REMARKS

ON

A MODE OF APPLYING THE SHORT MIDWIFERY-FORCEPS,

PRODUCTIVE OF LESS PAIN TO, AND DISTURBANCE OF, THE PATIENT, THAN THAT USUALLY ADOPTED.*

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THERE is a large class of cases, especially in primiparæ, in which, perhaps from some slight disproportion between the head of the child and the pelvis of the mother, from constitutional debility, or from accidental rupture of the membranes early in the case, the labour is exceedingly tedious, and the recovery afterwards correspondingly tardy and imperfect.

Now although, as an obstetric instrument, the forceps is everything that can be desired in cases of a severe type, yet for those in question it is hardly suitable. The instrument is seldom at hand when wanted, and has to be sent for, to the great alarm of the patient and her friends. It is, moreover, necessary, before it can be used, to move the patient to the edge of the bed, to empty the bladder, and to make other preparations, which arouse her fears still more; and they are not lessened if she hear the metallic click of the blades.

It is unnecessary for me to picture to you the questioning one has to undergo from the friends, the trouble required to calm the fears of the patient, and the unjust blame to which we may be subjected by our female critics for using instruments which "never were needful when they were having a family". You will doubtless be able to recall to mind times when you have waited many weary hours, wishing you had some means of assisting the descent of the head, yet where you hardly liked to apply the forceps, though the waning powers of the patient made you anticipate such a termination to the case. Doubtless, it has been during the ample time for thought unwillingly enjoyed at such times, that the vectis was invented—the whalebone loop, the suction-tractor; also, more recently, Sheraton's steel fillet and Debenham's whalebone fillet. There is no doubt, however, that none of these instruments can compare with the forceps for safety to both mother and child, if only the latter can be deprived of its objectionable features. If, although really an instrument of two blades, we can have one possessing the portability of the vectis, so that, when going into the country or to a place some distance from home, this blade can be slipped into the breast-pocket, and there remain out of sight, and without the chance of the noise which would arise if two blades were so placed; if we can apply this blade almost without the knowledge of the patient, without causing her the least pain during its introduction, and without disturbing her position in the bed, unless too near its foot to allow of the proper movements of the handles during extraction,—it appears to me that we shall have all we want. There would be, moreover, this additional advantage, that one instrument would do for all cases, whether those in which a little judicious assistance will be of great advantage to the patient, although not *absolutely* necessary to the termination of the case; or serious cases of impaction.

I am not writing a paper advocating the very frequent use of the forceps; but I cannot here refrain from reminding you how fatal ergot is to the child, when given in tedious labours from disproportion; and how preferable aid of the nature we speak of is, with the view of saving the life of the child.

Acting upon the hint conveyed by Sheraton's steel fillet, I have had an instrument constructed, consisting, as you see, of an ordinary pair of short forceps-blades, accurately adapted to one another—the convexity of one to the concavity of the other, and connected firmly together in this position by two India-rubber bands, which are easily removable by rolling off, when it is wished to separate the blades. This is the position in which they are intended to be maintained when not in use, and during introduction. When not in actual use, the blades are protected by a small leather case. They are used in the following way. The external parts being separated by the first two fingers of the left hand, the blade is to be slipped in between them (and it is sufficiently narrow for that purpose). Keeping the point in close contact with the head, it is to be passed directly into the hollow of the sacrum, precisely

as the vectis is introduced. In the ordinary position of the foetal head, the point of the blade will now be over the left eye, but above it about two inches. The blades must now be separated, and glided one downwards and the other upwards, until, as regards the pelvis of the mother, a line running from the concavity of one blade to the concavity of the other would be exactly at right angles to its antero-posterior diameter. With exercising a little pressure, they will now lock, and the case may be proceeded with. In the first or common position of the foetal head, the upper blade will be on the right temporal ridge, just within the line of the hairy scalp; and the lower blade just behind the left ear. In the second position, this will be reversed, and the lower blade will be just behind the right ear. The occipito-posterior positions nature will have almost invariably converted into occipito-anterior by the time the head is sufficiently low down in the pelvis for the application of the short forceps. To those who may object to the parts of the foetal head grasped in this way of using the forceps, I may reply as follows.

1. I have not recommended its use in this position, except in the less severe class of cases. At the same time, I may say that I have applied it at least forty times in this position, and that some of these cases were very difficult; and only in one case was there any bad result for which I could blame the forceps—the child dying in convulsions soon after birth. This might have resulted simply from the severe labour.

2. The long forceps seizes the child in almost exactly the same position, being applied at right angles to the pelvis of the mother, without reference to the position of the child's head; and, when the head has been brought down by them into the cavity of the pelvis, it is not thought necessary to alter its position on the head, or to substitute the short forceps applied over the ears.

3. Compression is effected by elongating the head exactly in the direction in which nature does it. A child's head is not compressed laterally in labour; it is elongated, the anterior part of the skull being flattened.

4. Compression is not effected in a dangerous direction. It is not along the same plane as it would be if from the forehead to the occiput. The line of pressure extends diagonally across the head, and from the top to the base. The lower blade lifts, as it were, the occiput into its hollow; whilst the upper slightly compresses the vertex. At the same time, the hold of the instrument being to a great extent a side to side one, we have almost all the advantages of the latter mode of grasp, in depressing the vertex, and rotating the head under the pubic arch when the time for that movement occurs.

I need hardly say that there is nothing to prevent the blades being passed separately in the usual manner, if thought desirable from the degree of impaction being considerable, and the difficulty in extraction expected to be great.

Before concluding, I will enumerate the advantages which are offered by the use of this form of forceps; and, in so doing, I leave the subject to your judgment.

1. It is light, portable, and can be carried in the breast-pocket, where it is invisible, and where it cannot be lost in travelling.

2. Its application is much more rapid than that of the ordinary short forceps; indeed, I think a minute and a half or two minutes is generally sufficient.

3. It causes so little annoyance to the patient, that its introduction and application to the head may be said to be painless. Now, this certainly cannot be said of the ordinary way in all cases; for, when the head is distant an inch and a half from the perinæum, the blades have to press considerably upon the external parts of the mother to get the points round the convexity of the head.

4. It is much safer to the child than the use of ergot, which should be confined to those cases in which the sole cause of delayed delivery is sluggish pains.

5. It is unnecessary to disturb the position of the patient, unless she be too near the foot of the bed. It is also needless to empty the bladder, unless we can feel it sensibly distended with urine.

6. Compression is effected naturally, the elongation of the head being assisted. I may here remark that, unless a certain amount of compression be exercised by forceps, the traction-power is confined entirely to the tips of the blades, and injury is likely to result.

7. A peculiarly distressing accident sometimes results from the use of the short forceps across the ears; viz., paralysis of the portio dura. There is no risk of this when it is applied in the way of which we are speaking.

8. The same instrument may be applied in the ordinary way in severe cases of impaction, if the operator think it desirable.

Of course, any ordinary pair of forceps can be applied in this way, except that each blade must be introduced separately.

The best way of avoiding rupture of the perinæum is, as the head

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presses on the external parts, to unlock the blades, and to let the handles cross one another as much as they will. The blades will now lie closely adapted to the head, and will not stretch the perineum at all. At the same time, they can be reapplied instantly, if necessary. This is better than entirely withdrawing them, which should only be done when the head is pressing well upon the perineum and stretching it; the pains being sufficiently strong to render it evident that no further artificial aid is required.

ON THE NATURE OF THE CONDITION KNOWN AS CATALEPSY.

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THERE is no doubt that catalepsy is one form of the manifold subjective phenomena which may be attendant upon an imperfectly nourished nervous system; but the vague notions which have floated in the minds of many regarding its absolute cause have induced me to seek for facts upon which some certain explanation or probable theory may be founded.

The difficulty in such an inquiry necessarily is the rarity of death under such a condition, whereby a reasonable or probable theory might be ratified by observation of the morbid anatomy of the brain and spinal cord in the subjects of this form of nervous disorder. I am inclined, however, to think that pathological observation would not assist us very materially; while we may draw some very certain conclusions from the comparison of the manifestation of this state with the expressions of allied nervous conditions.

Dr. Watson, in his ever recent *Lectures*, has placed catalepsy and hysteria in the same category with neuralgia and tic douloureux; which latter forms of nervous disorder Trousseau placed under the head of epilepsy, and with good reason. Dr. Watson (*Lectures on the Principles and Practice of Medicine*, vol. i, p. 716) expresses his opinion, which is endorsed by Dr. Chambers, that the condition, in one case at least under their observation, of temporary loss of muscular power, without loss of consciousness, was dependent upon a diseased state of the blood-vessels of the brain.

The late Professor Schroeder van der Kolk demonstrated beyond all question that in epilepsy the capillaries of the medulla oblongata become dilated—a fact which every one can observe, either upon the human subject, or upon animals the subjects of induced epilepsy. Trousseau advanced the idea that the condition of the brain in epilepsy was that of anæmia; which opinion was not only afterwards reduced to absolute demonstration by himself, but has been shown to be true by the beautiful experiments of Dr. Brown-Séquard.

The many experiments performed by myself on animals confirm, in my mind, the same facts. The brains—particularly the surfaces of the hemispheres—of guinea-pigs and rabbits, which have died during convulsions, I have found on examination almost absolutely anæmic.

These observations I have mentioned in order to lead up to the absolute pathological fact of which I am about to speak—viz., the identity of the condition of catalepsy with that of epilepsy.

The exception taken to this idea, no doubt, will be the assumption that catalepsy is "loss of voluntary power over the muscles, without loss of consciousness;" while the pathognomonic symptom of epilepsy is "loss of consciousness," with or without loss of voluntary power over the muscles. The distinction, however, will not bear the test of close scrutiny and comparison; and it is impossible to draw a line of demarcation, when we consider the wide extension of the generic term epilepsy. The absolute duration of loss of consciousness in *le petit mal* is often only momentary, and yet the condition is unquestionably epileptic. A patient with *le haut mal* not long since under my care, violent in the extreme, was only unconscious during the first few moments of the seizure, and was able to repeat accurately conversation that had occurred during the whole time she was in the state of clonic spasm. While reviewing the cases of so-called partial catalepsy that I have had the opportunity of observing at Guy's Hospital and in private, although all the patients have been able to relate circumstances that have occurred during their paroxysms, yet I have never yet seen one in which there was not some amount of loss of consciousness. The patients may remember the invasion of the attack, and be conscious of what passes during the period of recovery; but I am convinced that there is a stage in which the mental faculties are altogether in abeyance, and during which time consciousness is absent.

The loss or retention of muscular control hardly need enter into our consideration at this point; as, in epilepsy proper, there may or may not be any appreciable disturbance of the muscular function.

In the instance of one case of catalepsy that has for several years been under my observation, although, after the attack, the patient is able to speak of almost every subject that has occurred during the seizure, which is marked with great rigidity, yet she has never been able to remember all the occurrences of the invasion of the fit. This lady has a daughter who is the subject of *le haut mal*.

The most instructive and confirmatory instances indicative of the identity of the conditions of catalepsy and epilepsy, or rather, perhaps, showing catalepsy to be a specific manifestation to be classed under the generic head of epilepsy, are to be found in those almost perfect cases such as the one detailed by Drs. Sutherland and Gooch, and narrated by Dr. Watson. The close correspondence between the more perfect cases of catalepsy and *le petit mal*, especially the maniacal excitement which is sometimes attendant upon both forms of nervous affection, seems to render the essential condition and pathognomonic sign—the loss of consciousness—merely a question of degree, which may be greater or less in either the one or the other; while the loss of muscular control, so far as it may be taken to be a phenomenon of value, would certainly preponderate towards the epileptic viewing of catalepsy. A very striking case was in April last admitted into St. Luke's Hospital. The evidence afforded by her certificates pointed towards mania as her special mental condition; and she spoke of a delusion under which she was labouring—viz., an operation which she believed had been performed on her while she was under the influence of chloroform. She then complained that chloroform was often administered to her, and that she thereby often became insensible. On the day after her admission, while passing from the airing-court to her ward, she sat down on the staircase; and, when I spoke to her, I found she was unable to answer me. On trying to move her, I found that she was as rigid as *rigor mortis*; and she was as blanched as death. She very soon recovered, and was able to walk to her ward; and, on being questioned, she said that chloroform had been given to her. For several days she had, at variable times, a similar attack—each being preceded by maniacal excitement, and followed by violence; the intervals being more or less lucid, and often occupied with needlework, or in music and singing, which she was able to execute with both ability and taste. The attacks continued of daily occurrence for a fortnight, and they disappeared for three days; she then became again maniacal, and remained so for hours; after which she had a seizure, which was followed by a secondary period of excitement; and she again complained that chloroform had been given to her. This attack was succeeded by an intermission of three days, and then by another outbreak. About an hour afterwards, she became deathly pale; and I ordered her to bed. It was, however, only possible to place her on her bed; for she was insensible immediately she reached her room; and, on attempting to move her, I found that she was as fixed as a rigid rod. I then placed her arms and hands in various positions, in all of which they were retained as though fixed; but it was necessary to hold them in their position for a few moments, in order to allow the muscles to become set. I then pricked her two or three times with a pin, from which she did not in the least shrink. She was throughout as pale as an ordinary epileptic; and on recovery, in about thirty minutes, was again violent and maniacal. After recovery, she told me that she remembered being on her bed, but did not remember how she came there. She remembered my being in the room, that I had pricked her with a pin, and that I had spoken of her fit as being cataleptic; but said that she had never been subject to either catalepsy or epilepsy. Similar attacks recurred three or four times, each becoming less marked in their physical manifestation, and at longer intervals. After each, however, her mind became increasingly obfuscated; and, although the fits have disappeared entirely since the 1st of June, she is more or less imbecile.

This almost perfect case furnishes us with additional evidence; and from the comparison of the facts we have adduced regarding catalepsy with those established regarding epilepsy, I think we may fairly draw the following conclusions.

1. Although we cannot positively assert what the proximate cause of either condition is, yet it is incontrovertible that anæmia of the cerebral lobes is the first attendant phenomenon of epilepsy; and all observation leads to the same opinion as regards catalepsy.

2. Loss of consciousness, the immediate result of cerebral anæmia, occurs equally in catalepsy as in epilepsy, though it may be as fleeting in the former as in some forms of the latter, as exemplified in *le petit mal*.

3. The mental disturbance in either epilepsy or catalepsy is identical, and results from the same cause—viz., the anæmia and consequent malnutrition of the cerebral lobes; while its termination—dementia—is likely to be the same in either case.

The evidences afforded are strong, and I think sufficiently so to warrant the opinion that catalepsy, instead of being a special and distinct form of nervous disorder, is to be considered as a specific form of epi-