HISTORY

OF

A CASE

OF

CÆSAREAN OPERATION.

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PRACTITIONERS in midwifery are occasionally placed in the painful and unfortunate predicament of being obliged to have recourse to the cæsarean section, an operation, which, in this kingdom, has hitherto proved invariably fatal. The state of practice which regards this operation, is so unsettled, that the faithful detail of fatal cases, provided the necessity of the measure be established, will not only stand as precedents, and as grounds of justification to future operators; but will, sooner or later, form a body of materials, from whence we may reason, and which, by elucidating the causes of the fatality, may ultimately contribute to more

successful events. On these accounts I have taken the liberty of laying the following case before the Society.

On Friday the 19th of August 1814, a man came in haste to my house, to desire that I would go down and see the wife of James Tinker, of White-gate-end, in Moston, about three miles distant. He desired me to take instruments down, as she had been in labour some time. I arrived at ten o'clock in the forenoon, and found a medical man from the neighbourhood of Newton Heath, who had been in attendance from Thursday morning early. I learnt that he had not been able by a common examination to ascertain the state of the presentation, or even of the os uteri, these lying completely above the superior aperture, which he discovered to be excessively distorted. As the pains continued, the membranes pushed into the superior aperture, in a conical form, and the liquor amnii came away at seven in the morning of the 18th. The pains had been very strong at times, and as no part of the child had descended into the superior aperture, the hand had been very frequently passed through the os externum, with the view of ascertaining the progress of the labour. The urine had been voided freely during the 18th, but scantily since the evening of that day. The bowels were costive.

I found the patient lying upon her back in bed,

unable to turn herself, and scarcely able to move, from previous malacosteon and soreness, the consequence of her situation. She had borne five living children; was 34 years of age; a weaver; and this was her sixth labour. In the last two months of her third pregnancy she was very lame. She laboured under phlegmatia dolens after her fifth labour, and walked lame ever since, projecting the right side more particularly in her gait. She had been in the Manchester Infirmary ten weeks previous to her last pregnancy, without receiving any relief; and for the last five months had kept her bed. The pulse at this time was frequent and weak; the tongue moist and soft, having a clay-coloured deposit upon it; there was no headache. but occasionally a long continued cold fit, with shivering succeeded by heat. She spoke cheerfully.

Upon making a common examination, I could touch no part of the child or os uteri; there was an unpleasant cadaverous smell, arising from the state of the soft parts which were much enlarged, hard, and livid, particularly the right pudendum, extending along the perineum to the anus. Necessity alone could induce me to further examination in such a state of the external organs; and the patient being gently placed upon her left side, after oiling the hand and arm, I proceeded as easily as possible to pass the hand. The commencement of that dilatation of the os externum which was neces-

sary, although much more easy than I had ever noticed before, owing to the hand having been passed so repeatedly before my arrival, produced a convulsive action of the stomach, which lifted its contents into the mouth. At this time there were no labour pains. The approximation of the rami and bodies of the ischia made it necessary to pass the hand far backwards, in order to introduce the arm freely, which was unavoidable in order to examine the superior aperture carefully; but this diminution of the inferior aperture would not have been any objection to the use of the crotchet. It was at the superior aperture the great mischief was discovered; for here, the diminution was so great, as to render it impossible to pass more than one finger above the aperture. The greatest space, or that part where the greatest circle might be described, was from the projecting bodies of the lowest lumbar vertebræ, and base of the sacrum to the pelvis. This part was very much straightened by the bodies of the pubes turning outwards suddenly to meet at the symphysis, and thus projecting towards the sacrum two angular protuberances. Into this space, three fingers crowded upon each other, had their points received, but became immediately wedged fast, one finger alone could be passed through, so as to gain some information respecting the presentation, and state of the os uteri. From the projection of the body of the last lumbar vertebra and sacrum, to the symphysis pubis, was the longest an-

tero-postero diameter, which I thought an inch and a half; but a considerable portion of this space was rendered useless with respect to delivery, from its being bounded on each side by the bodies of the pubes, as they turned outwards before uniting at the symphysis. What may be termed the real and available aperture, was that part where the greatest circle could be described as stated above, and the diameter of this circle was, as near as I could judge, about one inch. This opinion I drew from its only being capable of receiving the points of the three fingers crowded close, which being soft, yielding, and irregular in shape, must necessarily in part lie within the approximating bodies of the pubes. Upon examining to the left of this aperture, I found the body of the pubis approaching so close to the projecting sacrum and vertebra, that it was not possible to pass the ring-finger edgewise, betwixt the approximating bones. Upon trial, I find I can pass the same finger edgewise through a space three-eighths of an inch wide, and very readily through a space half an inch; hence I concluded the space here to be less than three-eighths of an inch. Upon examining to the right of the greatest space, the fore-finger edgewise passed easily, but touching the approximating bones, so that I concluded the space here to be rather more than half an inch. It will be seen by this statement, that I was examining with the right hand, and with the back of it to the pubis, and the palm to the sacrum.

After withdrawing the right hand, I passed the left, in order to be more certain; and now by passing the fore finger as high as possible, I ascertained the foot to lie upon the superior aperture, but not within it. The os uteri I could never touch, from which I concluded the dilatation to be far advanced.

The opinions I had formed of the state of the pelvis, during this examination, induced me decidedly to decline any thoughts of using the crotchet, to which I was urged, and after explaining myself upon the practice I thought adviseable, and recommending an enema to be immediately injected, I rode home with the view of preparing for the cæsarean section.

Having called upon my friend Mr. Halkyard, and stated my views of the case, he was so kind as to accompany me to the patient. Mr. Halkyard made a very careful examination of the distortion, by passing both arms in succession, during which he touched a hand. This proved to me, that there was both an upper and lower extremity presenting, which is not an unusual preternatural case. Mr. Halkyard perfectly coincided with my opinion as to the absolute impossibility of delivering with the crotchet, and the necessity of resorting to the operation of hysterotomy.

The husband and friends being apprised of the

impossibility of delivery through the natural passages, willingly submitted to whatever was thought necessary, as did the patient, who was cheerful and resolute. At this time, a shivering came on, which continued half an hour; the pulse became frequent and weak, and the patient complained much of cold. A little warm wine was given, and, as the heat returned, the patient was gently placed upon her back, and the abdomen exposed. The part of the abdomen where the uterus and its contents were the most prominent was chosen, and it was proposed to tie the epigastric artery, if it should be cut.

An incision was made through the integuments, in a straight line, an inch to the right of the umbilicus, commencing three inches above, and terminating three inches below it, directly in the linea alba. As there was no fat in the adipose membrane, this incision exposed the peritoneum, with the tendinous fibres of the linea alba, scattered loose over it, rather than forming a compact tendinous expansion. An opening was carefully made with the knife, at the termination of the incision into the cavity of the abdomen, through which passing the finger, the incision was enlarged with a pair of curved scissors, at once, to the top. The uterus was now fairly in view, and no intestine protruding. The knife being now resumed, an incision was commenced into the substance of the uterus beginning at its fundus, and extending longitudi-

nally downwards, and corresponding in size and direction to the external opening. At the bottom of this incision, the cavity of the uterus was penetrated so as to receive the finger, upon which one blade of the curved scissors being introduced, the uterus was laid open from below upwards. At the fundus a small portion of the placenta was detached, as the scissors were insinuated betwixt it and the womb. I now passed the right hand into the groin of the child, and extracted it gently through the womb, whilst Mr. Halkyard supported the abdomen, by placing the extended hand upon each side of the incision. Unhappily the child, the object of my hopes, was dead.

I now cut the funis, and wrapping it around the fingers of the right hand, passed the left into the uterus, and detached and brought away the placenta, which was attached to its fundus. The moment the placenta was extracted, the uterus contracted powerfully, and hiding itself in the belly the wound was instantly filled with intestine and omentum. These were easily reduced and retained with the extended palm, whilst Mr. Halkyard passed six stitches through the integuments, and secured the wound with slips of adhesive plaster. Pledgets of the ung. ceræ were also applied, and the whole secured with a wide bandage, pinned easily round the belly. The quantity of blood lost did not exceed two ounces; no vessel spouting;

and the hæmorrhage, even after the detachment of the placenta, was unusually slight, owing to the rapid contraction of the womb.

The patient was placed in bed as comfortable as her situation would allow; she was thankful for her delivery, and spoke confidently of recovery. The hopes of any favorable termination, were however not to be entertained; and the loss of the child was peculiarly unhappy. The child was fresh, and it had not been dead long, as the mother felt its motions in the course of the night. The pulse was so low as to require a repetition of the cordial; but it rose in strength before I left the house. Previous to the operation the enema had procured a copious evacuation; the catheter was also introduced with great difficulty, but no urine found in the bladder.

The patient was much recruited at seven o'clock, five hours after the operation; but died at twelve o'clock at night, ten hours posterior to the delivery.

I went down to see her at five the morning after, and met a message coming to inform me of the result; I however rode forward with the view of inspecting the contents of the abdomen. Having cut away the stitches, and enlarged the incision, I found the uterus contracted to the ordinary size

after delivery; the opening into it measured only three inches. The edges of the wound looked like a fresh incision; its substance bore no marks of injury, either from the operation or the labour; the peritoneal coat was red and inflamed; the bladder was contracted, empty, and uninjured. The peritoneum was universally and uniformly red, and very much inflamed, more particularly the peritoneal coat of the intestines. A small quantity of bloody serum was effused within the cavity of the belly, and the external organs of generation were in a semigangrenous state. This inspection gave me an opportunity of confirming my opinions of the degree of distortion, by an examination of the pelvis from above, and satisfied me of the correctness of the opinion formed from the examination *per vaginam*. This inspection being made when I was unprepared for taking away the pelvis, and being in some measure clandestine, as I had only permission to examine the wound, I was necessarily confined to a view of the most prominent seat of disease and injury. I went down in the afternoon, with the view of procuring a more extensive examination, but the permission was declined.

The result of this inspection shewed, that the substance of the uterus had received little injury, and that the patient died of extensive inflammation of the peritoneum, the rapidity of which ter-

mination was undoubtedly hastened by the injury the external organs had received; and this in a debilitated system labouring under malacosteon.

In this case, the state of the external organs must undoubtedly be attributed to the frequent examinations made previous to my arrival: and these examinations, since they consisted in the introduction of the whole hand, so were they more injurious in their effects, than the simple examination made in an ordinary protracted labour. Whoever has been in the habit of examining a distorted superior aperture, will know, that this cannot be accurately done without an introduction of the whole hand: but the hand can never be frequently introduced into the vagina, without exciting great irritation and inflammation of the part, in which the whole pelvic organs become involved, and which is very easily extended to the abdominal viscera. As this operation ought to have its necessity ascertained, not by waiting till the fruitless efforts of the patient have produced exhaustion, but by a cool deliberation upon the degree of the distortion: so in cases of extreme deformity, there is not in fact any reason why a first examination, if made slowly and carefully, should not be sufficient to justify us in calling a consultation, and stating an opinion, rather than the repeating examinations which must necessarily induce a state of the parts incompatible with life.

It is necessary in this unhappy case, that the first examination should be made so carefully as to do away with repetitions as much as possible. By making this a general rule, we should in a great measure obviate the dangers of inflammation, as well as of too great a debility, which are the two sources of the fatality of the operation in this kingdom. We should thus come to an earlier operation, a circumstance upon which all our hopes of saving the mother must depend.

But it is not alone to the mother, that an early operation holds out its advantages, for labour is always dangerous to the child, if long protracted after the rupture of the membranes, even in a well formed pelvis; and in this case of an extreme distortion, the danger is much increased.

I would not here be understood to advocate a hasty or rash operation. It is to a decided and early conduct, founded upon a careful examination, that I would press. I have known a patient labouring under malacosteon, and absolutely confined to her bed, years previous to her pregnancy; and when labour came on, a gentleman of very large practice sat several days beside the bed without proposing any thing. As the strength of the patient began to fail, the head was opened with difficulty, but could not be brought down. When the patient was in a state of dissolution, a consultation was desired with a view to the operation of

hysterotomy; but the patient expired before other advice could arrive. In this case the distortion was so great, that the short ribs were received within the alæ or wings of the ossa innominata, and the head was so sunk and carried forwards, that the shoulders were nearly upon a line with the vertex. Such cases exhibit a culpable indecision, and shew that it is not the frequency of the examination, but the carefulness of it that entitles to confidence.

Before concluding these remarks, I should wish to allude to the advantages arising from the use of the curved scissors in this operation. After the common integuments have been divided, and an opening made at the bottom of the wound into the abdomen, the curved scissors will complete the exposure of the womb much quicker than the knife or the curved bistoury. The same may be said of completing the wound into the uterus; and so admirably calculated are they for this part of the operation, that it is surprising they should ever have been laid aside for the knife. In the exposure of such large cavities as those of the abdomen and uterus at the same time, it is of the greatest consequence that the incisions should be made as quickly as is consistent with safety.

There is also another observation I wish to make: when the abdomen was laid open, and the uterus exposed, the most prominent appearance was an incessant rolling of that organ, even during the in-

cision, which required the hand to be placed firmly upon it whilst the knife was carried from above downwards. This rolling of the womb I have not seen noticed in any accounts of other operations. There was nothing like a contraction of the womb nor labour pain during the operation, nor till the placenta was withdrawn. But then the womb contracted vigorously and instantaneously, burying itself amongst the intestines which rushed into the wound. This rolling of the womb seems to have been occasioned by feeble and irregular contractions of its muscular fibres, resulting from that state of atony or exhaustion in which there is not strength sufficient to produce a true labour pain. I have often noticed such a circumstance upon applying the hand to the abdomen of weakly women, after the expulsion of the child, and previous to the extraction of the placenta.