

618.3

OBSERVATIONS

ON AN

EXTRAORDINARY CASE

OF

RUPTURED UTERUS.

By ANDREW DOUGLAS, M.D.

MEMBER OF THE COLLEGE OF PHYSICIANS, LONDON;
PHYSICIAN AND MAN-MIDWIFE TO THE LYING-IN
CHARITY, INSTITUTED 1757; AND ONE OF
THE PHYSICIANS TO THE ASYLUM.



L O N D O N:

PRINTED FOR J. JOHNSON, N^o 72, ST. PAUL'S
CHURCH-YARD.

MDCCLXXXV.

[Price One Shilling and Six-pence.]

OBSERVATIONS

ON AN

EXTRAORDINARY CASE

OF

RUPTURED UTERUS,

A RUPTURE of the gravid Uterus is mentioned by writers, as an accident threatening the most imminent danger to the patient ; but though dangerous, not necessarily fatal. It has probably been the cause of death, both before and soon after delivery, more frequently than has been known ; as the prejudice which prevails against the opening dead bodies, often prevents any particular investigation of the cause of these sudden and melancholy events.

A 2

It



It is somewhat remarkable, that the writers on midwifery, of an early, and of a later date, should agree to admit a principle, to which their practice is in direct opposition. They grant that wounds of the uterus are not certainly mortal ; yet when a foetus has wholly escaped into the cavity of the abdomen through a rupture, they, almost with one consent, abandon the patient to her fate. If indeed the greatest part of the child remains *in utero*, they coldly recommend its extraction by instruments, or by turning ; but offer no expedient to relieve in the first case, excepting what is as barbarous and as hopeless, as leaving the woman to perish undelivered. The Caesarian section is proposed as the only method which affords a probability of saving either the mother or child ; and has been principally recommended by foreign surgeons, who seem fond of the parade of an operation.

The practice of midwifery about forty years ago, was become much too artificial. Though in this country we have not been

so ready in having recourse to the knife, as the accoucheurs of a neighbouring nation; yet there prevailed among us at that time, a rage for the invention and improvement of instruments to facilitate delivery. The powers of the constitution were often thought to want assistance and correction; and artificial means were ever at hand to remedy these supposed defects. It is not to be doubted, but much mischief was done by adopting this mistaken system; and the sex are highly indebted to the late Dr. Hunter, who stood forth their powerful champion. He, by his skill, experience and character, contributed greatly to restore the art to its genuine simplicity, and taught his pupils to depend with more confidence, on the action of the natural powers. But even this confidence, well-founded as it in general appears to be, is liable to be carried to a faulty extreme; and the possibility of doing too much, acting on a disposition naturally cautious, often produces dangerous and fatal delays: For excessive caution frequently led him to discourage endeavours, which a less timid

conduct might sometimes have rendered successful. The case of a ruptured uterus was one of those, in which he seemed averse to attempt any thing; as if unwilling to give pain, where he despaired of being able to do good: and his great reputation gave particular influence to his opinion. Dr. Denman, with a frankness and candour which does him honour, has communicated to me a case (No. 15) expressive of his own opinion; and I may venture to say, was that which generally prevailed at the time. The recovery of Mrs. Manning gave rise to a new train of ideas on the subject, and induced me to enquire how far this general despondency was justifiable. Whatever may be the effect of this enquiry, I am much pleased to have it in my power to communicate the history of a case, in which there can be no doubt, either of the nature of the accident, or the recovery of the patient.

On

On September the 12th, 1784 about noon, I was desired by one of the midwives of the Lying-in-Charity, to visit Mrs. Manning of Denzil-street, Clare-Market. She had been seized the night before with slight labour-pains; the membranes had been ruptured eight hours; and the pains had continued regular from that time: yet, though the os tincæ was considerably dilated, the child did not advance. The woman was become extremely restless, complaining of excessive pain in the region of the pubis; her looks were wild, threatening convulsions; and the fears of both midwife and attendants were excited to such a degree by these appearances, as to induce them to beg my advice. The head of the child, though plainly to be felt, was not engaged within the brim of the pelvis. She seemed to suffer agony during the action of the pains; yet these did not force the child strongly against the os tincæ, which was soft and yielding. Each return of pain caused her to wreath

A 4

and

and twist, as if suffering from violent choleric, very unlike the urging throes of common labour: but her pulse was calm and regular; nor did she make any particular complaint, excepting of the pain in the region of the pubis. This being the state of the case, there seemed to be no reason to induce me to precipitate the delivery. I therefore directed the patient to be kept as cool as possible, the weather being extremely hot; ordered the midwife to watch the progress of the labour, without much touching; and to be guided by circumstances in sending for me.

This woman was in stature low; her limbs small, and her complexion pale and fallow: her constitution was naturally weak and delicate, but in general healthy: she was above thirty years of age, and this was her fourth pregnancy: two of her children were living, and her former labours had been very lingering.

About nine o'clock the same evening, the midwife informed me,—‘ That there
‘ had

' had been a discharge of blood from the
 ' vagina some time after I left her, which
 ' however did not continue; that the pains
 ' had been more severe for an hour or two,
 ' and apparently with some effect; but
 ' had ceased about half an hour after six
 ' o'clock. From that time there had been
 ' no return of labour pains; reaching,
 ' with an incessant craving for drink had
 ' come on; and the poor woman seemed
 ' at sometimes like one frantic, at others
 ' almost lifeless.'

I visited her immediately, and was truly
 alarmed by her appearance. Her counte-
 nance was pale and ghastly; her face was
 lengthened and bedewed with cold sweat;
 her pulse was scarcely to be felt; her breath-
 ing was short and quick, with great anxie-
 ty; but she complained of no particular
 pain, excepting in the region of the pubis.
 The nausea and thirst were continual, and
 the returns of reaching very frequent.

By examination in the common way, I
 could distinguish nothing, excepting a
 round

round moveable substance, which I supposed to be the head of the child ; but being only able to reach it with the points of my fingers, I could not determine with any certainty what it was. The woman appeared to be *in extremis* ; and my mind was so wholly occupied by her danger, as to preclude all reasoning with respect to the cause. Immediate delivery seemed to promise the only chance of relief, which though very slender, I resolved to afford her, by turning the child. There was no difficulty in passing my hand ; and the substance which I had supposed to be the child, fled before the tips of my fingers : by following it, I at last found my hand in a cavity, which in no sort resembled that of the uterus. I was then forcibly and painfully struck with the nature of the case ; and on examining all round, with caution and gentleness, I could with certainty determine that my hand was in the cavity of the abdomen : the child lying on the fore part ; on the back part, the contracted uterus like an oblong ball ; and the intestines hanging among my fingers.

gers. It is not easy to imagine how miserable I felt at this moment. No hope of doing good to the woman, from the usual event of such cases; no possibility of consulting with any of my brethren; and a necessity of determining instantly, how I was to proceed. I decided in favour of immediate delivery, as my hand was already in contact with the child; the feet easily to be found; and no possible advantage to be expected from delay: besides, that the death of the patient might reasonably be expected to happen; and I was well aware of the dreadful impression which the death of a woman undelivered, would make upon the minds of others. I met with no obstruction to the turning and extraction of the child, excepting in the passage of the head through the brim of the pelvis. While my hand was in search of the feet, I thought I could perceive that the placenta was likewise in the abdominal cavity; therefore expected it would be easily brought away: but in this I was mistaken; for it had so clung to the intestines, that I was again under the necessity of introducing my hand to detach

detach it. This was not difficult ; and gave me an opportunity of being still better instructed in the nature of the injury. The uterus seemed to have been ruptured transversely, on the lower and fore part, some distance above where the vagina is connected with it : and it was more contracted in its size, than I thought possible in the few hours which had elapsed since the accident. The hæmorrhage was not greater than is usual in a common labour : But the woman complained, that notwithstanding she was delivered, she still felt the same severe and unremitting pain, about the lower part of her belly. With an intention to alleviate this pain, I prescribed an opiate ; directing the room to be kept airy and cool, and her drink to be mint tea or gruel. I left her about eleven o'clock, with very little expectation of finding her alive in the morning ; signifying to her friends the great danger of her situation ; and enforcing the necessity of keeping her perfectly undisturbed and quiet.

Sept.

Sept. 13. — She was quite sensible, though she had been very restless through the night. The nausea and thirst had been very distressing to her during the first part of it ; but became more tolerable towards morning ; and the reaching after some hours, had neither been so violent or so frequent in its returns. Her complaint was no longer of her belly, but of her breast, pointing to the seat of the heart. The anxiety still affected her considerably ; she had frequent sighings, and her pulse was quick and small, but very regular. I directed the opiate to be given in a saline mixture, with a little cordial confection.

—— 14th. — Curiosity had procured her too many visitors the day before ; and her reaching had returned in the evening to a violent degree, with great heat and restlessness. Towards morning the febrile paroxysm terminating in a profuse sweat, the vomiting had ceased, and she had slept four hours. Her pulse, when I saw her, was calm and regular, the pain and anxiety much abated.

—— 15th.

———15th. Her night had been tolerably quiet: Her pulse made about 100 strokes in a minute, with a considerable degree of firmness; so that Dr. Osborn, who saw her this day, said, ‘She had ‘not a dying pulse.’ She had voided her urine freely and regularly from the day of her delivery; but having had no stool, I directed her to take a solution of the cathartic salts.

———16th.—She had two stools the preceding evening, before the salts could be given: She complained of griping; but in other respects was much the same.

———17th.—A diarrhoea had come on in the night, with great flatulency, and violent pain from the pit of the stomach, along the whole intestinal canal: She likewise complained of a pain and soreness extending across from ilium to ilium. The belly felt tumid, and rather hard; her pulse was quick (110) with a degree of fulness: She had some thirst, and a tendency to delirium.

lirium. I had her blooded to eight ounces; and directed she should, every two or three hours, take a solution of the cathartic salt in mint-water, with a few drops of laudanum.

———18th.—The delirium was gone off, and the abdominal pain had abated soon after the bleeding: The blood was not fizy. She had only one stool in the night: Yet her pulse was quicker (120) than it had ever been. Dr. Hunter, who was so kind as to accompany me occasionally in my visits, saw her this day: We thought it unnecessary to repeat the bleeding, but the use of the solution was continued.

———19th.—She had purged only twice in the last twenty-four hours; and did not complain of pain, excepting when she had an inclination to go to stool. She had slept some hours in the night; her tongue was moist, and her pulse 110, with a greater strength and firmness in the strokes than the day before.

———20th.

——— 20th.—Having had a return of the pain and purging in the night, an opiate glister was injected in the morning; after which she had no return of either. Her pulse was about 96.

——— 22nd.—Her nights had been quiet, and her belly natural.

——— 24th.—She continued much the same, but with a tendency to diarrhœa, which caused a considerable degree of pain at the time of each motion: Yet on the whole, she seemed to gain ground; her pulse being regular, firm, and making 90 strokes in a minute; and her tongue moist and clean, without thirst. She had been taken out of bed this day, with less inconvenience than could have been expected.

——— 26th.—She still continued to have slight returns of griping pain of the bowels; but without purging oftener than once in twenty four-hours.

She

She had had a regular and moderate lochial discharge from the beginning, which was now almost entirely gone: but what was very singular, there had never been the smallest appearance of a secretion of milk.—Dr. Garthshore, who had not been able to visit her before, saw her this day. On his pressing the abdomen externally, she complained of a little remaining foreness; but he could not perceive that there was any particular tumor or hardness.

—— 29th. — The pain and disorder of the bowels seemed now to have entirely left her. Her pulse was firm, regular, and at 72 strokes in a minute: her nights were easy and quiet, and her belly natural. Indeed she was, this day, so perfectly free from complaint, that I could no longer doubt of her recovery.

October 3d.—She was now able to get up every day; and only complained of general weakness, with a pain of the back

B

when

when sitting, and of an inability to stand upright.

—— 14th. She had gained considerably in strength, in the course of the last week; and no longer found any uneasiness in an erect posture.

—— 27th.—She walked from Clare-Market to my house in Bedford-street, Bedford-square; she had then nothing to complain of, excepting a palpitation of the heart, on any attempt to move quickly.

As some of my friends had been desirous of examining the state of the parts after a recovery so unexpected, I wished much to procure them the opportunity; but the shyness and delicacy of the woman defeated my intentions: and when she called on me to return thanks, it was with difficulty I could persuade her to permit my neighbour Dr. Osborn to examine *per vaginam*. He thought the os tincæ somewhat more open externally, than it usually

usually is ; I fancied I felt rather more fulness than is common about the *cervix uteri* : but we both agreed that there was nothing in the touch so different from what is observed in the natural state, as to have excited any idea of previous disease, had not we known the complaint with which she had been afflicted.

This patient took no other nourishment during the first week, than whey, milk, and plain gruel. In the next period of ten days, her diet was only mended by a raw egg beat up with water and a little sugar. In the third week she began to take broth and light pudding ; and afterwards came by degrees to a fuller diet.—She has continued well from that time to the present, January 10th, 1785 ; and about a week since, the menfes returned.

While my attention was engaged by this poor woman, who, every day she lived, became a more interesting object, my curiosity was particularly directed to collect

all the information possible, concerning ruptures of the uterus. In books I found instances sufficient to compose a very long list; but it was almost a list of deaths. In many the cause was unknown, while the patient lived; in others, if the nature of the case was suspected, yet the woman was either allowed to perish without assistance; or an incision through the integuments of the abdomen, was recommended for the extraction of the child. But an event so unusual as recovery, when the uterus had been ruptured, and when the foetus and secundines had been extracted through the rupture by the natural passage, led me to think it was equally criminal, either to give up such a case as hopeless, and do nothing; or to consign the patient to as certain death, by means of a cruel operation.

It is seldom allowable to draw practical inferences from a single instance: but when a disease very rarely occurs, it becomes necessary to lay particular stress on a case, which happens to be exactly in point. The history I have related is of this

this fort ; but that I may not neglect to strengthen my opinion by every collateral support I can procure, I shall make abstracts of such cases, from medical writers, or from the information of my friends, as I think will give additional weight to my conclusions ; numbering them, that they may be the more easily referred to.

N° I. A case mentioned by HEISTER as communicated to him by Rungius, a respectable Surgeon of Bremen. Without relating any previous circumstances, he says——‘ That after the extraction of the foetus, though the intestines were distinctly felt, through a rupture of the uterus, and kept up by the hand of the Surgeon (Rungius), till that was sufficiently contracted to prevent their falling into its cavity, yet the woman happily recovered.’

N° II. PEU, in his *Practique des Accouchemens*, page 341, relates the history of a case, ‘ In which the uterus had been torn and pierced in several places, by violent attempts to deliver ; yet the pa-

B 3

tient

tient was cured in six weeks.'—I insert this as an additional proof, that wounds of the uterus do not certainly kill : And I am well informed, that the late Dr. Hunter was consulted in a case exactly similar which had as favourable an event.

N° III. Dr. HAMILTON—*Outlines of Midwifery*, page 344, gives the following account in a note : ' That he was called to a patient who had been in labour from the morning to the afternoon, under the care of a midwife; the shoulder of the child presenting in an oblique direction at the brim of the pelvis. The patient's situation seemed to require her being immediately delivered; which he at first attempted by turning. In his trials for that purpose, he perceived the uterus to be ruptured, and that a shoulder of the child had protruded into the cavity of the abdomen: But having good reason to give up that mode of delivery, he performed it at last with the crotchet. The uterus was ruptured at the superior lateral part of the cervix, and the rent continued

continued downwards to the very edge of the os tinæ: He reduced some portion of the intestine, which had forced through the wound of the uterus, even into the vagina; and had an opportunity of examining how amazingly the rupture was diminished by the contraction of the uterus. There was a discharge of matter on the cloths from the fifth day, which gradually lessened; and her recovery was nearly as good as if no extraordinary accident had happened.'

N° IV. M. LA MOTTE, in *Observation* 312, says, ' That, in a case where the woman's pains had been violent, long, and frequent for eleven or twelve hours, they ceased entirely after a strong effort, six hours before he saw her; from which time she no more perceived any motion in the child. The head of the child was to be felt at the upper part of the vagina, but not at all engaged in the brim of the pelvis. Her belly was hard, stretched, and painful; her pulse very weak; and her stomach would retain nothing that

B 4

was

was given her. He turned and extracted the child by the feet; the placenta was much torn in the middle. She survived the delivering three days, during which time she vomited incessantly.—

M. La Motte is a sensible and judicious author, and relates his observations with a plainness and candour, which claims our most perfect confidence. He does not particularly mention a hæmorrhage; but, as he says, the placenta was much torn when the uterus gave way, it is probable this accident was attended with a considerable loss of blood. If it was allowable to suppose that inflammation could have taken place in the six hours, during which the child remained among the viscera, it would still more fully explain the hardness, tension, and soreness of the abdomen.—He does not say, that the body was opened after death.

N° V, LA MOTTE, *Observation* 313, was called to assist in a case where the hand, he says, presented; ‘The pains which were at first

first sharp and frequent, had abated gradually, and when he arrived were entirely gone. Introducing his hand to deliver by turning the child, it passed into the cavity of the abdomen, where he found the feet and part of the body, which had escaped through a rupture of the uterus. The placenta, in this patient's case, was likewise much torn, and she lived four days after delivery; on an inspection of the body after death, the uterus was found much contracted; so that the rupture, which had at first allowed the whole body of the child to pass into the abdomen of the mother, would not then admit more than the tip of the little finger.'—The delivery in this case, seems to have been performed sooner after the accident than in N° V. In the history, he says, there was no previous hæmorrhage: but in his reflections, he adds; 'That after having finished the delivery, he was not surprised at the weak state in which he found the woman; it being easily accounted for, from the laceration of the womb and placenta, *et la perte de sang qui en est inséparable.*'

Since

Since I have been engaged in arranging my observations, another case of ruptured uterus has occurred ; which though not favourable in the event, the gentleman who attended has, in the liberal spirit of philanthropy permitted me to publish ; being convinced, that improvement is alone to be expected from a comparison of various facts ; and that a successful case does not always afford the most useful lesson.

N^o VI. ‘ A young woman was taken in labour of her third child on the 11th of December 1784, and the pains having continued for twelve hours the membranes broke, the os tincae being thoroughly dilated. When the gentleman saw her three hours afterwards, the head was beginning to enter the pelvis, the pains being regular, frequent, and very strong. Her pelvis was narrow ; her former children had been dead born ; but as she had been delivered of one by the natural pains, he was induced to hope a like event. The pains increased in violence for six hours, when they suddenly abated in force, but continued

continued to recur frequently, though short and unavailing. It did not appear that she had made any particular complaint at the time the pains abated, excepting that her spirits flagged much. When he saw her on the 13th, at eleven o'clock in the forenoon, eight hours after the strong pains had left her; her pulse was calm and regular, the pains had ceased almost entirely; she was inclined to sleep, and made no complaint, excepting of a pain in her left side below the ribs. The head was very little lower, but part of the navel-string was within reach and without pulsation. He then determined to open the head of the child; but thought it prudent to encourage, for the present, the disposition to sleep. At eight in the evening, her pulse was so low he could not feel it; she was cold and pale; and the pain of which she complained, was now in her belly. In attempting to open the child's head, it suddenly gave way to the force applied. No part of the child was to be felt; and the woman complained of a sensation as if her life was going from her. He was then

then convinced the uterus was ruptured. He introduced his hand immediately, and found the whole child floating in the cavity of the abdomen. Finding the feet very readily, he delivered with the greatest ease, till the head came to the narrow part of the pelvis, when it resisted his utmost efforts. Knowing the child was dead, he perforated the cranium behind the ear, and extracted with the blunt hook. The placenta was in the cavity of the abdomen, wholly detached from the uterus. The woman was quite sensible; complained of great lowness, and pain in her belly; her pulse small and fluttering, and her breathing short; but she was not restless. The rupture appeared to be near the cervix. She slept a little during the night; but next day complained much of the pain in the belly, and excessive sinking within her. Her breathing became more and more difficult, her lips livid, her belly swelled; and seventeen hours after delivery, she expired. He was not permitted to inspect the body after death.

In

In this case, there is little doubt but the rupture of the uterus happened, when the force of the pains abated, and the woman's spirits flagged ; which was sixteen or seventeen hours before the child was extracted. The continuance of the pains, though they were short and ineffectual, and the retention of the head within the brim of the pelvis, were very likely to destroy all suspicion of the nature of the accident ; more especially as the patient had a calm regular pulse, and an inclination to sleep, without the usual concomitants of ruptured uterus. When we consider that great part of the body of the child must have been many hours among the viscera, it is not an improbable supposition, that the difficulty of breathing, the pain and swelling of the belly, and death at last, were the consequences of peritoneal inflammation,

N^o VII. Dr. Garthshore within these few years attended in a case, where he soon discovered that a rupture of the uterus had happened. In consequence of some peculiar symptoms, it was agreed in consultation

sultation with the late Dr. Hunter and others, that delivery should be delayed. On the third day, another gentleman was joined in consultation, who, from the circumstances, did not think the uterus was ruptured ; and the result was, to deliver by turning the child. This was performed by Dr. Garthshore, who extracted it from the cavity of the abdomen through the laceration by the natural passage, and the patient lived twenty-three days afterwards, with a variety of symptoms, sometimes alarming, at others encouraging. In the body, after death, firm adhesions were found to have taken place among the viscera ; and the strongest marks of general inflammation, were every where evident in the cavity of the abdomen, excepting that the uterus itself shewed no signs of disease ; the edges of the rupture appearing to have a disposition to heal without uniting.

I do not think myself at liberty to enter more particularly into the history of this case, as I have reason to believe, that Dr. Garthshore means to publish it at large,
when

when his leisure will permit, with others in which he has been concerned.

N° VIII. PÉU—Book I. chap. viii. page 79, has preserved the history of another case of ruptured uterus, in which the child had passed intirely into the abdominal cavity, excepting one foot, and the umbilical cord. ‘ With a view (he says) to save the child, for of the mother he had no hopes, he slipped the noose of a fillet over the foot, which he then pushed up through the rupture into the cavity of the abdomen; and finding the other foot, he grasped both, and delivered with great caution, to avoid doing farther injury to the uterus. This woman lived to the eighth day, six of which she was perfectly sensible. The hæmorrhage which followed the accident had been excessive.’

N° IX. M. STEIDELE, in his *Observations, De Rupto in Partu Doloribus Utero*, relates, ‘ That he was called to the assistance of a woman who had been ten or twelve hours in labour; and during the whole time had

6

complained

complained in a particular manner, of violent pain in the region of the os sacrum. The child, he was informed by persons attending, had presented favourably ; and that the head had even entered a considerable way within the brim of the pelvis. The pain in the region of the os sacrum had continued without intermission ; and the throes had been strong and regular, till after one uncommonly violent, a cracking noise had been heard even by the attendants : From that time the pains had ceased, and a considerable hæmorrhage had ensued. The distance of time between the cessation of the pains, and the attendance of M. Steidele is not mentioned, but the head of the child was then no longer to be felt ; and the woman was become extremely low, with a very feeble, quick, and intermitting pulse. She could not lie down without fear of suffocation ; and had so many other alarming symptoms, as induced M. Steidele to think immediate delivery to be absolutely necessary. He introduced his hand through the os uteri, without perceiving any parts of a child,

till

till it reached the fundus, when he could distinguish the feet and abdomen, but felt nothing of the head. He brought down the feet with ease, but found some difficulty in extracting the rest of the fœtus. The appearances of extreme weakness and danger, did not diminish in consequence of delivery; and the patient complained of a soreness of the right side of the belly, which was intolerably painful to the touch. The following day the hæmorrhage had abated; the pulse was become stronger; and the natural warmth returned; yet many threatening symptoms continued. The uterus was thought to be ruptured. During the days she lived after the extraction of the child, she was afflicted by a variety of most unfavourable symptoms; intense thirst, vomiting, great pain, tumour and tension of the belly, fœtid stools, laborious breathing, watchings, excessive weakness and delirium, with a pulse very feeble and rapid. The time this woman survived the delivery is not very accurately stated, but appears to have been about a week. When the abdomen

C

was

was opened, a great quantity of bloody water and foetid air was discharged. The omentum was thickened, the stomach swelled, and the intestines seemed greatly inflated with air, having their external surface tinged, with a yellow colour. An extensive rupture was discovered on the right side of the uterus; and its substance near the ruptured part was gangrenous, and thinner than usual.

The history of this case, as far as was immediately within M. *Steideler's* observation, seems faithfully related; and the symptoms after the abatement of the hæmorrhage, are almost all deducible from inflammation in the cavity of the abdomen.

The livid appearances often observed in the uterus after death, are not certain marks of gangrene having begun. In examining the bodies of women who have died soon after delivery, the cervix and os uteri have often a livid hue; probably in consequence of the pressure which these parts suffer from the child, during the action

tion of the pains. Therefore unless these discoloured parts are soft and spongy as well as black, they are not to be considered as gangrenous.

N^o X. Communicated by Dr. GARTHSHORE, contains an account of appearances observed on opening the body of a woman who had died undelivered, after having been two or three days in labour under the care of two midwives. From the previous symptoms, there was reason to suspect, that the uterus had been ruptured early in the labour, but these did not, at first, give any alarm. The body was examined in the presence of several medical gentlemen; and the first view after opening the abdomen, exhibited all the appearance of an extra-uterine conception. But on inspecting the uterus more closely, a rupture was discovered on its fore-part, through which the fœtus and secundines had passed into the abdominal cavity. The extent of the rupture was then so diminished by the contraction of the uterus, as to appear much too small for such a purpose. It

C 2

was

was remarkable, that wherever any part of the membranes or placenta had come in contact with the internal surface of the abdomen, they adhered with a considerable degree of firmness; and there were likewise signs of inflammation every where on the coats of the intestines.

N° XI. POUTEAU, page 487, relates, that a woman who had been a considerable time in labour, under the care of a midwife, was seized with a hæmorrhage; on which the child, which had before presented with the head, was no longer felt by the midwife. He was sent for the following day, when he found the woman in little pain, but suffering a degree of uneasiness not to be described, with great anxiety: Her pulse was small and frequent; her eyes sunk; her countenance ghastly, and breathing laborious; symptoms announcing her to be in the greatest danger. Nothing was to be learned by examination, his hand entering at once into a cavity which appeared large; and on the fore-part
he

he perceived a round substance of the size, but not the solidity of a child's head; yet there was not any thing to be felt, which could assure him of a child being there. He carried his examination no farther, and the woman died soon after. The body was opened, and the child and placenta found in the cavity of the abdomen, entirely out of the uterus; which was of the size of a child's head of five years old, of a lively red colour, resembling inflammation, and was the round body which had been felt per vaginam. The rupture was on the posterior and inferior part, and then about three or four inches long.

Pouteau attributes the death of the woman to the injury done to the womb; to the mischief which must have been occasioned by the presence of so considerable an extraneous body among the viscera, and to the hæmorrhage.

N° XII. SAVIARD—*Observation* xxv. p. 131, gives the case of a woman who had

C 3

been

been received into the Hotel Dieu in labour; the child presenting favourably, with every appearance that it would be soon finished: yet the pains continued two days without the child advancing, and ceased at once; the presenting parts receded, and only the placenta was to be felt. The woman died undelivered, after having been much examined, yet nothing attempted with a view to relieve her. When the body was opened, the child and secundines were in the abdomen among the viscera, the feet of the child touching the stomach of the mother. The intestines were all fretted, and the omentum rotten and stinking; but the uterus of the natural appearance.

N° XIII. *Journal de Medicine* for December 1780.—A woman, seven months with child, was in the beginning of January thrown down, and squeezed between a carriage and the wall. She instantly suffered the most dreadful pains in the abdomen; and a flooding came on which continued six weeks. After that ceased, she

she did not get better, but remained in a state of constant suffering; wasting and becoming weaker daily, though she was regular in her periods, reckoning from the cessation of the hæmorrhage. She was received into the Hotel Dieu the June following, having been seized some days before with a vomiting, which never abated while she lived. When the body was opened, a collection of foetid matter, of a brown colour, was found in the abdomen: the omentum was dissolved, and all the part contiguous to the liver, had undergone inflammation and suppuration, and had contracted adhesions with one another. The remains of a putrid child were found amidst these adhesions. The uterus, as to colour, size, and consistence, was in a natural state; but a rent was observed on its back part, which had never united,

N° XIV. *Journal de Médecine*, 1780.—
A woman, about four months with child, having suffered some great violence, an uterine hæmorrhage immediately followed. The flooding stopped, and the menses appeared

peared a month from that time; and this periodical discharge rendered it matter of doubt, whether she had been pregnant: but the tumor of the belly did not subside. She died five months afterwards; and on opening the body, a foetus was found in the cavity of the abdomen. A rupture was discernible in the uterus, through which it had escaped; which was closed and cicatrized on the internal surface of the womb, but still open on that towards the abdomen.

N^o XV. In June 1778, about six o'clock in the evening, I was desired to visit Mrs. Bagnall, in Titchfield-street, who had been long in labour, and was supposed to be in great danger. She was attended by the gentleman under whose care she had formerly been, and this was her fifth child. Her present labour commenced on the preceeding day, and had gone on regularly, though very slowly, to four o'clock in the morning, when she suddenly complained of a most excruciating pain in her bowels, and immediately vomited a large quantity of coffee-coloured fluid. From that moment

ment the pains of labour ceased, and there being no progress afterwards made, I was at length desired to see her. From the account which was given me before I went into the room where the patient lay, I expressed the strongest apprehension of an unfavourable event of this case, and really suspected the accident which had happened. I found her in a state of the utmost debility, with very much of that appearance observed in the last stage of putrid fevers; except that she was sensible, vehemently lamented her situation, and begged in the most passionate terms to be delivered. The head of the child presented, but was scarcely within reach of a common examination; it was said to have receded since the time when the pains left her. Through the integuments of the abdomen, I could also perceive so very distinctly the several limbs of the child, that I was convinced it had escaped into the cavity of the abdomen, through some ruptured part of the uterus. When I made a second representation to her friends, they were desirous of a consultation, and Dr. Savage was called

2 in.



in. From the history, and by examination, he was soon convinced of the nature of the case. I had no idea of any woman surviving a rupture of the uterus, under any circumstances; and therefore considered an attempt to extract the child not only as hopeless, but likely to answer no other end, than that of aggravating the sufferings of the patient. But the Doctor being resolute in his opinion, that we ought to attempt the delivery, I was easily convinced by the arguments of my very worthy and ingenious friend to accede to his proposal, and sat down for that purpose. In my endeavours to trace the body of the child, I soon came to the ruptured part, through which, in search of the feet, I passed my hand into the cavity of the abdomen. The sensation given by the touch of the naked viscera, was beyond expression dreadful; but I proceeded, and found no difficulty in the operation, till the body of the child was extracted; but the head sticking at the superior aperture of the pelvis, whilst we were striving to bring it away, the patient expired.

On

On the following day we were permitted to open the body. The abdomen was very much tumified, and inflated near the center, where it had a disposition to burst. On making an incision through the integuments, there was a strong gush of putrid air, and then was discovered a great quantity of bloody serum in the cavity of the abdomen; the contents of which, together with the peritonæum, had that appearance often seen in the highest degree of the puerperal fever. The fundus of the uterus was regularly contracted, and apparently healthy; but this being turned downwards, a large opening was perceived in that part of the cervix which joins the uterus, directly opposite to the projection of the sacrum. The part ruptured, together with the contiguous parts, both of the uterus and vagina, were of their usual degree of thickness, but in a state of gangrene.

Dec. 18, 1784.

THOMAS DENMAN.

IT

IT appears from a variety of instances, that a rupture may happen in any part of the uterus, and in every direction, but that its inferior portion is most liable to this accident : and that the parts which come most immediately in contact with the bones of the *pubis* and *sacrum*, are those which most frequently give way in the time of labour.

From an attentive consideration of the state of the uterus, with its contents, in the last months of pregnancy, it cannot be thought likely to suffer this injury, while the membranes remain unbroken ; unless in consequence of some great violence, capable of rupturing both *uterus* and membranes at the same instant. In the natural position of the *fœtus in utero*, the limbs are generally disposed in a manner as compact

pact as the figure of such parts will admit ;
 and while the *liquor amnii* is retained,
 every inequality is compleatly filled up.
 But as there are frequent deviations from
 this commodious disposition of parts, it
 may often happen that the knee, the elbow,
 the shoulder, or even the head, will be
 thrown so far out of the usual oval outline,
 as to become offensively prominent. If
 this inequality cannot be reduced into
 form, by the first efforts of the uterus af-
 ter the discharge of the *liquor amnii* ; if
 the efforts be violent and irregular ; the
 resistance to the descent of the child very
 great ; and the same portion of the uterus
 repeatedly and strongly forced against the
 projecting part, on the return of each
 pain ; it is easy to suppose, that its fibres
 may at last give way. Should the obsta-
 cle to the advancement of the child be at
 the brim of the pelvis, it will act more
 powerfully, by keeping the uterus from
 contracting in its length : and if the
 thickness of this organ can be diminished
 by stretching or rubbing, as is commonly
 believed ; or if the firmness of its texture
 should

should be weakened by inflammation, ulceration or gangrene, the patient will be rendered still more fatally liable to this accident. Though a narrowness of the pelvis by increasing the resistance to the action of the uterus, will render it more liable to be ruptured; yet such an accident has been known to happen in a pelvis not ill-formed, even when the head of the child had advanced so far as to protrude the peritonæum. Many writers have considered the foetus as the principal agent in producing a rupture of the uterus, but I believe it must be altogether passive. The weak action of its muscles cannot be able to produce such an effect, where they have so little room for exertion; and I have been informed, that a rupture of the uterus has happened after the child had been dead a considerable time; which was evident from the appearance of the cuticle. The uterus may likewise be torn by attempts to turn the child *in utero*; and by the unskilful use of instruments in cases of laborious parturition.

The

The signs enumerated by authors, as portending a rupture of the uterus, are too uncertain and equivocal to enable us to found on them any general rule of practice : Yet, I must, at the same time confess, that was another case to occur, resembling in most of its previous circumstances, that which I have just related, I should be tempted to turn the child and extract it by the feet. For I shall ever retain the most lively impression of the nature and appearance of the poor woman's throes ; of the agonizing sensations they seemed to excite in her ; and the little effect they had in propelling the child : These, with a recollection of the alarming accident of the rupture of the uterus which followed, would amount to a degree of internal evidence of what I had to apprehend, which I should not think myself at liberty to reject. But language is too feeble to convey these circumstances to the mind of another, with force sufficient to produce that irresistible conviction which they would not fail of bringing to mine.

A voi-

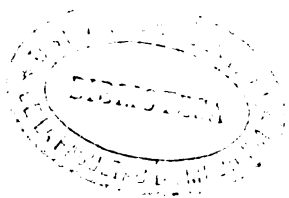
A violent pain fixed in one particular part, might perhaps be stated as a circumstance that should excite our fears of an impending rupture, more strongly than any other. In Mrs. Manning, the pain in the region of the pubis, was by much the most distressing of her complaints. Though in observing her attentively during the action of a pain, she appeared from the contortions of her body to suffer the severest pangs in the whole region of the pelvis ; yet in answer to particular questions, she expressed herself, as if the intolerable agony was confined to a very small spot near the arch of the pubis. M. *Steideler's* patient, N^o IX. suffered in a peculiar manner, during the whole time of labour, from a violent and unremitting pain in the region of the os sacrum.

When a rupture of the uterus has really happened, it is generally marked by symptoms which are decisive ; but it being a case which occurs so very rarely, they do not immediately create suspicions. When labour has continued violent a considerable

ble time ; if a pain expressive of peculiar agony is followed by a discharge of blood, and an immediate cessation of the throes, there is reason to apprehend this mischief. If nausea and langour succeed, with a feeble and irregular pulse, cold sweat, reaching, a difficulty of breathing, an inability to lie in an horizontal posture, fainting or convulsions, there is still more reason to suspect the nature of the case : But if the presenting part of the child, which was before plainly to be distinguished, has receded and can be no longer felt ; and its form and members can be traced through the *parietes* of the abdomen, there is evidence sufficient, I believe, to determine that the uterus is ruptured. The labour pain in consequence of which, the rupture is supposed to have happened, is often described by the patient as being similar to cramp ; and as if something was tearing and giving way within them. It has been said likewise, to have produced a noise which could be heard by the people present.

D

When



When the head of the foetus is wedged among the bones of the pelvis, or an arm entangled in the vagina or os externum, the case is deprived of its two most distinguishing signs : The presenting part will be prevented from receding ; and less of the child being allowed to escape by the rupture, it will not be so distinctly felt through the integuments. Such a case really occurred within these few years ; in which, from the head not receding, the nature of the patient's situation was not known, till the body was examined after her death ; when the head was found so firmly wedged within the brim of the pelvis, that it required considerable force to pull it out. A friend of mine has lately met with another instance of that uncertainty, which must necessarily be the consequence of a child's remaining fixed in its position, after a rupture has taken place. In his patient N° VI. there was no symptom which could give the alarm, till the appearance of those arising from debility. The strong efforts of labour generally cease from the time a rupture takes place ; yet
alter-

alternating, though ineffectual pains, will in some cases, continue for a considerable time ; and an uneasy and painful sensation often remains in one spot, after the child and placenta are extracted.

When it is certain that the uterus is ruptured, every one must be sensible, that the woman is in a state of the extremest danger ; whether we consider the importance of the viscus itself, the excessive hæmorrhage that often ensues, or the violence to which the abdominal viscera are exposed, from the pressure of a substance so bulky and so heavy as the body of a child, at the full time. Indeed, her situation is so very hazardous, that if the means to be undertaken for her relief are not speedily applied, she will soon be beyond the reach of human assistance.

The horrible expedient of making an incision through the parietes of the abdomen, for the extraction of the child, affords very little prospect of recovery to the mother. For if a rupture of the

D 2

uterus

uterus is of itself an injury so generally fatal, what is the patient likely to gain by combining the dangers of such an accident, with those of a penetrating wound which will expose the abdominal viscera? The operation is said to have been performed with success in a few instances: But the histories which I have read, are told in terms so general, as not to be very satisfactory. In a case related in the *Journal de Medecine*, on making an incision through the integuments, the intestines were found inflamed and suppurating; and the wound afterwards became an artificial anus. Neither does this operation promise to be very instrumental in saving the infant: Since the placenta is often separated by the action of the uterus; and (as in the case of Mrs. MANNING, in N° VI. X. XI. and XII.) forced with the foetus into the cavity of the abdomen. The powers of life in the child will soon be extinguished in consequence of this separation, and therefore any hope to preserve it, ought to have very little weight in directing the measures to be pursued; of which

which the mother should be the only object while she is alive. The practice is quite exploded in this country ; nor do I believe it is ever thought of, excepting with the hope of saving the life of a child, when the mother is certainly dead.

It is not, however, sufficient, that an attempt is made to check unfeeling boldness, if there is not likewise an endeavour to avert the consequences of a too cautious and timid mode of practice. There is a passive as well as an active inhumanity ; which though less shocking in appearance, is not less dangerous in its effects. A rupture of the gravid uterus is confessedly a case, which the experience of the past and of the present time has rendered almost hopeless. Yet it might be worth enquiring, whether the instances of recovery would have been so very rare, had we not so generally given way to an almost criminal despondency. The case I have related, is decisive as to the possibility of recovery ; and the other histories which I have cited, though not so conclusive as I could wish,

D 3

contain

contain each of them, some circumstance, which ought to encourage us to try in future, what immediate delivery may be able to effect; since it does not appear, that any thing has hitherto been gained by a contrary conduct.

The objections to immediate delivery in cases, where all, or greatest part of a child, has escaped through a rupture of the uterus into the cavity of the abdomen, must principally arise from the following circumstances :

First, From the extreme danger of the original complaint, as affording no hope of recovery.

Secondly, From the increased difficulty of delivery, in consequence of the contraction of the uterus,

Thirdly, From the fear, that the mischief already done to the parts, must be so aggravated by the introduction of the hand and the extraction of the fœtus, as

to render the death of the patient inevitable.

Under the most favourable circumstances which can attend a rupture of the uterus, it must still be acknowledged a case of the greatest danger. But the case of Mrs. MANNING, and those of N° I. II. III. prove, 'That it is an accident of itself not certainly mortal;' and of course obviate the first objection; N° VII. likewise affords some encouragement to hope, as the patient survived the rupture six and twenty days, and seems at last to have sunk under another disease.

Many facts can be adduced to weaken the force of the second objection. N° I. IV. V. VIII. evince the ease with which delivery may be performed; and in N° VI. IX. XV. and in Mrs. MANNING's case, the obstacle to speedy delivery did not proceed from the uterus, but from the narrowness of the pelvis. N° VII. proves, that, even on the third day after the rupture, the contraction of the uterus did

D 4

not

not materially obstruct the extraction of the child, though that of the os tincæ somewhat retarded it. It is remarkable, that in N° V. the child was turned and extracted with so much ease, that LA MOTTE himself expresses it, *en moins d'un Miserere* ; yet on examination of the body after death, the uterus was found so contracted, that he could then introduce only the tip of his little finger into the rupture. This great contractile power of the uterus, when emptied of its contents, must be favourable to the process of healing in wounds or rupture, by diminishing their extent, and bringing the divided parts more into contact. But the presence of any considerable extraneous substance, even in the abdomen, seems, in some degree, to counteract this power of contraction.

In addition to the second objection it has been urged, that it is inhuman to increase the misery of the patient by endeavours which are painful, yet do not promise to be successful ; but which will tend

to shorten the little time she might otherwise survive the accident. That the extraction of the child in such cases, is not complained of by the patient as a very painful operation, I know from that which I have related: and there are instances, from which it appears, that the patients themselves have expressed both surprise and comfort, in being delivered with so little additional pain. Admitting that the efforts used to extract the child might possibly hasten the patient's death; yet sure, if that affords the most remote chance of recovery, it cannot be a matter of the smallest consideration, in case she should die, whether she lived twelve or twenty-four hours.

Since ruptures of the uterus are neither immediately nor certainly mortal; since the supposed contraction of the uterus, is no obstacle to the extraction of the foetus, nor the cause of greater suffering to the patient, the third objection is already answered, and the fair conclusion will be,
that

that the means used to deliver, cannot increase the danger of the woman's situation.

Besides the objections which have been made to delivery, on the score of pain and danger to the woman, it has been suggested, that the constitution, if not farther disturbed, might be able to accommodate itself to this unusual situation of the foetus ; or by some extraordinary exertion of its powers, after a great change produced in the soft parts of the child, direct those which remained and could not be altered, where they might be expelled from the body of the mother with less danger to her life, than would have attended the extraction of the whole foetus, soon after the original accident.

Slender must be the hope, I believe, that the constitution can ever be reconciled to such a guest. There are indeed a few stories told, of children remaining many years within the mother's body, without causing much inconvenience ;
where

where they are said sometimes to have petrified. But, without either admitting or rejecting the petrefactions, I cannot think two or three extraordinary instances are sufficient to warrant an expectation, which may tempt a timid or a visionary man, to let slip an opportunity of assisting his patient, with a more reasonable expectation of success. Neither can the histories which give an account of the bones of a foetus being discharged by the anus, or from abscesses formed about the navel or neighbouring parts, be properly urged in support of the opinion of those, who discourage the immediate extraction of the child in cases of a rupture of the uterus. These have most probably been extra-uterine conceptions, which from their very minute beginning and gradual increase, are long before they excite any disturbance in the constitution. Possessing the principles of life, they immediately adhere and derive their nourishment from the mother; and being enveloped in their own membranes, and presenting a smooth surface to the contiguous parts, they produce

duce no irritation till they offend by their bulk. The first effect of this is probably a slight degree of the adhesive inflammation, by which the ovum becoming still more firmly connected with some of the adjoining viscera, its increasing weight will consequently be supported with less inconvenience to the woman. Some circumstances capable of extinguishing life in the foetus occurring at last, it is reduced to the state of a mere extraneous mass within the woman's body, and thence more offensive to the constitution than before; the powers of which will be excited to get rid of a substance now no longer a part of it. Ulceration is the method which nature uses to effect this purpose, and (the soft parts being first absorbed) the bones are guided by that process to the nearest external surface; to the skin, or to the intestinal canal, which is external with respect to the cavity of the abdomen. The adhesions which have been previously formed with the peritoneal lining of the abdomen, or covering of the intestines, will determine the pointing

ing of the abscess, from which the bones of the foetus are at last to be expelled, if the powers of life do not sink before that can be performed.

Having endeavoured to shew how little relief is to be expected from any power which we can suppose the constitution to have over a foetus, in such circumstances as I have described, I shall next attempt to point out the pernicious effects which its remaining in the abdomen must inevitably produce.

The increased susceptibility of irritation which prevails in a state of pregnancy, the pressure which the abdominal viscera sustain from the increasing uterus and resisting integuments, and the action of the uterus and muscles of the abdomen in the severe pangs of labour, will all dispose the peritoneum to be more readily affected by any new irritating cause. It is easy, therefore, to imagine, how much parts very susceptible of irritation must be liable to suffer, from the presence

fence of an extraneous mass so considerable as a child near the full time: and as that is not only out of place, but unconfined, it must follow the motion of the woman's body, and by its mere weight, rub and bruise the tender substance of the viscera among which it lies.

The fever, which sometimes seizes lying-in women, affords a strong proof of the particular disposition of the peritoneal coat to inflame at that time. Originating from some cause too inconsiderable or too subtle to be readily detected, it is yet so active as frequently to destroy the patient in a very short time. The dissection of the bodies of those who have died of this disease, shows how violently the abdominal viscera are affected, particularly the intestines, mesentery, and omentum. Every degree of mischief, from the slightest adhesive inflammation, to a complete gangrene, being sometimes evident in the same body. Besides other appearances of inflammation on the intestines, they are found adhering in different places,
as

as if glewed together, and their surface sometimes covered with a thick matter. The omentum is often almost wasted; what remains having become black and putrid. In the cavity of the abdomen a considerable quantity of serous fluid is generally found; sometimes mixed with pus, and having pieces of a thicker matter like curds swimming in it. This fluid varies in quantity and colour, and is commonly putrid. Whether these diseased appearances in the abdomen are cause or effect, producing the fever, or produced by it, they equally prove the strong disposition which the parts have to inflame in a puerperal state: and make it more easy to conceive the dangerous consequences which must arise from the body of a child remaining among the bowels, then so peculiarly susceptible of every species of irritation. In fact, the symptoms and appearances in a woman who has survived a rupture of the uterus some days, very much resemble those arising from puerperal fever.

The

The only symptoms which required medical treatment in the case of Mrs. MANNING, were those which indicated a slight degree of peritoneal inflammation; though the foetus could not have remained among the viscera much more than three hours. In the case N° X. there were evident signs of inflammation, POUTEAU in N° XI. describes the uterus as being of a lively red colour resembling inflammation. SAVIARD expressly says, N° XII. that the intestines were fretted (*tous rongez*) and the omentum rotten and stinking. In case N° IX. of M. STEIDELE, many of the symptoms which threatened the most immediate danger abated during the first and second days after delivery; from which time to the patient's death, almost all the symptoms were similar to those which attend the puerperal fever. And the appearances on the body being opened, were the same as are often observed in women who die of that disease. N° VII. exhibits striking marks of the same kind of mischief having taken place; and the resemblance was so strong in N° XV. that

Dr.

Dr. DENMAN has made the same comparison. In this last mentioned case, though the rupture does not seem to have taken place above fifteen or sixteen hours before death, yet the signs of peritoneal inflammation apparent on opening the body, were of the most striking sort. The symptoms in N° VI. which came on before the patient died, appear to have been effects of the same species of inflammation: And the abdominal hardness, tension and soreness, which LA MOTTE describes in N° IV. even before delivery, lead one to suppose that its progress is often very rapid. Although the woman N° XIII. lived five months after the accident by which the uterus appears to have been ruptured, yet she lost strength, and her health declined daily from that time; and on inspecting the body after death, the foetid matter found in the abdomen, the wasted omentum, the adhering viscera, with the marks of inflammation and suppuration which were evident on these parts, all indicated that the peritoneal coat had been principally affected. The uterus was in a

E

natural

natural state as to colour, size, and firmness of texture, but the edges of the rupture had not united. The powers of the constitution, in this woman's case, seemed to have made great efforts to counteract the impending mischief, by forming adhesions between the parts in the region of the liver, to prevent the fœtus from rolling about. But the irritating cause continuing to act, nature at last sunk under the disease; by which the uterus appeared to have been less affected, than any other of the neighbouring viscera. The gradual decline of this patient's health, bears a great resemblance to the effects of that hectic fever, which, in two or three instances, I have seen follow the peritoneal inflammation.

The recovery of the patients N° I. and II. may have been, in a great measure, owing to the viscera having sustained little or no injury; as there is no reason to suppose, that the child in either case, had been in the cavity of the abdomen. Dr. HAMILTON, N° III. says, 'that a shoulder only, of the

the child protruded into the abdomen ; in which situation it could not give much disturbance to the viscera. It will not be improper to observe in this place, that a portion of the intestine sometimes falls into the rupture, as in N° I. and III. which it will be necessary to reduce with great care ; and as the interposition of a very small part would prevent the lips uniting, and produce irritation and inflammation, it may be adviseable to pursue the method practised by RUNGIVS of *keeping his hand in the uterus*, till that is sufficiently contracted to prevent its happening again.

Abstracted from the particular injury which the abdominal viscera themselves are liable to sustain, the wound of the uterus can have little disposition to unite, while the body of a child is acting on all the surrounding parts as a constant and powerful stimulus. N° XIII. and XIV. may be considered as proofs of the effects of such a cause : since in N° XIII. the healing process had never begun, and in N° XIV. it had not been completed in the whole five

E 2

months

months which these women survived the accident. Whenever the subject required that I should reason from opinions respecting inflammation and the actions connected with it, I have availed myself of those adopted by Mr. HUNTER, as being best calculated to solve all their various phenomena.

It is remarkable, that in the two last cases, the functions of the uterus seem not to have been altogether interrupted by the accident which had happened. In N° XIII. the menses returned after some time, and continued to flow regularly; without being affected, either by the state of the wound, or by the mischief brought on the other viscera; and the same regularity had taken place in N° XIV. In the last case the uterine portion of the rupture had united, while the peritoneal remained unhealed.

The most favourable situation for the efforts of nature to produce adhesions and carry on a process for relieving the constitution of such a load, is undoubtedly
when

when the rupture of the uterus has been the effect of accident ; the powers of the constitution being unimpaired and equal to the greatest exertions. Yet in N° XIII. and XIV. under such favourable circumstances, with this farther advantage, that the woman in one case was in the seventh month, in the other only in the fourth, and of course the children small: Nature was unequal to the task, and after many efforts sunk under the attempt in a few months. Hence we may conclude, how little hope remains of a favourable event, when the foetus has attained its full growth, and the constitutional powers of the mother are weakened and deranged by a tedious and severe labour.

When rupture is the effect of some external violence, it may happen at a period of gestation, when the os uteri is not disposed to relax, and delivery by the natural passage will consequently be rendered extremely difficult or impracticable: but an attempt to dilate, for the purpose of extracting the child, should always be

2

made;

made, excepting in the very early months of pregnancy.

In enumerating the signs of a rupture of the uterus, I have mentioned as the most decisive, the retrocession of the parts of the child which had presented, and the ease with which the form of its limbs can be traced through the integuments. If previous to the accident the head has been so wedged among the bones, or any other part so entangled in the passage that it cannot recede, we shall be under the necessity of judging from symptoms, which do not so clearly point out the nature of the mischief. These may sometimes be so mild at first, as to give no immediate alarm; but in general, they will be sufficiently marked to determine the dangerous situation of the patient; and to point out the propriety of assisting her, by judicious attempts to deliver. Symptoms of great debility coming on after a sudden cessation of strong pains, ought always to be considered as indications of particular danger.

Should

Should it be allowed, that I have made a proper selection of cases to illustrate my opinion on this subject, and that I have reasoned justly from the facts which they contain, I think the following conclusions may be admitted :

First, That in a rupture of the gravid uterus, which has even allowed a foetus to pass into the cavity of the abdomen, the case is not to be considered as absolutely hopeless.

Secondly, That the danger of such a case, is as much in consequence of the injury which the viscera sustain from the child remaining in the cavity of the abdomen, as from that which is done to the uterus itself.

Thirdly, That the danger will generally be in proportion to the time the child is suffered to remain among the viscera, and to the susceptibility of irritation which prevails in the constitution of the patient at the time.

Fourthly,

Fourthly, That delivery affords the only prospect of recovery to the patient, and should therefore be effected as soon as the circumstances will permit.

Although these inferences may be fairly deducible from what has been said, yet circumstances will frequently arise, in a case of such complicated danger, which will baffle all reasoning from general principles: For when rupture is the consequence of some violent disease having affected the substance of the uterus itself, no advantage is to be expected from any measure that can be tried. When the accident is attended with excessive hæmorrhage, death too generally happens, before it is possible, with any certainty, to determine the nature of the complaint: and even if the hæmorrhage should not be so violent as to destroy the patient very suddenly, it may yet be so considerable, as by greatly diminishing the powers of life, to make her recovery impossible.

Other

Other causes existing in the constitution, may contribute to render this accident peculiarly fatal. The body being at this time in a state very susceptible of stimulus, whatever acts violently on the nervous system, may have power to produce effects suddenly destructive of life.

It is a matter of some comfort, that amidst such accumulated danger, there still remains a possibility of the patient's recovery: and as that seems in a great measure to depend on the speedy removal of the child from among the viscera, it is a point of the highest importance, to be able early and certainly to determine, that the accident has really happened. I have endeavoured to bring into one view all the circumstances I could collect, which were likely to assist in directing our judgment on this occasion. These do not, however, establish that absolute certainty, which I wish could be attained in a matter of so much consequence. The gloomy idea of inevitable death, which has been hitherto annexed to this accident, by de-

F

stroying

destroying hope, has checked the ardour which should have directed endeavours that might have sometimes been successful: and has consequently deprived us of the aid of experience, and the advantages resulting from a comparison of facts and observations.—Let us discard these melancholy apprehensions, and cherish the hope of a more favourable event; and we need not despair of making additions to the list of recoveries. One in half a century, will be sufficient to justify the practice of immediate delivery; which, if it fails of preserving life, yet takes place of no other mode which promises the smallest chance of safety to the patient.

F I N I S.

