

ART. V.—*Cases of Adhesion of the Placenta and Hour-glass Contraction of the Uterus.* By W. H. BYFORD, M. D., of Evansville, Ind.

CASE I.—I was called, November 1, 1842, to see Mrs. L., in the sixth month of her pregnancy with second child; she was 34 years old.

Mrs. L. had miscarried at early periods of pregnancy fourteen times, and for several years her health was much impaired on account of the flooding which usually attended them. She had been married eighteen years; had sometimes two miscarriages a year. Great difficulty was experienced in overcoming her almost constant tendency to abortion with the first child. She was attacked about one o'clock this morning with shivering, succeeded by febrile reactive pain in the right side a little below the umbilicus, of a dull character, which was persistent and aggravated by pressure. Soon after the chill had subsided she began to experience pains resembling "labour-pains." When I saw her the pulse was 105, full and hard; tongue with a white fur, some nausea, probably, resulting from the dose of iodonum taken during the night; costiveness; head, back, and bone-ache. The face was flushed, the skin dry and hot. Examined per vaginam; the os uteri was high up and tightly closed; the vaginal mucus membrane hot and devoid of secretion. The foetal heart beat feebly between the left ilium and umbilicus, and the placental murmur was heard at the seat of the dull pain. She was bled sufficiently to affect the pulse in a sitting posture, took a saline cathartic, and had warm fomentations with tincture of camphor over abdomen, while absolute quietude was enjoined. Visited again at 10 o'clock P. M. The cathartic had acted pretty freely. Paroxysmal uterine pain relieved entirely; constant pain in side much better. Gave ten grains Dover's powders, ordered fomentations to be continued, and left for the night.

November 2, 10 o'clock A. M. The patient has perspired freely all night, rested well, and experiences no inconvenience but soreness in side when she moves. Pulse about 85, rather full. Spt. milderer, quietude, and fomentations for the day. Called again at 10 P. M.; pain pretty nearly as severe as at first, with slight return of paroxysmal pains; pulse 100, full and tolerably hard; bowels not moved since day before yesterday; headache; back and boneache. Venesection again to about sixteen ounces; continue fomentations to abdomen; take two grains calomel and quarter grain sulph. morph.; repeat in four hours if not better.

Nov. 3, 10 A. M. Rested well, did not take the other powder, and says she feels better than since first attack. Gave a cathartic. After it operates take six grains Dover's powder every three hours.

It will be needless to pursue a regular account of the case further. With almost nothing else, in about a week she was quite well, except weakness. Mrs. L. required no further attention until she was, on Feb. 24, 1843, two o'clock A. M., taken in labour. I was called about six; found os uteri entirely open; the head engaged in the upper strait; pains active, frequent, and propulsive. All went on well, and in one hour and a half the child was expelled, the cord separated, and it removed. I should also state that the membranes did not give way until the head occupied the lower strait, and not more than thirty minutes before the head was expelled. The child being removed, I seated myself by my patient and waited for the uterus to expel the placenta. In a short time three pains succeeded each other, expelling more than ordinary coagula; but the placenta was not thrown down

into the vagina, nor lower part of the uterus. I waited for several more pains; no placenta; much blood. The pains were described by the patient as cramps instead of throes, and being almost insupportable. Placing my left hand on the abdomen I found, to my surprise, that the fundus reached above the umbilicus, and instead of sinking, arose higher up during each pain. I introduced my hand into the uterus and found about the middle of the body a contraction, leaving scarcely room for the cord that resisted its farther progress; but as flooding was great I felt under the necessity of overcoming it and relieving the placenta. With my hand, made conical by the prescribed arrangements of the fingers, I was proceeding in a gradual and cautious manner when the patient fainted; relaxation immediately took place, and no further resistance offered. The placenta was implanted upon the side near the fundus, and adherent very firmly over an extent of about, as near as I could judge, one-fourth of its extent, so firmly as to require something more than mere grasping to remove it. After several minutes, cautiously "peeling up," it was separated and removed. The uterus followed, by more regular and normal contractions, until it contracted to its usual size after delivery. No farther hemorrhage occurred. The patient, however, was very much depressed by the loss she had sustained, and it was several hours before she recovered from it. About an inch of the edge of the placenta far nearly a third of its circumference was so condensed by the deposition of fibrin as to entirely obliterate the peculiar structure of the organ; no trace of the cavernous tissue being left. It was replaced by a firm, unyielding, almost cartilaginously hard substance. From appearances this must have been the point of adhesion between it and the uterus.

CASE II.—I was called, December 6, 1845, to Mrs. J., pregnant with her sixth child. She was in the eighth month. Arriving at 2 two o'clock P. M., I received the following account of her case: She was attacked yesterday about six o'clock, while milking, with a dull pain in the left groin, reaching up towards the ribs, which she said distressed her very much. When she returned into the house it was necessary to take her to bed, in consequence of chilliness and paroxysmal uterine pains. After going to bed, placing in a hot bag of ashes to her side, and taking thirty drops of laudanum in some warm tea, she soon became very much better. The paroxysmal pains ceased entirely. Towards morning the chilliness returned; it was succeeded by fever, pain in the head, back, and extremities. The febrile symptoms had constantly continued until my arrival. There was considerable pain in side, and soreness; pulse 104, tense, but not very full; nausea, constipation, dry skin, flushed face, coated tongue. I bled her until the pain was much relieved, the pulse reduced in force and frequency, and perspiration occurred. As she had taken castor oil in the earlier part of the day, and it had not operated, I gave another portion with ten grains of calomel, to be followed, if the bowels were not acted upon in six hours, by Epsom salts one ounce. Fomentations to the seat of pain, with hot spirits of camphor. After the medicine operated twice, she was to have eight grains of Dover's powder every three hours.

7th, 4 o'clock P. M. Found her much relieved. The salts which was given her produced large green watery discharges; the Dover's powder produced perspiration; but yet there was some pain. Continue the fomentations and powders; give at bedtime two grains calomel and a quarter of a grain of sulph. morph., and repeat in four hours unless the first produces rest. Early in the morning sulph. mag. to produce purgation.

8th, M. Much better, some pain. As it was twelve miles in the country I did not see her again. But, by giving anodynes and mild mercurials until

slight pyalism occurred, she was so free from disease that she did not take anything more than laxatives to keep the bowels open.

I saw her husband five weeks after the attack, when he said Mrs. J. had some pain and soreness all the time since last visit, but that was all the inconvenience at present. Although she had always been attended by a midwife in her previous confinements, she was anxious to engage my services in this case, as she was apprehensive the *after-birth* had grown fast to her side.

Feb. 6, 1846, 8 o'clock A.M. A messenger arrived with a hurrying message from Mrs. J., who had been delivered at 6 o'clock, and was supposed to be dying from loss of blood. Nearly two hours elapsed before I saw her. She had been dead for half an hour. The placenta was undelivered, and the midwife said, "was not in the womb, nor did she know where it was." The husband desired me, if possible, to ascertain the cause of his wife's death. I passed my hand into the uterus and found the contraction of a portion of the circular fibres had divided the cavity into two chambers. In the uppermost was lodged the placenta. The contraction was dilated without much resistance. Arriving at the placenta I endeavoured to remove it, but the adhesion between it and the uterine walls was so extensive and firm that it required several minutes to "peel" it off. The whole uterus contracted so firmly and uniformly, after the withdrawal of the placenta and hand, that it awakened some hope of resuscitation. Accordingly, I caused her head to be removed off the bed and very much lowered, and her feet to be raised to an angle of forty-five degrees, so as to induce a flow of blood to the head, and, if possible, stimulate the brain to a discharge of its functions. I used the cold douche to head and chest, and, as well as I could, resorted to artificial respiration. But all produced no effect. It remained for me to examine the placenta. The same hard, compact appearance of its edge was present in this as in the first case. Not so dense, perhaps, nor so extensive, but contracted with the healthy structure, it was unmistakably fibrinous condensation. It occupied the edge, as in the former case, and extended about an inch towards the centre.

CASE III.—Was called, July 6, 1846, four o'clock A.M., three miles, to see Mrs. M., who was moribund from hemorrhagic exhaustion. Extremities icy cold; gasping respiration; vomiting; frequent fainting; glassy eye; pulse imperceptible; husky voice; and delirium, jactitation, &c. The blood was still passing from the vagina, but to a very moderate extent. My first object was to cause the blood to flow to the brain. I turned her head and shoulders off the bed, and held them as much dependent as possible, and had the feet and legs raised. In this position, there seemed, for a few moments, some rallying. An attempt was made to administer stimulants, but she could not swallow in this position, and begged to be raised so that she could have a drink. Finding there was no other chance, I raised her head slightly above the horizontal position, when she fainted, and never revived.

The midwife told me that she was taken in labour at five o'clock the evening before. The labour progressed naturally, and the child was delivered about twelve o'clock at night. Everything promised well, for one so weak. The placenta being delayed, she examined but could not find it. Pains continued, of a crampy character, worked up, and the womb was so high that for a time she thought there was another child. Hemorrhage being very profuse, she became alarmed and perplexed, and desired to have me sent for. During the time the messenger was gone, flooding became still more copious; syncope occurred frequently, and ushered in the symptoms I have above described.

Upon placing my hand on the abdomen, I found it occupied with a long,

irregular tumour, reaching above the umbilical region. I introduced my hand into the uterus, and found annular contraction near the middle, with the cord passing through it. Carrying the hand through it, the placenta was reached near the fundus, where it was pretty firmly attached. I removed it without much trouble, as the adhesion was not very extensive. As in the case of Mrs. J., the uterus contracted firmly upon my hand, and assumed its globular shape above the pubes. Upon examining the placenta, I found a portion of the edge, the circumferential length of about two inches, hard, thin, and shining when cut. A circumscribed spot of an inch, perhaps, near the hardened spot, was soft, and contained pus. The placenta, as a whole, was uncommonly large.

The history of Mrs. M.'s pregnancy was very interesting, although imperfect. In her sixth month, she fell down with a load of wood on her shoulder, and struck her abdomen against a plough handle. This caused her much pain in the place, and paroxysmal uterine pains for several days. These last gradually wore off, but she remained quite unwell during the remainder of her pregnancy. Had pain, some fever, night-sweats, diarrhoea, &c., the most of the time. She was very much debilitated at the time of her accouchement. So far as I could learn, she had had no medical attendance.

These three cases I regarded as placentitis, possibly complicated with local metritis. Sufficient proof, I think, of this was presented in the symptoms and appearance of the placenta. Depositions of fibrin in all, and formation of pus in one, leave no doubt in the matter. How terrible the result in two! and, in the third, what imminent peril was incurred! Adhesion of the placenta was its effect. Does this adhesion ever occur only as a consequence of inflammatory deposition? I think not. Doubtless many cases of partial placentitis pass off in resolution, and are not recognized as such. Atony of the uterus may fail to throw off the placenta of ordinary attachment; but I think it next to certain, that all cases which resist pertinaciously powerful contractions, prevent the uniform subsidence of the uterine globe, and cause such horrible floodings as result in death in so short a time as two of the cases above detailed—and we must have been the case in the other, but for prompt and judicious management—are brought about by the plastic products of inflammation. Whether primary, or secondary to uterine inflammation, it is impossible to decide; that it may be primary is reasonable and probable.

CASE IV.—I was called to Mrs. L., aged thirty, a stout, energetic woman, in labour with fifth child. The first intimation she had of the approach of labour, was an evacuation of liquor amnii, which occurred as she was getting in bed about 10 o'clock P. M.—now two hours since. It continued dribbling away, but she had no pain whatever. I quieted her apprehensions of danger from this, to her unusual commencement, and went home, directing her to send for me when the pains should become urgent.

At eight o'clock next morning I was called again, and found the pains feeble but frequent, with constant draining of the water at each pain. The os uteri was open to the size of half a dollar, but high up. No propulsive tendency in the pains. I was absent again about two hours. When I returned, the os was entirely dilated, and the head was engaged in the pelvis. The pains had a slight propulsive effect at first, but, as they wore off, in the language of the patient, they "worked up" as each thro' ceased. About high

twelve, she was delivered of a large and healthy female child. This labour, for her, had been unusually tedious and painful. The placenta was found in the vagina, and was removed without any further aid from the uterus. Placing my hand upon the abdomen, I felt the uterus forming a long, narrow, irregular tumour, that reached above the umbilicus. While my hand was on the abdomen, a peculiar, sickening, and cramping pain, described as being very different from the ordinary after-pains, was experienced. It was of very long duration, and attended with a large discharge of fluid blood and coagula. I placed cold wet cloths over the abdomen, rubbed, washed, and poured a stream of cold water upon it, but to no purpose. The pain recurred often, the flooding continued, and an alarming state of exhaustion threatened. I now introduced my hand into the cavity. There was a contraction about the middle of the body, so tight that considerable perseverance was necessary to dilate it. This being done, a large body of coagula was set free that had been imprisoned in the upper division. The whole organ now contracted uniformly, until of its usual size and form in such cases. No further hæmorrhage occurred. The patient, of course, was much prostrated, but recovered in a reasonable time and manner, and had a good "getting up."

CASE V.—Was called June 4, 1848, to see Mrs. G. at 8 P. M., full term of pregnancy. About 5 o'clock, three hours before my arrival, while stooping, she experienced a gush of water from the vagina. For an hour it continued almost constantly to drain away. At the end of this time she began to feel, at intervals, a slight pain in the back. Things remaining so for some time I retired. About midnight I was called up; the pains had increased in frequency and severity, but, according to her own expression, "worked up" into her stomach. The os uteri was open only enough to admit the end of the index finger. Presentation good. At every pain a slight gush of water could be felt in the vagina. The os short, the pains continued slow, feeble, tearing, and "working up," until about 5 o'clock A. M., on the fifth, when the os uteri was fully dilated. The pains then became propulsive, but at the end of each pain the distressing sensation of "working up" was experienced, until the head was expelled. The child was delivered at 10 o'clock, seventeen hours after the rupture of the membranes. Apprehensive of irregular contraction, I placed my hand on the abdomen, and found the long hard tumour characteristic of these cases. Anxious to see whether nature would do anything for the relief of the case, I awaited the recurrence of pain, and I shall never forget the energetic epithets she employed to convey an idea of their excruciating severity. "They seemed like a cramping, that compassed all her capacity for pain; a rise, squeezing her bowels to a jelly." They were accompanied with profuse hæmorrhage, coagula, and fluid. Although the placenta was felt, at the os uteri, it could not be removed by any justifiable means. When drawn down into the vagina it receded the moment the traction was relaxed. I introduced my hand. The placenta was grasped in the annular stricture, which existed about one-third up the body of the uterus, and so firmly held that it could not be removed without tearing. The stricture was slowly dilated and the upper chamber reached, which was very large, and filled with coagula. These, together with my hand, were expelled by the regular and uniform contraction of the uterus. It then contracted down to its usual size and shape. Much blood had been lost during this time, which, together with the protracted suffering and watching, reduced the patient to a great degree of prostration, and it was difficult to keep her out of syncope. The head was placed lower than the feet, brandy and laudanum were admin-

istered, and perfect quietude enjoined. In a few hours she was comfortable, and all the powers rallied so that it was safe to leave her. Her getting up was slow, and attended with the many nervous ailments so common to æmemia. No hemorrhage whatever succeeded the expulsion of the placenta, and normal contraction of the uterus took place. So soon as the stricture was dilated a uniform and simultaneous contraction of all the parts occurred, with remarkable energy, and put hemorrhage out of the question. The character of the pain which succeeded was declared to be "refreshingly changed," when contrasted with those which preceded, being simply after-pains, instead of the cramps experienced before, "so horrible to think upon."

In review of the above cases I desire to note—

1. The three first described cases all exhibited symptoms of abdominal inflammation, during some period of pregnancy, over a circumscribed locality.

2. The uterine pains determined the seat to be in the uterus.

3. In the first case the pain was ascertained to be in the same locality as the placental murmur.

4. All three of the placentæ contained the products of inflammation; the first two fibrinous, and the third pus.

5. In all three there was adhesion of the placenta and hour-glass contraction of the uterus below the place of adhesion.

6. The irregular contraction was supposed to be caused by the adhesion, and the adhesion by inflammation, causing plethoric effusion between the uterus and placenta.

7. The partial separation of the placenta was the cause of the hemorrhage, by opening the placenta-uterine veins, and preventing contraction to an extent sufficient to close them.

8. In the last two cases the irregular contraction, no doubt, depended on the vamping of the uterine walls upon the uneven surface of the child's body for so long a time before delivery as to derange its contractile fibres, and induce spasmodic action in the fibres most contracted.

9. The most effectual means of relief is the introduction of the hand to dilate the contracted part, and thus restore the uniformly arched shape of the organ, and remove the placenta and coagula from its cavity.

Is nature capable of relieving such cases?

10. Nature sometimes relieves such cases as the last two, by syncope. This relaxes the whole muscular organization, and with it, the spasmodically contracted fibres. The elasticity of the parietes of the uterus may, after the subsidence of the state of syncope, restore the regular rotund shape of the organ, and, upon the supervention of the next pain, it may contract uniformly.