Successful case of cæsaream section: with remarks read at the anniversary meeting of the Provincial Medical & Surgical Association held at Worcester, August 1st, 1849 / by Thomas Radford.

#### **Contributors**

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SUCCESSFUL CASE

OF

## CÆSAREAN SECTION,

WITH REMARKS.

READ AT THE ANNIVERSARY MEETING

OF THE

Provincial Medical & Surgical Association,

HELD AT

WORCESTER, AUGUST 1st, 1849.

BY

THOMAS RADFORD, M.D., F.R.C.P., EDIN.,

CONSULTING PHYSICIAN TO THE MANCHESTER LYING-IN HOSPITAL, &c., &c.

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WORCESTER:

DEIGHTON AND CO., HIGH-STREET,

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# CAESAREAN SECTION

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### CÆSAREAN SECTION.

THE subject of this case-Mary, wife of William Haigh-resides at Flats Fold, a mile from Ashtonunder-Lyne, and about eight miles from Manchester. On my arrival, at half-past three o'clock p.m., I called upon Mr. Cluley, who accompanied me to the case, and with the greatest courtesy and candour, gave me as we passed along, the following particulars: -She had felt slight pains, according to the account of the friends, about a week, but Mr. Cluley thought that true parturient pains had only existed about three days, and which were so slight as not to require his interference. On this day, (Sunday, May 20th, 1849,) at nine o'clock, he was again called, and although the pains were still trifling, he made an examination per vaginam, but was unable to feel either the os uteri, or the presentation; he therefore had her taken out of bed and placed on the lap of a female friend, and again repeated his inquiry. The head of the infant was now felt, and the os uteri found dilated to the size of a half-crown piece. In this manœuvre he unintentionally ruptured the membranes. The pelvis, he mentioned, was considerably contracted. I found her lying on the right side. Pulse 120; tongue clean and moist; her countenance tranquil, but a little flushed. Her bowels had been freely and fully moved this morning; and she had also freely and duly urinated. She was helplessly fixed on her side, and when requested to turn, she remarked that

she suffered very great pain when she made an attempt to do so, or was by another person turned on the back. The pelvis was very considerably altered from its natural shape: its sides were flatter; and the posterior division of the ilia, especially on the left side, projected backwards; and the upper portion of the sacrum and the lower lumbar vertebræ, had sunk in an inward and downward direction, so that a great concavity was perceived here. The uterus inclined rather to the right side, and stood considerably more forward than usual, although it had not assumed the retort form to the same degree as I have witnessed in former cases; its tissue felt soft and compressible. The fundus or upper division of the organ was fluctuant, and rounder in shape than it generally is after the discharge of the liquor amnii, which led me to conclude that a great portion of this fluid still remained. This opinion was corroborated when I attempted to ascertain the position of the infant through the abdominal parietes, for at the lower or cervical portion of the uterus, from whence it was presumed the fluid had escaped, the projections of its body could only be felt.

By a vaginal examination I found the lower aperture of the pelvis very considerably diminished by the close approximation of the rami of the ischia and pubes, which nearly destroyed the arch, and by their jutting forward there remained only a narrow slit, which would not admit the point of the finger. In the transverse diameter, two fingers could only just be placed between the tubera ischii, the antero-posterior diameter was also much shortened by the coccyx and the lower part of the sacrum being considerably incurvated. This great diminution in the outlet rendered it difficult to measure the brim, so that it was necessary to carry

the hand very far backwards to accomplish it. Its figure was tripartite, or composed of three divisions. This alteration in the brim was occasioned by the falling downwards and forwards of the upper part of the sacrum, and the lower lumbar vertebræ which inclined a little more to the left side, and by the body of the ossa pubis and ischii being forced backwards and inwards, and by the jutting forwards of the symphysis and rami of the pubis. The measurement of the widest part of the conjugate diameter, in the two lateral divisions, did not exceed an inch and a half; I could only place two fingers, one lying a little over the other. The anterior division was not more than half an inch in its widest part, as it would scarcely admit one finger edgeways. The length of this narrow opening is not relatively available in practice. In the transverse diameter of the brim I could just place three fingers, parallel with each other. The external genitals were free from tumefaction, and the vaginal lining was moist, and of a natural temperature. Whilst lying on her side I was unable to feel either the os uteri or the presenting part of the infant, but on placing her on her back, (which occasioned her great pain,) the os was felt to be dilated to rather more than the size of a shilling. She had not felt the movement of the infant since the morning, but by the stethoscope I satisfactorily heard the pulsations of its heart, which fact Mr. Cluley afterwards corroborated.

With my opinion as to the position the Cæsarean section ought to take in obstetrics, I at once concluded that it was the only operation which was justifiable, and indeed capable of giving the best chance of life to both mother and infant. Mr. Cluley most cordially acquiesced in this opinion. We now informed her husband

of the nature of the case, and the means to be adopted. He answered, "if nothing else would save her;" he willingly submitted to any plan we considered right. When a similar communication was made to the poor woman, she received it with the greatest resignation; it was unaccompanied by either mental or physical disturbance. At Mr. Cluley's request, Dr. Lees, Messrs. Hunt, Gibbons, Galt, and Brewster, were present at the operation. Before the incision was made, I was anxious as far as possible to ascertain where the placenta was located, and I therefore placed my ear over the left division of the uterus. From the negative evidence, I concluded it was not fixed on this side of that organ. Mr. Cluley adopted the same plan, but thought he heard the placental "soufflet." I again applied my ear, and still heard nothing. Dr. Lees tried, and considered the sound to arise from the friction of the ear on an interposed piece of lint. Mr. Cluley after a second trial, agreed in my opinion. I therefore suggested the left side of the linea alba as the proper situation to make the incision. I now raised the fundus uteri, and Mr. Cluley divided the abdominal integuments on the left side of the umbilicus, to about six inches in extent, from which very little blood was lost. An opening was now made into the uterus by a scalpel, which was further extended upwards and downwards by the probe-pointed bistoury. At this stage some little bleeding took place from the divided sinuses; and there was also a considerable discharge of liquor amnii. I now, as quickly as possible, introduced one hand into the uterus, over the infant's hip, and fixed the fingers under the flexed thigh in the groin, and having placed the other hand on the opposite side of its breach, I extracted it vigorously alive. During

this manœuvre the uterus strongly and regularly contracted. The funis was now tied and divided by one of the gentlemen present. Afterwards I seized the funis with one hand, and with the other readily detached and brought away the placenta, which was fixed on the right latero-posterior surface of the uterus. There was some blood discharged, but not more than frequently happens after ordinary or natural labour. Several convolutions of intestines, with a portion of omentum, now protruded, which had up to this time been supported and effectually restrained under the abdominal parietes, but they were readily returned. I carried my finger round the wound to ascertain if any portion of these viscera had descended into the uterus. The integuments were brought into proximity, and held together for a short time by a hand placed on each side, and as there was no further discharge of blood, ligatures were inserted at an inch distance from each other. Mr. Cluley used a long needle, with a scalpellike handle, for this purpose, which admirably answered. It is much superior to those in ordinary use. Straps of adhesive plaster were laid across the wound, and on each side a compress of lint was placed, and over all a bandage, just tight enough to give a firm support.

During the whole time her mind was calm, she never even uttered a complaint. She remarked that her sufferings during the operation had been much less than what she had endured previous to it. Pulse from 80 to 90 in the minute. Tinct. Opii, dr. iss., administered.

Half-past seven.—Pulse 100 to 120; dosing; there was no hæmorrhage or vomiting; had taken some gruel. Ordered mucilaginous beverages and farinaceous diet. At a later hour the same evening Mr. Cluley saw her,

and found a little abdominal uneasiness. She had slept, and had a lochial discharge.

May 21st. Monday, half-past two P.M.—Pulse 130; tongue moist; face less flushed; abdomen tympanitic, and slightly painful; fresh and plentiful lochia; bowels not moved; five ounces of water drawn by catheter. Continue mucilaginous drinks, &c. An enema of warm water to be administered in the morning.

22nd. Tuesday, half-past nine A.M.—Mr. Cluley had ordered forty drops of Tinct. Opii to be taken at bedtime. She had several times vomited a dark coloured fluid during the night, and she still continues to do so; pulse 120; abdomen tympanitic, but not tender; tongue slightly furred; lochia natural; bowels still unmoved. After loosening the bandage, there was a discharge of sanious matter. Ordered an enema, with Ol. Ricini, oz. j.; Spt. Terebinth., oz. ij., &c. To take Ext. Col. Co., gr. x.; Hydr. Chlorid., gr. ij.

23rd. Wednesday, half-past nine A.M.—Hiccough has been troublesome; has bilious vomiting; tongue brownish; pulse 120; has a burning sensation in the throat, and the side of her mouth is excoriated; she says she tastes the turpentinue which was given in the enema; bowels not moved. Ordered Sodæ Sub. Borat, dr. ij., Aq. distillat., oz. iij.; Mist. Acaciæ, oz. iij.; Capt., oz. j.; tertiis horis. Gum-water to drink. To have an enema, with three ounces of oxgall and a pint of water.

24th. Thursday, half-past nine A.M.—Symptoms continue the same; but the tongue is slightly aphthous; two enemata were administered, which produced two small scybalous stools; wound much lessened in size, but its edges are flabby and have not united; ligatures still firm. To continue the same plan; to have the ox gall enema repeated.

25th. Friday, half-past nine.—All the symptoms better; has had free alvine evacuation. The integuments over the sacrum are inflamed and excoriated, and have a tendency to slough. To continue the same means; ordered warm water enema. The parts over the sacrum to be dressed with collodion; warm water to be injected per vaginam into the uterus.

26th. Saturday, half-past nine A.M.—Tongue red and clean; bowels twice freely opened; has vomited several times since yesterday; wound granulating and looking well. To continue the same plan.

27th. Sunday, nine A.M.—Had suffered from occasional deafness and tinnitus aurium yesterday. This morning she is not so well. Pulse 125 and tremulous; the tinnitus aurium and deafuess still continue; has numbness of one arm and leg; the bowels not moved. To take a little milk, to have a warm-water enema administered, and afterwards one of milk. To take Ammon. Sesqui Carb., if required.

28th. Monday, half-past nine.—Yesterday not so well; had delirious rambling. Pulse from 120 to 130; great restlessnes and tossing about; was low in spirits; seemed much weaker; the bowels were moved; has taken the ammonia. She is much better this morning and has had some sleep. The wound was patulous and from it a dark-coloured and fetid fluid escaped. To continue milk diet; warm water to be thrown per vaginam into the uterus.

29th. Tuesday, half-past nine A.M.—All the symptoms are better; the wound is filling up by granulation; one ligature came away. The bandage was wet from the water which had been injected per vaginam into the uterus escaping through the wound. Slough over the sacrum came away, and the sores are looking

well. Collodion to be again applied; to have a warmwater enema first, and afterwards one containing ox gall if required.

From the above date, up to June 7th, nothing occurred in the character of the symptoms to require particular comment. She continued progressively to improve. The wound gradually filled up by granulation, and it is at this time nearly healed. The fistulous opening, through which the water, which had been injected per vaginam into the uterus, had escaped, is now completely obliterated. The sores over the back part of the sacrum, and on the nates, are also quite well.

During this period the diet chiefly consisted of milk, but towards the end of it animal food was allowed once a day. The mucilaginous mixture, with Sodæ Sub Boras, was the only medicine which she took, except the gum-water. When the bowels required relief, an enema of warm water was first administered, and if necessary, this was followed by one containing ox gall. The collodion was continued as a dressing to the raw surfaces behind, until the latter part of the time, when pads of cotton, with a mild unguent, were substituted. During my absence from Manchester I received favourable reports of the patient from Mr. Gibbon, under whose professional care she was placed, in consequence of Mr. Cluley's severe illness. In his last letter, dated June 18th, he says :- "The wound is very healthy but not quite healed."

June 26th. Tuesday.—I visited her along with Mr. Cluley and found her down stairs and looking very well; she remarked she was in excellent health. On removing the dressings we found two or three spots of exuberant granulations, which only required the application of Argent. Nitras. and a little dry lint.

July 15th, Sunday.—I called on Mrs. Haigh. She was looking extremely well and in excellent spirits. She observed that she was better, and could walk with more ease to herself than she could have done for a long time before the operation; the wound was quite healed.

It was a great object with us, that the infant's life should be preserved, we therefore strenuously recommended a wet nurse, and if one could not be obtained, then, that it should be supplied with asses milk; but from unavoidable circumstances, neither were procured until its life was placed in great danger. All those mischiefs consequent upon dry nursing appeared; such as bowel affections, a threatening of marasmus, and convulsions. At length a nurse was obtained, after which the infant improved, and on this day is quite well.

Before I proceed further, I take this opportunity of mentioning, that the surgical part of the operation, was most skilfully and dexterously performed by Mr. Cluley; and his punctual, assiduous, and unremitting attention to the patient, are highly honourable to him. To him I am personally indebted, and return him my sincere thanks for his uniform great kindness and courtesy.

REMARKS.—Mary Haigh was occupied before her marriage as a domeatic servant, and was then strong and capable of undergoing great exertion. She is of a sanguineo-lymphatic temperament; her skin fair, with a red blush on the cheeks; her hair of an auburn or reddish brown colour; the tint of her eyes is rather peculiar, being of a brownish grey, and they have an animated expression. Her father is now living and

very healthy. Her mother has been dead many years, and most likely her death was occasioned by some chronic disease of the vertebræ, as I understood she was afflicted with abscess in the back.

Our patient is thirty-one years of age, and has been married nearly nine. During this period she has had five children. The labours of the first four were natural and quick; the last of this number happened three years ago, and was so rapid that the infant was born before the obstetrician arrived. After the birth of the second, she was rather more delicate and suffered a little from indigestion; and about five or six years since first complained of slight rheumatic pains about her hips. Two years since she was confined to bed for a short time, by pains about the pelvis; but she gradually recovered, and afterwards was able to walk about tolerably well. Her general health remained the same up to the period of her last pregnancy. She was now observed to limp a little when she walked, and to be less in height.

During her gestation her progression was more difficult, and her gait more waddling. She also complained more of pelvic pains; and the diminution in her stature now evidently increased. Mollities ossium, the disease under which she suffered, usually commences during pregnancy, and generally becomes suspended in the interval, returning in an aggravated form in each successive pregnancy, until its ravages have completely destroyed the form of the pelvis. In this case, however, it did not exactly pursue this course. There is no doubt there existed a strong predisposition to the disease—most likely hereditary; and probably the disease began at the latter part of the second pregnancy, but evidently no great, if any

mischief, was done to the pelvis at this time, or for a long time after this period, as the third and forth labours were so rapidly and easily terminated. The rapidity of its progress is remarkable; for there is little doubt that the great degree of distortion took place immediately before and during the last pregnancy. Sometimes in this disease, the bones are so soft that they yield, when the hand is introduced to make an examination. This happened here, as Mr. Cluley thought he felt a giving way of the bones when he examined the pelvis.

Sometimes the pelvic bones, when affected with this disease, yield during labour, when the infant is drawn through. Three cases of this kind have occurred to my knowledge, one of which is detailed in the *Provincial Medical and Surgical Journal*, 1847, p. 706.

Opium is usually given after great operations to lessen the shock on the nervous system, but in the present instance we had no evidence that such an effect existed, and therefore on this account the drug might have been omitted. A second dose was administered by Mr. Cluley, to which he attributed the vomiting which afterwards occurred. He considered that it had produced an effect similar to that which follows a debauch. It most likely constipated the bowels, but there is no doubt that this was chiefly caused by the bowel being compressed between the bulky uterus and the projection of the lower lumbar vertebræ and promontory of the sacrum. The garrulous delirium, the convulsive twitchings, and tinnitus aurium, &c., were considered by Mr. Cluley to depend on a state requiring more support, we therefore agreed to give a milk diet, and as its effects were so satisfactory, it was continued to the end.

The negative system of treatment here pursued considerably contributed to the well-doing, both of this case and also of the one in which I was concerned along with Mr. Goodman. I have also observed the same plan, most beneficially carried out, in the after-treatment of abdominal sections for the extirpation of large ovarian tumours. There are great objections to the use of purgatives after these great operations, as the mucous membrane of the bowels is so readily disturbed, we therefore only ordered two doses of pills, and trusted chiefly to the use of enemata. The ox-gall enema was decidedly beneficial.

Before the incision was commenced a question was put to me by one of the gentlemen present, whether it was considered necessary to administer chloroform? I answered in the negative. I objected to its use on two grounds,—1st, because it was unnecessary, she possessed in such a high degree tranquility, calmness, and resignation of mind. Moral courage is superior to anæsthesia. 2nd, our experience of it in this operation is limited, there being at that time only one case published, in which this plan had been adopted, and that an unsuccessful one.—Vide Lancet, Vol. i., p. 139, Feb., 1847.\*

Since then another fatal case of Cæsarean operation,

<sup>\*</sup> In addition to the above objections to the use of chloroform in cases of Cæsarean section, I quote one of the conclusions drawn by Dr. Denham, which I have met with since
my paper was read before the members of the Provincial
Medical and Surgical Association, in his "Report upon the
Use of Chloroform in Fifty-six Cases of Labour." He
says,—"If given in large quantities, or if persevered in too
long, it puts a stop to all muscular action. This is contrary to the opinion of Dubois, who states that it never

in which chloroform was used, has been detailed by Mr. John Campbell.—Vide London Medical Gazette, Vol. xliii., p. 1105, June 22nd, 1849.

Rupture of the membranes, and evacuation of the liquor amnii, a long time before the operation, is always to be deplored; but although this accident had happened here, yet the great bulk of this fluid was still retained in the middle and upper portion of the uterus, which felt fluctuant and round in shape, and which admirably prevented the contraction of this organ, and so thereby lessened the chance of mischievous pressure on the maternal structures, and also contributed to the safety of the infant, and rendered its extraction more easy. The length of the uterine wound was also thereby diminished, in a degree proportional to the difference in the measurement of the uterine tissue, when distended by the contained fluid, and after its evacuation, when shortened by contraction.

The dangerous results of protracted labour are to be found in all the published cases of this operation, which have had a fatal termination, and which ought never to be allowed to occur in any cases of labour in which such a degree of deformity exists as to require its performance. In the present case, happily, the water was not evacuated until a short time before the

destroys the uterine contractions, or those of the abdominal muscles."—Vide Dublin Journal of Medical Science, No. xv., p. 107. August. 1849. Notwithstanding the high authority of Dubois on this subject, Dr. Denham's numerous facts are sufficient to induce us to believe in his opinion, and if it be the case that chloroform does interfere with regular uterine contraction, we ought not to have recourse to it or any other means which act in this manner, in cases of Cæsarean section.

operation, and then only very partially; the pains were also fortunately so slight, that no injurious pressure was made.

Fæcal accumulation generally takes place during ordinary pregnancy if great attention be not paid to prevent it; but in cases of distortion of the pelvis, this is much more likely to happen, from the mechanical impediment offered by the unnatural projection of the promontory of the sacrum, and lower lumbar vertebræ, and also from the anterior, oblique, and flexed position of the body and fundus uteri, which throws the cervical and oral portions of this organ backwards. The interposed rectum is thereby compressed, and the passage of the fæces interrupted.

The evils of a neglected state of the bowels are not felt so much during pregnancy as they are afterwards, in the puerperal state, and which in some cases lead to a fatal result. It must be quite obvious then, when we contemplate an operation, such as the Cæsarean section, that the bowels should be first unloaded; and if this has not been fully and naturally accomplished, an enema, consisting of a large bulk of warm water, should be administered. In the present case the free evacuation by stool contributed to her safety.

The aid derived from auscultation, to detect whether the child be living or dead, is most valuable, but not more so than the evidence it furnishes us as to the location of the placenta. It is of the utmost importance to avoid, if possible, cutting into this organ, for if it should happen that it is fixed on the portion of the uterus incised, there is some risk of hæmorrhage, and it may lead to irregular contraction of the uterus, and so become an obstacle to the speedy and safe extraction of the infant.—Vide case by Dr. Henderson,

Edinburgh Medical and Surgical Journal, Vol. 17; also case by me ibid. Vol. 55, p. 67, case 2nd.

The same accident happened again in my unpublished case. Happily in the present case we determined on the site for the incision, which was free from placental attachment; and it is remarkable how regularly the uterus contracted The analytical tables of all the Cæsarean operations performed in Great Britain and Ireland, which were laid before the profession in 1843, with those added which have since occurred, furnish important data on several practical points; they would, however, occupy too much space to introduce here. One inference to be drawn from them shall be mentioned. It is the black account, or the great maternal mortality shewn to arise from this operation. Out of fifty women operated upon, five only have been saved. At the present time it is not my intention to inquire into the validity of these five cases. The statistics of the results of this operation thus appear very unfavourable, and if abstractedly considered, are quite enough to deter us from its performance. But before we condemn this expedient, we ought carefully to analyze each case; to ascertain what proportion of the fatal issue is really attributable to it; what part is assignable to the constitutional or local state of the patient; what is due to the length or the influence of the labour itself, or its management; and at what period, and how, it was performed. All these subjects have received my serious attention, and, as far as possible, each individual point has been faithfully recorded by me, and the deductions truthfully stated to the profession. I will now place before you the result of five cases which have occurred to me:-

Of the five women operated upon	Saved.			Lost.
		2		3
Of the five infants extracted		2		3

One of the women who died had been in labour thirtyfour hours; the membranes were ruptured two hours afterwards; pulse 150 in the minute, and feeble; repeated vomiting; had great tenderness in the belly, which was considerably increased by pressure; great thirst; tongue furred and dry; great anguish expressed in countenance; external genitals much swelled; vagina hot, dry, and rough. On withdrawing the hand an odour was perceived from it similar to that which takes place from partially decomposed animal matter. The movement of the infant had not been felt for some time, and its heart could not be heard by the aid of the stethoscope. When extracted it was dead. In another of the cases which occurred, the woman had been in labour and the membranes had been ruptured twenty-two hours; pulse 130; skin hot; tongue furred; thirsty; pains very frequent; had great tenderness in the belly, which was considerably increased by pressure. The infant was alive, but was destroyed by being spasmodically seized around the neck by the uterus.- Vide Edinburgh Medical and Surgical Journal, Vol. lv., p. 67.

In the third case the duration of labour was fifty-three hours, and the membranes had been ruptured fifty hours; abdomen excessively tender; fetid discharge from vagina; pulse 130, irritable and weak; bowels had not been moved for several days; frequent vomiting; skin hot; great thirst. The incision being made, the intestines were exposed and much inflamed; there was some serous effusion of a red colour in the belly; peritoneal coat of the uterus injected. The infant had not been felt by the woman to move, nor could the

pulsation of the heart be perceived by the stethoscope. When drawn out it was putrid.

From the above statement of the condition before the operation, of the three women who died, we are warranted to conclude that their deaths were not attributable to the operation. We have in all of them indisputable evidence that the mischief was occasioned by protracting it, more especially in the two lastmentioned cases.

Of the three infants extracted dead,—in that of the first case we have every reason to believe it was so before the operation, as it was not felt by the mother, nor could we hear the pulsations of its heart. In that of the second case, it was alive, and its death is no doubt chargeable to the operation, but it was produced by a cause which I think may in general be avoided, or at least guarded against. The third to be accounted for was already dead and putrid.

Notwithstanding the unfavourable aggregate results of the Cæsarean section in Great Britain and Ireland, I think, from my own experience, shewn in the above statements, I am justified in advocating it as an operation of election, not merely having recourse to it as one of necessity, according to our present obstetric rule, when no other means can suffice, but to give it a preference over the use of the crotchet, in cases when neither premature labour, the long forceps, these two operations combined, or turning, will meet the exigencies of the case. I am a warm, and I hope a sincere, advocate for its adoption, and doubt not but if it is early and properly performed, and if the after treatment is judicious, it will be even more successful than it has been in my hands.

The maternal mortality will thus be considerably

reduced, and will bear a comparison with that of other capital operations, provided a just calculation be made of all contingent and relative circumstances existing in each case. The number of deaths will no doubt then fall considerably under those occasioned by the use of the perforator and crotchet, although it is now stated to be the reverse, but the truth of which statement I have great reason to doubt. The results to the mother, in all cases of the Cæsarean section, are known; but those after the use of the crotchet are buried in oblivion, the grave telling no tales. The child's rights are maintained by the former, for if living, it may be extracted alive, but by the latter it is necessarily destroyed.

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