cases of long-continued red discharge which have been noticed by Fehling, in women who were under most perfect hygienic conditions, had probably their origin in retention of the membranes, after Credé's method of expressing the placenta had been put in practice.

The spontaneous expulsion of the placenta takes place in the majority of cases within three hours, and after its expulsion the vagina is irrigated with a five per cent. solution of carbolic acid, any rupture assisted, and then a wad of jute steeped in carbolic acid solution of the same strength is laid up against the vulvæ.

No injections, either vaginal or uterine, are made during the puerperal state.

In cases, however, where there is a probability of *post partum* hæmorrhage the hand is placed over the fundus from the time the child is born, but if no hæmorrhage take place the uterus is neither rubbed nor kneaded. The uterus is then watched for 1-1½ hours, and if no hæmorrhage has then taken place the expulsion of the placenta is left to nature. If the symptoms are such as to demand the immediate removal of the placenta they use Credé's method. If this fails, or if, having practised it, any portion of the membranes is left behind, they then pass the hand in and remove the placenta, or the portions of retained membranes, as the case may be. After this the uterus is irrigated with a two per cent. solution of carbolic acid, and the vagina washed out three times daily with the same solution during the puerperal state.

Finally, he thinks it would be of immense benefit to puerperal women if midwives were better instructed as to the natural way in which the placenta is expelled, as they would then cease to do damage by their ignorant and misdirected attempts to express it by Credé's method.

MASSAGE IN SIMPLE ENGORGEMENT OF THE LIVER.

IN cases of chronic hyperæmia of the liver, where there is neither cachexia nor ascites, Dr. Durand-Fardel recommends, in addition to the free use of Vichy waters, local douches to the hepatic region and massage. He does not consider pain or tenderness to pressure a contra-indication, or jaundice, which in these cases is yellowish rather than of a green hue. The douches should be given daily, with a pressure graduated to the sensitiveness of the part, and of a temperature of 95° Fahr. The massage is begun by rubbing lightly the whole abdomen; then the hepatic region is rubbed simply by the hand, then the integument over it is kneaded, and lastly the liver itself. By-and-by its free border can be grasped in the hand. The douches and massage are followed by a feeling of comfort. The treatment should be persevered in for at least a month. It is claimed that the obesity which occurs on the upper parts of women's chests and shoulders about the time of the menopause may be checked by this procedure.—*Revue Médicale*.

S. W.