A CASE
OF
SUDDEN ILLNESS IN ADVANCED PREGNANCY
TERMINATING IN
THE DELIVERY OF TWINS AND DEATH;
WITH AN ACCOUNT OF
A SINGULAR LACERATION
OF THE
PERITONEAL COAT OF THE UTERUS,
AS DETECTED ON THE POST MORTEM EXAMINATION.
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READ MAY 13TH, 1834.

MRS. BARR, the mother of six children, was seized about eleven A.M. on Sunday, the 25th of August, (being then in the beginning of the eighth month of utero-gestation,) with abdominal pain, and vomiting of bilious matter. After the lapse of two hours, a watery discharge, mingled with coagulated blood, took place from the vagina. I saw her at three P.M., when she appeared pale, faint, and sunk in countenance, like a person suffering from extreme hemorrhage, though the quantity of blood she had then lost was inconsiderable. As I was apprehensive labour would be the consequence of such continued vomiting, I gave her a dose of opium and enjoined her

strictly to keep the recumbent posture. The sickness continuing, about five o'clock one of her attendants gave her some brandy, which allayed it, but shortly after, labour pains commenced, and about seven I was sent for in haste, and on my arrival, found the patient just delivered of twins; each child enveloped in its proper membranes, with the placenta attached.

The contents of the uterus were expelled by a single violent contraction, which left her much exhausted; and during the application of the bandage the abdomen heaved violently, the impulse forcing the epigastric region remarkably forwards. The pain continued very severe, and I gave her another dose of opium, but without any alleviation of the pain, which increased in intensity till she expired, at a quarter before nine. Rather more discharge than usual had followed the delivery, though less than many women lose with impunity.

On the following day I examined the body, with the assistance of my friend Mr. Ingleby, lecturer on midwifery at the School of Medicine in this town, to whom I am indebted for many of the following remarks.

On opening the abdomen, a quantity of thin dark-coloured blood was found, which amounted to about forty ounces. There were no coagula. The uterus was well contracted, and on its anterior part quite natural, excepting an ecchymosed appearance of the

cellular texture around the tubes and ovaries ; but on the posterior surface a considerable number of transverse lacerations were discovered, all more or less curved in form, with the convex part towards the fundus, averaging from half an inch to two inches in length, and varying in depth ; some were mere fissures, as though made by a penknife. One was particularly large, measuring three inches in length, and nearly two in breadth in its centre. A flap of detached peritoneum had fallen down, and the raw and fibrous structure from which it had been torn, was exposed as completely as it could have been done by the most careful dissection. The immediate cause of death was probably exhaustion from internal hemorrhage and intense pain.

With respect to the delivery, two explanations are suggested. First, that the violent vomiting may have detached the placenta, and occasioned the discharge of blood which was noticed at the end of the second hour, and that thus, as frequently happens, the uterus may have been stimulated to action ; for so long as its fibres are not deprived of their power, any effusion of blood, whether it escapes per vaginam or is contained within the uterus, tends to produce uterine contraction. Secondly, that the direct exposure of the uterine fibres by the detachment of the peritoneum may have excited the parturient action ; a supposition not improbable, and in support of which it may be recollected that the pain continued severely until shortly before dissolution. Rupture of

the uterus, the most fatal of all injuries incidental to parturition, generally includes the whole of its textures; occasionally, though but rarely, the fibrous coat alone gives way, and the peritoneum remains entire; and still more rarely, (at least as far as examination has at present shewn,) the peritoneum is lacerated, leaving the other structures but little injured.

Upon what does this peculiar laceration depend? Upon mere distension, with or without the application of force? Upon disease of its texture?—or upon some unnatural arrangement of the fibrous structure of the uterus? In the present instance, I should rather suspect the first mentioned cause; partly on account of the peritoneum appearing healthy, but principally from the uterus containing twins, and the circumstance of no sensible contraction having preceded the mischief. From the suddenness of the seizure, it might be supposed that the peritoneum gave way spontaneously, producing the pain, the internal effusion, and subsequently the vomiting and syncope; but it is difficult to comprehend how so extensive a detachment of peritoneum as was observed in the principal laceration could be occasioned independently of a force suddenly exerted. If we consider the attack to have been bilious colic, a complaint which was prevalent at the time, may we not reasonably suppose that the sudden and forcible pressure of the abdominal muscles upon the anterior surface and fundus of the uterus, during the act of vomiting, would occasion a propulsion of its contents to-

wards its posterior part, and produce an extraordinary degree of tension in the peritoneal covering of that portion, bound down as it is to the sacrum by the broad posterior ligaments. The numerous cracks or fissures occurring in a transverse direction, shew that a great distension had taken place previous to the occurrence of the larger rent, and if we call to mind the situation of the uterus in an advanced stage of pregnancy, (the fundus being then the most projecting part, and the posterior surface being comparatively but little supported during the act of vomiting,) we have some explanation of the cause of the laceration occurring on the posterior surface. Still I am aware this view is not quite satisfactory; for in a case of rupture of the uterine peritoneum, related by Mr. (now Sir) Charles Mansfield Clarke, in the third volume of the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge*, and in another, mentioned by Dr. John Ramsbotham, in his "Practical Observations in Midwifery," Part I. p. 409, (the only two cases of this accident on record †,) very similar fissures and lacerations occurred, where no vomiting is reported to have taken place.

Sir C. M. Clarke's case differs from this in several points. In the former, the symptoms did not arise till two hours after labour had commenced, and some dilatation of the os internum had taken place. The principal laceration was less extensive, the effusion

* A Plate accompanies the Case

† See postscript at the end of this paper.

did not exceed an ounce or two, and death took place before delivery, and after a much shorter period of suffering. Sir C. M. Clarke does not attribute the lacerations to distension, from the fact of the uterus never being full at any period of pregnancy; but may not the peritoneum be greatly distended, whilst the uterine textures remain comparatively soft and yielding? With the increasing size of the uterine vessels, the tissue in which they ramify becomes progressively softer, until the fibres begin to shorten; but no such provision is made for the peritoneal investment, and since it possesses but little elasticity, it is a reasonable inference, that a material extension of this membrane may produce a breach of continuity.

Interesting as these cases are, they possess but little value in a practical point of view. An injury of this nature can only be suspected before death, and even if it could be certainly known, it must be irremediable. They however strongly prove the importance of making post mortem examinations in all cases of sudden death connected with parturition; for not only may the public ignorantly censure the medical attendant, but if an investigation be withheld, he may actually reproach himself, for the fatal termination of a case which is altogether beyond the reach of human foresight or human skill.

POSTSCRIPT.

Since writing the above, I have met with accounts of two other cases of rupture of the peritoneal coat

of the uterus, which were followed by death. In both, however, some part of the fibrous structure of the uterus was lacerated. The first case is related by Mr. Chatto, in the London Medical Gazette for 1832, p. 630. The woman was twenty-eight years of age, and in labour with her sixth child. The pains were very irregular; sometimes moderate and at others vehement, and occasionally ceasing altogether. The patient became restless, pale, the pulse very languid, and there occurred some flooding. At length the os uteri becoming dilated, the membranes being tense, the presentation natural, and the pains continuing irregular, Mr. Chatto ruptured the membranes; and then a few pains slowly following each other, fully dilated the parts, and brought the child's head into the pelvis. The pains after this again becoming slight and intermittent, a scruple of the *secale cornutum* was administered, which produced uterine action until the child's head was born; the pains then ceased for fifteen minutes, when they again returned, and the child, together with the placenta, were expelled, the pains continuing for some time after. The uterus contracted completely, and the bleeding did not recur. Shortly after delivery the woman became pale, depressed, almost pulseless, and was subject to frequent and severe jactitation. Six hours after delivery she died. Upon examining her body on the following day, a large quantity of blood was found effused into the cavity of the abdomen. The uterus was firmly contracted, and posteriorly, near its fundus, was found ruptured to a

considerable extent. The surface of the rent was covered with portions of coagulum : it occupied a space perhaps as large as a crown-piece, but of irregular margins, and surrounded by a reddish stain, giving it, at first view, the appearance of having resulted from ulceration. Near this breach were three or four smaller cracks in its substance. Upon cutting into the cavity of the uterus, it was found that the rupture had not extended into it ; the lining membrane being entire throughout ; and indeed a considerable portion of the muscular substance intervened between it and the external rent, which perhaps had not penetrated more than two-thirds through it. The uterus seemed sound in all other parts of its structure. The surface, whence the placenta had been detached, looked as usual, and was some slight distance removed from the situation of the rupture.

The next case is related by Mr. White, in the *Dublin Journal of Medical and Chemical Science*, for July, 1834, p. 325. The patient was thirty-two years of age, and the mother of eight living children. When nearly at the full period of utero-gestation of her ninth child, being frightened, she turned quickly round, and was immediately seized with pain in the lower part of the back and abdomen, attended with faintness and palpitation of the heart. From these symptoms she recovered, seeming only more pale and languid than usual. Eight days afterwards she was attacked with darting pains in the lower part of the abdomen, she became agitated, pale, and ghastly, had

difficult breathing, pain about the heart, and a quick and fluttering pulse. Some hours afterwards labour came on, and after a few feeble uterine pains the patient was delivered of a full-grown, still-born male child ; but in less than three-quarters of an hour she gradually sunk and expired. When the body was examined, "considerable serous effusion was found in the right side of the chest ; on the left there were adhesions of the pleuræ and some effusion : the structure of the lungs healthy, the heart empty, its walls flaccid, and valves of the arteries natural." "On opening the abdomen, a large quantity of fluid blood was found in the vicinity of the uterus, the broad ligaments of which were injected with blood ; the uterus had not contracted, the right ovarium was much enlarged, and contained two hydatids of considerable size ; on the anterior surface of the uterus were *two long lacerations*, and *one of smaller size through the peritoneal coat*, and also through a few superficial fibres of the uterus, from which the blood had issued. All the other parts, both of the pelvis and abdominal cavity, were perfectly sound ; and on opening the vagina and uterus, nothing was observed except what is usual after parturition."

I have added the two preceding abstracts, that the reader may compare them with what I have myself related, and thereby be enabled to form a more correct opinion respecting the symptoms and nature of these important cases.