A CLINICAL DISCUSSION

ON

THE CÆSAREAN SECTION: AND ITS CLAIMS AS AN OPERATION OF SELECTION.*

By ROBERT GREENHALGH, M.D.,

Physician-Accoucheur and Lecturer on Diseases of Women and Children at St. Bartholomew's Hospital; Consulting-Physician to the City of London Lying-in and Samaritan Hospitals; etc.

It is not my intention, in the present communication, to enter into any inquiry as to the antiquity of this important operation; nor do I feel that any arguments on my part are necessary to convince you as to its justifiableness—nay, expediency—in certain cases. Like most great operations, it has had its staunch advocates and stout opponents; and, notwithstanding the indiscreet laudation of the one, and the irrational opposition of the other, it has stood its ground, and now receives a place and practical consideration in every complete systematic treatise on midwifery. My object is to place before you as briefly as possible a record of ten cases of Cæsarean Section, with results, which have occurred in my own practice; and to endeavour to point out and determine the class of cases to which this operation is especially applicable; further, to offer some suggestions by which certain evils may be anticipated and avoided, and a greater success than has hitherto attended it may be secured. I was induced to select this important subject for consideration, partly because I have had painful experience of the fatal effects of craniotomy, in certain cases of extreme distortion of, and disease within, the pelvis; and partly because I am aware of many cases in which this operation—usually so easy where the disproportion is not great, so difficult and hazardous when extreme—has been performed with a reckless indifference, alike destructive to life, and subversive of obstetric morality. It struck me that no more fitting occasion, or suitable arena than in this great city, where the obstetric art has been so largely and successfully cultivated, and where its professors are so justly celebrated, could be selected for the consideration of so momentous a subject.

While fully subscribing to that old established axiom of British midwifery, that under no circumstances should the life of the mother be jeopardised for that of the child, still I shall endeavour to show that there are cases in which the pelvis is so much distorted, and craniotomy and extraction attended with such difficulties and hazards to the mother, that one is certainly bound to consider the child, and give it a reasonable chance of life by performing the Cæsarean operation. To quote the words of Dr. Murphy:—"I hold this principle, that no practitioner is justified in taking away human life, even from an unborn child, unless he is nearly certain that it will be the means of saving the parent; and in cases where the mortality from craniotomy is as great as the Cæsarean Section, he is bound to adopt the operation that will save the child." (Murphy *On the Cæsarean Section*, p. 15.)

Cases of Cæsarean Section.

CASE I.—Mary Ann J., aged 32, had been married thirteen years, and eight times pregnant. She had had three labours at the full period, normal, with good recoveries. Shortly after her last labour, three years ago, she began to suffer from pains in and about her hips and loins, great debility, and subsequently difficulty in walking; which symptoms she attributed to repeated losses of blood in miscarriages, and to privation and anxiety. About August, 1853, she was treated at one of the metropolitan hospitals for rheumatism; but, deriving no benefit, and her inability to walk increasing, she sought my advice on the 20th of February, 1854. She stated that the symptoms had greatly increased of late; and particularly drew my attention to the fact that, whereas she was formerly 5 feet 2 inches in height, she was now reduced to 4 feet 2½ inches. On examination, the long bones and upper parts of the spinal column were found perfectly straight; the lumbar spine and upper part of the sacrum being much curved forward, the lower ribs resting upon the ilia, which were much flattened laterally, the pubes projecting forwards. The abdomen was remarkably prominent; the pelvis was much distorted in all its diameters, the promontory of the sacrum ap-

proximating so closely to the pubes, as not to admit the index finger between them. The neck of the uterus could not be reached. As she had not menstruated since September 16th, and believed herself pregnant, the abdomen was carefully examined, when foetal movements were detected, and the foetal heart, with a distinct bruit, could be heard. On February 28th she was seen by Dr. Rigby and Mr. Taylor, who confirmed my diagnosis, both as regarded the question of pregnancy and the amount of distortion; and they both concurred with me as to the advisability of performing the Cæsarean section when labour set in. From this time up to the full period of pregnancy, every endeavour was made to improve her general health, but in vain. Within two months she lost 1½ inch in height, and became so decrepid that she could not cross her room without the assistance of two persons. For the last fortnight she lay almost constantly on one of Hooper's water beds. It is worthy of remark that her urine was loaded with neutral triple phosphates.

At noon, on June 5th, labour-pains set in, which gradually increased in frequency and severity up to eleven o'clock at night, when she was again seen by Dr. Rigby, who carefully examined her *per vaginam*, but could detect no part of the uterus or presenting part; the foetal heart was distinctly heard. At two o'clock on the morning of the 6th I performed the Cæsarean Section in the usual manner, in the presence of Drs. Rigby, Ramsbotham, Waller, and Druitt, and Messrs. Taylor, Walton, Nelson, Probert, and others. At the time of the operation, the uterus was contracting well, and the membranes were unruptured. The child, a female, in the first position, was extracted alive and vigorous. Owing to the placenta being immediately beneath the incision in the uterus, a considerable loss of blood occurred in cutting into its cavity. For some hours after the operation she suffered from sickness, which was checked by ice and opium; otherwise she was doing satisfactorily.

From the date of the 6th to the 16th of June, she progressed fairly well; had a good appetite, and partook of port wine, brandy, meat, etc. She slept well with opium, and had little pain. The skin was cool and moist. She passed urine freely, and the bowels were relieved naturally on the 12th. All the wound had healed, with the exception of the lower inch, through which a portion of sloughing omentum protruded. On the following two days, she suffered some abdominal pain, and became more restless and feverish, which she attributed to the bowels not having been relieved since the 12th. On the 19th, the intestine ruptured, and a considerable amount of fecal matter escaped through the lower part of the abdominal wound and into the cavity of the peritoneum. The rupture was followed by alarming prostration, from which she rallied for two days, when she began again to lose strength rapidly, and expired on June 24th, eighteen days after the operation.

The *post mortem* examination, which was made in the presence of Drs. Jenner and Sieveking, and Messrs. Paget, Taylor, Walton, and others, revealed a far advanced stage of mollities ossium; the flat bones throughout the body being crumpled up, and the walls of the long bones thinned, the medullary canals thereby being enlarged. The neck of the right thigh-bone and both sides of the os pubis were fractured. The muscles and other tissues had undergone extensive fatty degeneration. The size and dimensions of the pelvis were as follows.

Brim: Conjugate diameter, ¾ths of an inch.

From sacro-iliac synchondrosis to back of acetabulum, right and left sides, ¾ inch.

Transverse diameter, utmost available, 2½ inches.

Outlet: From tuber ischii to tuber ischii, 3 inches.

From base of sacrum to apex of coccyx, 1½ inch.

The arch of the pubes was totally destroyed.

CASE II.—Lydia L., aged 27, four feet in height, and very rickety, had been married four years. I first saw her on February 9th, 1852, when she had been in labour with her first child seventy-two hours, owing to great distortion of the pelvis. It was terminated by craniotomy. The extraction, which was extremely difficult, occupying seven hours, was followed by an alarming attack of peritonitis. She became pregnant a second time in July 1853, and progressed to the seventh month, when labour came on spontaneously; it lasted forty-two hours, and was again terminated by craniotomy, the extraction occupying between three and four hours. A smart attack of peritonitis followed, from which she eventually recovered. After this confinement, she was strongly urged to separate from her husband. She, however, declined, stating that, should she again become pregnant, she should feel it her duty to submit to the Cæsarean operation, in order to save her child. For the third time she became pregnant, and reached the full period on August 28th, 1854, when she was seized with pains. After labour had lasted twelve hours, the os uteri being partially dilated, and the membranes unruptured, the Cæsarean section was performed in the presence of Drs. Rigby, Waller, and Peregrine, and Messrs. Walton, Taylor,

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and others, when a vigorous female child was extracted. There was nothing in the operation needing comment. For six hours she progressed satisfactorily, when she began to vomit large undigested masses of pork-chop, heavy cook-shop pudding, potatoes, cheese, and beer, of which she had partaken freely, without my knowledge, four hours before the operation. Notwithstanding every endeavour to check the sickness, it persisted up to the fourth day, when she died of exhaustion.

On examination after death, the abdominal wound was nearly healed. The incision in the uterus, which was about six inches long, was reduced to 3½ inches, and was gaping. The intestines in proximity to the wound were slightly stained with blood, and vascular; but there was no trace of lymph, serum, or other inflammatory deposit. The other viscera were healthy. The admeasurements of the pelvis were as follows.

Between the anterior superior spinous processes of the ilia, 11 inches.

Brim: Conjugate diameter (true), 2½ inches.

Transverse diameter (available), 2½ inches.

From sacro-iliac synchondrosis to back of acetabulum, right side, 2½ inches; left side, 2½ inches.

Outlet: Transverse diameter, 3½ inches.

Antero-posterior diameter, 2½ to 1½ inches.

From base of sacrum to tip of coccyx, 3½ inches.

CASE III.—I was hurriedly sent for on September 13th, 1854, to Mary S., aged 36, married between four and five years. She had been three times pregnant, and had miscarried on each occasion about the sixth month. She had died suddenly, from disease of the heart. On my arrival, about thirty-five minutes after death, I extracted, by the Cæsarean section, a small male child, evidently between the sixth and seventh months of gestation, which made several feeble attempts to respire.

On examination, one large and several smaller fibrous tumours were found embedded in the walls of the uterus. All the other viscera were healthy, excepting the heart, which was diseased.

CASE IV.—E. H., aged 39, had been married twelve years, and had had eight labours at the full period; they had been natural, excepting the last, which came on spontaneously at the eighth month, and was extremely tedious, and finally terminated with great difficulty by the forceps, owing, she said, to a "tumour in the hips". She was admitted into St. Bartholomew's Hospital under my care during the summer of 1863, when she was six months advanced in her ninth pregnancy. At that time, the left side of the abdomen, as high as the umbilicus, was occupied by a round, firm, tender, and immovable swelling; the enlarged uterus being driven over to the right side. Nearly the whole of the pelvis was filled up by the growth; the neck of the uterus could not be felt.

Labour spontaneously set in at the seventh month; and, after eleven hours, the membranes gave way, when I was sent for. Several attempts were made to raise the tumour, but in vain. Subsequently, with the assistance of Dr. Barnes, the child was turned by external abdominal manipulation; but so limited was the space that the extraction by the feet could not be effected. At this stage of the case, the opinion of Dr. Arthur Farre was sought, who strongly advised the Cæsarean section. In twenty hours from the commencement of labour, the operation was performed by Mr. Skey, under chloroform, when a feeble male child was extracted, and died almost immediately. There was considerable hæmorrhage from the incision in the neck of the uterus, which was, however, eventually controlled. The patient never rallied, and expired eighteen hours after the operation.

POST MORTEM EXAMINATION.—The abdominal and uterine wounds were ununited. Some fluid blood, with coagula, were found in the peritoneal cavity. Nearly the whole of the pelvis and left side of the abdomen were occupied by a medullary tumour of the ovary, which was firmly attached in every direction to the surrounding parts.

CASE V.—Mary S., aged 26, five feet in height and rickety, married a year, was taken in labour at the full period on September 8th, 1864. The membranes ruptured about twenty-four hours after the commencement of labour. At the time of my visit, she had been suffering from severe and frequent pains for forty-six hours. Her skin was hot, pulse rapid, tongue dry and furred, belly tender, and she complained of great thirst. The soft parts were hot, tender, and much swollen. The head was above the brim, which was believed to be greatly distorted; the child was alive. After an anxious consultation with her medical attendants, who sought my advice, it was agreed that it was a fit and proper case for the Cæsarean section. Accordingly she was removed to the City of London Lying-in Hospital, where it was shortly performed by me, in the presence of Drs. Eastlake and Musgrave, and Messrs. Savory, Callender, T. Smith, and Times. A living female child was extracted. The only point worthy of consideration is, that the placenta was immediately beneath the incision in the uterus, from which a sudden and copious hæmorrhage took place. Six hours after the operation,

which was performed under chloroform, she began to vomit, which continued, in spite of every endeavour to check it, for nearly forty-eight hours, when she died from exhaustion.

POST MORTEM EXAMINATION.—The abdominal wound was partially united. The uterus was much contracted. There was a small amount (about two ounces) of blood effused into the peritoneal cavity. No inflammatory or other adventitious deposit was present. The viscera were healthy.

CASE VI.—Mrs. L., aged 28, with limbs and pelvis much distorted by rickets, married, had been once pregnant; she went to the full period. The labour lasted fifty-four hours, and was terminated by craniotomy. Since that time, she had suffered from a large vesico-vaginal fistula. At the end of the eighth month of her second pregnancy, pains came on; and, after a moderate labour of twenty-four hours, the membranes ruptured, when the left foot of the child was found presenting. Every endeavour was made to deliver her *per vias naturales*, by craniotomy and the use of Sir James Simpson's cephalotribe, during which the body separated from the head. The Cæsarean section was subsequently performed, under chloroform, with the assistance of Dr. Balls and Mr. Dewsnap. On opening the abdomen, a considerable amount of blood was found effused into the peritoneal cavity from a rent in the uterus, through which the child's head had escaped. There was some difficulty in removing the placenta. For twenty-four hours after the operation, the patient was doing well, with the exception of sickness. At the end of thirty hours, symptoms of prostration came on; and she quietly sank in an hour afterwards.

Post mortem examination, in the presence of Messrs. Dewsnap, Hemborough, and Brown. The abdominal wound was ununited. There was a small amount of bloody serum in the peritoneal cavity. The uterus was contracted and empty. The wound in it was gaping, reduced to two inches and three-quarters. There was a jagged rent running upwards and backwards in an oblique direction, commencing at the vesico-vaginal fistula on the left side, and passing through the vagina and neck of the uterus.

The dimensions of the pelvis were the following.

Between the anterior superior spinous processes of the ilia, 10 inches.

Brim: Conjugate diameter, 1½ inch.

From sacro-iliac synchondriasis to back of acetabulum, right side, 1½ inch; left side, 1½ inch.

Transverse diameter, 5 inches.

Outlet: Conjugate, from 3 to 3½ inches.

Transverse diameter, 3½ inches.

From base of sacrum to apex of coccyx, 3½ inches.

For further particulars, illustrations and observations, see *Transactions of Obstetrical Society of London*, vol. vii, p. 220.

CASE VII.—Mrs. W., aged 32, stated that her first four pregnancies, labours, and recoveries, were normal; that, after her fifth pregnancy, she began to suffer from pains in and about her pelvis and general debility, which symptoms increased during the sixth pregnancy. She, however, went to the full period, and had a difficult and protracted labour of thirty-six hours, the child being still-born. Again, for the seventh time, she became pregnant, when her symptoms became so aggravated as almost to incapacitate her. Notwithstanding she reached the end of the ninth month, and was taken in labour on Nov. 6th, 1865. The pains continuing with more or less severity, and no advance being made, the gentlemen in attendance sent for Dr. Arthur Farre on the evening of the 10th, who diagnosed uterine distortion of the pelvis with breech-presentation. Subsequently she was seen by Drs. Eastlake, Meadows, and myself, who came to the conclusion that there was little more than two inches available space in the conjugate diameter of the brim, the pelvis being otherwise much distorted. Her condition was most deplorable. I at once performed the Cæsarean section in the usual manner. Owing to the long and complete escape of the liquor amnii, there was some difficulty in removing the child, which was dead and firmly grasped by the uterus. There was some bleeding from the interior of the uterus, which was speedily arrested by the application of cold. For the first forty-one hours she progressed most satisfactorily, when severe vomiting came on, followed by exhaustion, from which she sank eighty hours after the operation.

Post mortem examination by Mr. Hemborough. The wound in the abdominal parietes was nearly healed. There was no blood, serum, or lymph, in the peritoneal cavity. The uterus was contracted. The wound in the uterus was reduced to four inches, gaping in the centre.

The dimensions of the pelvis were as follows:

Brim: Conjugate diameter (true), 2½ inches.

Transverse diameter, 4½ inches.

Oblique diameter, 4 inches.

Outlet: Conjugate diameter, 2 inches.

Transverse diameter, 2½ inches.

For further particulars, illustrations, and observations, see *Transactions of Obstetrical Society of London*, vol. vii, p. 275.

CASE VIII.—Mary G., aged 30, married, was admitted into St. Bartholomew's Hospital under my care on December 30th, 1865, on account of severe uterine hæmorrhage. She had had four children at the full period; good labours and recoveries. The last confinement took place two years and four months ago. She had always enjoyed good health up to the last eight months, when she became subject to a constant pale red, brown, and offensive discharge. About this time, she thought, she became pregnant. Four months ago, she began to suffer pain in the "womb and passage", which greatly debilitated her. On admission, she was found to have a large epitheliomatous growth of the cervix uteri which nearly filled up the vagina, and from which she was losing blood so freely as to necessitate the use of the perchloride of iron and cotton-wool plug. From this date to the end of January, she suffered several severe losses of blood and much pain, which still further reduced her powers. Labour-pains commenced on the morning of Feb. 3rd, 1866, accompanied with severe hæmorrhage, which continued for five hours without producing any effect upon the os uteri; the child being alive and the membranes unbroken. It was now deemed expedient to have recourse to the Cæsarean section; which was performed in the presence of Drs. Arthur Farre, J. Hall Davis, B. Hicks, Eastlake, Palfrey, Playfair, and Priestley, and Messrs. Paget, Savory, Calender, Spencer Wells, and others. Although the placenta was immediately beneath the incision, little blood was lost, and no difficulty was experienced in the extraction of a living child, which presented in the first position. The uterine wound was closed by an uninterrupted silk suture. She progressed very satisfactorily for twenty-six hours, when a profuse and a very offensive bloody discharge escaped from the vagina, followed by faintness, which passed off after the free administration of stimuli. For the next twelve hours she improved considerably, when sickness came on; the pulse became very quick and feeble, attended with cold clammy sweats and great restlessness. From this time, she became more and more prostrate, and eventually sank sixty-nine hours after the operation.

Post mortem examination by Mr. Hemborough. There was fair union throughout the abdominal wound. The peritoneum was vascular; there was no inflammatory deposit. Some bloody serum was effused into the cavity of the abdomen. The uterus was firmly contracted; the edges of the incision were gaping and everted, the silk having cut its way out entirely on the left side, not at all on the right. The whole of the neck and lower part of the body of the uterus were involved in epithelial cancer. The other viscera were healthy. There were no secondary cancerous deposits.

CASE IX.—Sarah W., aged 27, was admitted into St. Bartholomew's Hospital on January 10th, 1866, on account of epithelioma of the cervix uteri. She had been married eight years, and had had three children, the last two and a quarter years previously. She had had easy labours and good recoveries. She was perfectly well until last February, when she took cold at a menstrual period, which put off the next recurrence for six weeks. This period was followed during the succeeding month by repeated losses of blood. Since this date, she had had a constant offensive brown and sanious discharge, with repeated attacks of flooding, preceded by pain. In the hypogastrium was a soft and somewhat elastic swelling, the enlarged uterus, extending to within an inch and a half of the umbilicus, dull on percussion. The vagina was short and capacious, its roof and cavity being almost entirely occupied by the enlarged cervix, which was spongy and fissured, and bled freely on the slightest touch. The anterior lip was somewhat everted. The os uteri was very patulous, of crescentic shape, with its concavity forwards; the margin was very lobulated. Her last normal menstrual period, she thought, was about the 20th of last July. A *bruit*, and subsequently the foetal heart, could be distinctly heard to the left of the hypogastrium. From this period the disease made rapid progress, and she sustained repeated and severe losses of blood. Latterly, the foetal movements and heart-sounds had become more and more feeble; I therefore determined at once to effect delivery by the Cæsarean section. On the morning of March 29th, at the completion of the ninth month, and before the accession of labour and rupture of the membranes, I performed the operation, in the presence of Drs. Hugenberger and Lazarevitch of Russia, Martin of Berlin, Beatty and McClintock of Dublin, Wilson of Glasgow, Lockwood of New York, Sköldberg of Stockholm, B. Hicks, P. Smith, Eastlake, and many others. Dr. B. W. Richardson, with the assistance of Dr. Sedgwick, having rendered the parts about to be incised insensible by the ether-spray, the operation was performed in the usual way; a small and very feeble female child being removed alive, which survived about an hour. It is worthy of remark that, under the influence of the ether-spray, the uterus contracted so firmly as for a short time to impede the introduction of the hand into its cavity. Although

the placenta was beneath the incision, scarcely three ounces of blood were lost. Under the influence of good diet, stimuli, and an occasional opiate, the patient progressed, with slight interruptions, most satisfactorily up to the twentieth day, when she was churched, and left town the following day for the country. The wound healed by the first intention. For ten months after the operation, her local affection and general health continued to improve; but, since that period, the local disease has steadily advanced, and she is now (Aug. 1st, 1867) greatly reduced by severe and repeated losses of blood, offensive brown watery discharge, and constant acute and gnawing pains in and about the uterus and vagina.

For further details about the effects of the ether-spray in this case, see *Medical Times and Gazette*, April 6th, 1866, p. 362.

CASE X.—On August 19th, 1866, I was requested by Dr. Hall of Brighton, to visit Mrs. W. of Shoreham, aged 29, who had been suffering upwards of three years from a cancerous tumour of the rectum, which had reached such a size that in no part of the pelvis could more than the index-finger be passed. The cervix and os uteri could not be reached. She had been married two years, and was eight months and a week advanced in her first pregnancy. After a consultation with Drs. Hall, Meadows, Fuller, and Murray, it was deemed expedient to have recourse to the Cæsarean Section, which was performed in the presence of Drs. Sieveking, Richardson, and Dawson, and Messrs. Jardine, Murray, Arnold, Philpot, and the above-named gentlemen. Dr. Richardson having applied the ether-spray to the abdominal parietes, the operation was performed in the usual manner; and, before the accession of labour and rupture of the membranes, a living female child was extracted. Notwithstanding the placenta was beneath the incision, less than six ounces of blood were lost. On her removal to bed, the pulse and general aspect of the patient were scarcely affected. She complained of slight smarting, and expressed herself as most grateful. Fifty hours after the operation she was doing very well, and Dr. Hall repeated: "I think there is every prospect of the patient's recovery from the operation." She continued to do well until the fifth day, when the sutures and strapping were removed by Drs. Hall and Fuller. The pulse now became very rapid; the abdomen tympanitic; and obstinate vomiting set in, followed by exhaustion and death on the sixth day after the operation.

Post mortem examination in the presence of Drs. Hall, Fuller, Dawson, Murray, and Greenhalgh, and Messrs. Jardine Murray, and Philpots. On removing the strapping, the abdominal wound was opened widely. The uterus was contracted, but the incision was gaping and flaccid. There were no traces of inflammatory action. The tumour, about the size of two adult fists, sprang from the lower portion of the sacral hollow, completely surrounding the rectum, and blocking up the pelvic outlet, its anterior surface being within half-an-inch of the symphysis pubis. There were evidences of other visceral disease. For further particulars see *Lancet* August 25th, and Sept. 1st, 1866.

(To be concluded.)

AN ENORMOUS MEAL.—An inquest was held in the Marylebone Road, on James Lee, 33 years of age, who fell down and died in the street, after an enormous meal. Mr. W. Cathrow deposed to making the *post mortem* examination, and said that the stomach contained 1 lb. 8½ oz. of solids, each piece of beef or mutton weighing half an ounce. The intestines were full of undigested food. The cause of death was spasm of the heart and over-distended stomach. Verdict to that effect.

THE LONDON STUDENTS.—An interesting and well-attended meeting of the students of the various colleges of arts and medical schools of London was held on Wednesday evening, at the Rainbow, in Fleet Street, to consider the desirability of starting a new magazine to represent the students of London, to treat of educational affairs in a manner likely to interest the students, and to disseminate information relating to their pursuits. The proceedings, says the *Standard*, were thoroughly business-like, and a very high tone was manifested by the various speakers. The chair was taken by Mr. Byrne, barrister-at-law; and representatives of a considerable number of colleges and schools were present. Letters sympathising with the object of the meeting, and apologising for non-attendance, were read from the Hon. G. Denman, M.P., Q.C., Professors Huxley, F.R.S., Seeley, Morley, Brewer, Odling, M.D., Masson, and Foster; Dr. Buchanan, Dr. Headland, Rev. F. W. Farrar, Mr. J. W. Hale, Mr. R. B. Litchfield, and several other gentlemen of influence. Ultimately a committee was appointed, consisting of several of the above gentlemen, and including Mr. Spiers, President of the Architectural Association, Dr. Tilbury Fox, and Messrs. Allchin, Beal, and J. F. Boyes, to consider the best means of carrying out the objects of the meeting. We understand the new magazine is intended to be published as early as possible in the new year, and to be called *The Student*.