AN ACCOUNT
OF
SOME CIRCUMSTANCES, IN WHICH
A UTERINE HÆMORRHAGE

MAY OCCUR,
SUFFICIENT TO PRODUCE ALARMING SYMPTOMS,

THOUGH

THE UTERUS FEELS CONTRACTED IN THE ORDINARY DEGREE.

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HÆMORRHAGE from the uterus, after delivery, is attributed to insufficient contraction of that organ. We infer security from hæmorrhage, if the uterus be contracted; and that the uterus is contracted, if it feel small, round, and firm. This I believe to be, generally, the truth; yet the observing practitioner must have been frequently struck by the little proportion that existed between the want of contraction and the degree of hæmorrhage; having found the uterus bulky without any hæmorrhage, and a profuse hæmorrhage without greater bulk of uterus. Nay, further, I have witnessed a profuse hæmorrhage though the uterus had contracted in the degree which commonly indicates security; and I have ventured to do what is seldom justifiable, separate the placenta before the uterus had contracted, without more hæ-

morrhage than after a common labour. What is this circumstance which has so great an influence that its presence can cause a moderately contracted uterus to bleed profusely, and its absence can cause an uncontracted uterus to bleed scarcely at all?

Experience has taught me that there are two circumstances in which a hæmorrhage sufficient to produce alarming symptoms may occur, though the uterus feels contracted in the ordinary degree.

1st. The effect which loss of blood produces on the system depends not only on the quantity lost, and the rapidity with which it flows, but in a great degree likewise on the constitution of the patient. Some persons are singularly prone to syncope. If these, on the separation of the placenta, lose rather more blood than usual, it will affect the constitution as much as a profuse hæmorrhage will in others, and this trifling excess will not be indicated by any thing unusual in the size of the uterus; the discharge is often more or less, without any corresponding varieties of bulk that I can perceive. Thus there may be a hæmorrhage sufficient in such cases to produce alarming symptoms, though the uterus feels contracted in the ordinary degree. The following case is a specimen of what I mean :

I had delivered a lady of her first child, after a

short and easy labour. About ten minutes had elapsed; the discharge was not great, though more than usual; through the parietes of the abdomen the uterus felt round, firm, and not larger than is common before the removal of the placenta. This was the state of things when she suddenly exclaimed that she was going to faint; that she knew the feeling, for she was very subject to it; a fatiguing walk would often bring on long fainting fits; a minute afterwards she fainted away. An intelligent matron of a lying-in hospital, who was present, said that she did not remember such an occurrence with so contracted a uterus, and that she did not know it was possible. It is needless to relate minutely the remainder of the case. Suffice it to say, that for a long time she continued one minute reviving, another sinking into a death-like faintness, a state which the most experienced cannot watch without painful anxiety.

Whenever syncope is attended by so moderate a hæmorrhage, it admits of dispute whether the one is the cause of the other; yet, in the cases which I am alluding to, I entertained no doubt about it; first, because the faintings did not occur till the separation of the placenta, and consequent flow of blood; and secondly, because though not very profuse, it was more so than usual.

Sometimes the unusual susceptibility to syncope is not natural to the constitution, but the acci-

dental effect of an exhausting labour, and, under these circumstances, I have generally found that the constitution is affected not with simple syncope, but with that powerless and agitated state of the vital functions, which, in the technical language of our age, is called nervous irritation. These are the cases I believe where the best cordial is an opiate.

I was attending a lady, thirty-six years old, in her first labour. Of her mother and three daughters, all but one, have, in their first labours, been delivered with the forceps. She had a severe and protracted labour, and no longer feeling justified in postponing the delivery, I applied the forceps. The external discharge was not greater than usual; the uterus, after the removal of the placenta, felt rather, but not very, large. She had not been tranquil since the extraction of the child, but about twenty minutes afterwards her appearance alarmed me greatly. Her heart beat with indescribable rapidity, her pulse was countless, she breathed so quick and short that, to use her own expression, if it became quicker and shorter she should not breathe at all, and she felt as if she was dying.

I had two duties to perform; one, to take care that the symptoms were not kept up, nor caused by internal hæmorrhage; the other, to administer what I thought most likely to tranquillize these alarming symptoms. I passed my hand into the uterus; it contained a good deal, I guess a pound

and a half, of coagulated blood; I scooped it out with the hollow of my hand. There was no occasion to irritate the uterus to contract; the instant it was empty it shut like a spring, and when I put my hand on the outside I found it not more than half its previous size, but the symptoms continued as alarming as ever. I now gave her a dessert spoonful of Hoffman's æther, and fifty drops of laudanum, and then sent off for the family physician. When he arrived the symptoms had abated so much, as to relieve me from my anxiety; the pulse was slower, the breathing more tranquil, and she felt disposed to sleep. She continued to sleep nearly two hours while we remained in the house, then awoke for a few minutes, slept well through the night, and awoke the next morning without any vestige of her symptoms, sensible to herself; but her pulse continued frequent for many days.

2nd. After delivery, under ordinary circumstances, the contraction of the uterus prevents hæmorrhage, by occasioning a sufficient closure of the blood vessels to resist the ordinary force of the circulation. It appears reasonable to suppose, however, that if the force of the circulation was *extraordinarily* great, it would be able to overcome the *ordinary* closure of the orifices, and that thus a *profuse* hæmorrhage might arise although the uterus was contracted. That this event, so probable in point of reason, is true in point of fact,

was first fully disclosed to me by the following case :—

April 10, 1815. I delivered Mrs. S. W. of her second child ; for many hours before the accession of labour she was flushed, and had a very full quick pulse. Abstinence from meat, wine, and warm drinks, a cool room, and a saline purgative, diminished, but did not remove, this state of the circulation, which continued in a considerable degree when the child was born : it was expelled very gradually, and, after the removal of the placenta, the uterus felt in the hypogastrium contracted in the ordinary degree ; nevertheless, about twenty minutes afterwards there came on one of the most frightful hæmorrhages I ever witnessed ; by the introduction of the hand, and the application of cold, however, it was speedily arrested.

It was somewhat more than a year afterwards when she informed me that she was pregnant again, and coming to town to lie in. As she arrived only two or three days before she fell in labour, I did not see her till she was taken ill ; but then as soon as I entered her chamber, I was struck on observing the same state of circulation that had preceded her former labour ; she was sitting in her easy chair with a red face, and a throbbing pulse. I had not been many minutes in the room before the pains became so strong it was necessary to put her on

the bed, and soon afterwards the child was born ; it could not be expelled more gradually ; after the head was born, another pain expelled the shoulders, another the body, and another the limbs. I cut the chord, placed my hand on the abdomen, and felt the uterus contracting in the usual degree, yet a few minutes afterwards the blood burst out with prodigious impetuosity. The fearful scene which followed, I need not depict ; it is enough to state, that by the introduction of the hand and the application of cold, the hæmorrhage was speedily suppressed, yet it bleached her face, and for many days she could not sit up without faintness.

I had now witnessed two labours in the same person, in which, though the uterus contracted in the ordinary degree, profuse hæmorrhage had nevertheless occurred ; let me be understood—after the birth of the child, I laid my hand on the abdomen and felt the uterus within, of that size and hardness which is generally unattended by, and precludes hæmorrhage ; in both instances the labour had been attended by an excessively full and rapid circulation. I could easily understand that a contraction of the uterus, which would preclude hæmorrhage in the ordinary state of the circulation, might be insufficient to prevent it during this violent action of the blood-vessels, and the inference I drew, was, that in this case, the hæmorrhage depended not on want of contraction of the uterus, but on want of tranquility of the circulation, and

that if ever she became pregnant again, a mode of treatment which would cause her to fall in labour with a cool skin and a quiet pulse, would be the best means of preventing a recurrence of the accident.

It was not very long before I had an opportunity of trying the truth of my doctrine, and the efficacy of my treatment, for about twelve months after this confinement, she called on me to tell me that in about four months she should require my attendance again.

The plan I advised was this, to avoid fermented liquors ; to take meat only thrice a week ; a purgative of salts and senna twice a week ; a scruple of nitre three times a day : this she began two months before she expected to be confined, and continued it up to the full time. I saw her when she was expecting her labour every hour, and had the satisfaction to find her with a cool skin, and a soft pulse under eighty. She was to lie in at her own house a few miles from town ; I was to attend her there ; for fear I should not arrive in time, the neighbouring surgeon was to be in the house. I was sent for four days afterwards ; when I arrived she was not delivered ; but I was mortified to find, that since our last interview, her pulse had sprung up, and there was now the old heated skin and hurried circulation, though in a far less degree, and this the surgeon said, had been the case for two days. The labour came on, the child was gradually ex-

pelled, and after the placenta had separated and was removed, the surgeon put his hand on the abdomen, and said he had seldom felt the uterus more contracted so soon after delivery ; yet within a few minutes there came on a flooding ; like what I believed to be the cause, it was trifling to what I had formerly witnessed, and was readily suppressed by a cold wet napkin thrown flap upon the belly ; but it was enough to produce syncope, and detain us in the house several hours longer than we should otherwise have remained there.

In process of time she became pregnant again. She pursued the same plan, with only this addition, that when she came within a fortnight of her confinement, she had twelve ounces of blood taken from her arm, and when a few days, eight ounces more. She fell in labour, and as soon as I entered the chamber, the first thing I did was to feel her pulse ; it was as soft and slow as I could wish. After the birth of the child and the removal of the placenta, the uterus contracted not more than in her last labour ; but not the smallest degree either of flooding or faintness took place.

I have met with other cases similar in kind, though less striking in detail. I have seen a strong cordial given unnecessarily towards the end of labour, excite inordinate action of the heart and arteries, the consequence of which was, that after the child was born, though the uterus contracted

in the ordinary degree, the separation of the placenta was followed by a flooding. On the contrary, I have ventured to separate the placenta while the uterus remained largely dilated; but the circulation being languid, no more blood was lost than after an ordinary labour.

How often a disturbance of circulation plays an important part in uterine hæmorrhage it is difficult for an individual to know; but I suspect sufficiently often to deserve the especial attention of practitioners. I advise them when they meet with patients subject to hæmorrhage after delivery, to notice the state of the circulation before labour, and if disturbed, to employ means for tranquillizing it before labour comes on. I advise them during labour, to use cordials cautiously, lest the placenta should separate during an excited state of circulation. I advise them after delivery, though the uterus may feel contracted, to be slow to leave their patient, if the circulation be greatly disturbed.

In the foregoing observations, the reflecting reader may suggest an apparent inconsistency, as I attribute the hæmorrhage *not* to want of contraction of the uterus; yet in arresting it, I resort to cold and the introduction of the hand—remedies which act by exciting it to contract. The difficulty is easily removed; for though, in a disturbed state of circulation, the ordinary contraction of the uterus may

not be sufficient to prevent hæmorrhage, yet a greater degree of contraction may. Besides, after a hæmorrhage has occurred, so as to produce faintness, this faintness is followed by a relaxation of the uterus, and this relaxation still further tends to augment the hæmorrhage. Thus a uterus which has become contracted, sometimes again becomes relaxed, a circumstance which, though seldom mentioned by writers, is, I believe, not unknown to the observing practitioner. I find the following aphorism in the second part of the Treatises on Midwifery, by Dr. Boer, the celebrated professor of that art, at Vienna, Page 116, Aph. 4th. "The uterus is commonly found contracted immediately after delivery; nevertheless it can again and even repeatedly relax, and thus give occasion to floodings. Most commonly this happens in weak patients, when the labour had been slow and anomalous."

I have thus fulfilled the principal object of my paper, yet there occurred other circumstances in these successive labours which I think worth relating, because they throw light on some important points in the treatment of Uterine Hæmorrhage.

The first time I attended this lady, after the violence of the hæmorrhage was over, although the abdomen was covered with pounded ice, it returned again and again, slightly in degree, yet sufficiently, in the debilitated state of the patient, to produce

alarming recurrences of faintness; the uterus too, which had become firm and distinct, became so soft it could no longer be felt. In hæmorrhages from the uterus, these alternations of contraction and relaxation, with cessations and recurrences of bleeding, are familiar to the observing practitioner. Finding the ice so inefficient I swept it off, and taking an ewer of cold water, I let its contents fall from a height of several feet upon the belly; the effect was instantaneous; the uterus, which the moment before had been so soft and indistinct as not to be felt within the abdomen, became small and hard, the bleeding stopped and the faintness ceased; a striking proof of the important principle, that cold applied with a shock, is a more powerful means of producing contraction of the uterus than a greater degree of cold without the shock.

After the second labour, at the beginning of the hæmorrhage, I found the placenta separated, and lying in the vagina; I removed it; the hæmorrhage abated, but a few minutes afterwards it returned as violently as at first; my patient turned white and faint, and said the room was going round with her. I had been talking on the subject with Dr. Rigby, at Norwich, who told me that in hæmorrhage from the uterus, after delivery he had found Le Roux's remedy the most effectual, and that it had unquestionably enabled him to save several lives, which must otherwise inevitably have been lost. I took several handker-

chiefs, soaked them in vinegar, and passed them one after the other into the vagina, so as completely to fill it; this effectually prevented all external hæmorrhage; I no longer felt the blood pouring over my hand; the uterus began to harden, and my patient complained of pain; the colour came into her face again, and her faintness she said was gone. These favourable appearances, however, lasted but a short time; the pains ceased, the uterus grew soft and seemed to swell, the pulse became thread-like and weak, and she turned ghastly pale. It was plain that though I had prevented the blood from escaping externally, it was flowing into the uterus in great quantity, and that I had only converted an external into an internal hæmorrhage. Feeling herself sinking, she screamed out she should never see her children again, and entreated that she might see her husband, and take leave of him before she died. The next instant I thought she had realized her fears, she sunk into the pillow pale and senseless, her face became distorted, and her limbs convulsed.

My belief now is, that when hæmorrhage occurs after the removal of the placenta, the quickest way to stop it, is to introduce the left hand closed within the uterus, apply the right hand open to the outside of the abdomen, and then between the two to compress the part where the placenta was attached, and from which chiefly the blood is flowing. When the hand is introduced merely as a stimulant,

there is an interval of time between its arrival within the uterus and the secure contraction of this organ, during which much blood is often lost. By directing the hand to the very vessels from which it issues, and compressing them as I have described, this quantity is saved. If I may judge by my feeling, the blood stops, in a great degree, even before the uterus contracts ; the hand acts first as a tourniquet, then as a stimulant. It is true we cannot tell with certainty where the placenta was attached, and consequently where the pressure should be applied ; but as it is generally attached to or near the fundus, if the pressure be directed there, it will generally be right. Besides, after the child is born it is often several minutes before the placenta separates and descends ; if, during this interval, we pass up the finger along the chord and observe at its entrance into the uterus, whether it turn towards the front, the back, the right or left side, or straight up to the fundus, we shall form a tolerably exact idea of the spot to which the placenta has been attached in this individual case.

But to return to my patient. As it was my duty no longer to rely on the remedy I was using, I drew out the handkerchiefs and applied my hands as I have described with the most immediate and happiest effect ; the bleeding stopped, my patient came to herself, and whilst *she* complained of pain, *I* felt the uterus contracting ; here was an end of the hæmorrhage and the alarm, and though for many

days her face looked bleached, and she almost fainted in the upright posture, she recovered without any untoward circumstance.

It has been said that it is impossible to make the uterus contract during syncope, and consequently that we ought to use means for reviving the patient, before we employ means for exciting the uterus to contract. I did not find this to be true. Without stopping to revive my patient, I immediately introduced my hand and compressed the uterus, the hæmorrhage stopped, and she came to herself again. It may be said that the hand in the uterus roused the patient, and that it was not till she recovered from the syncope that the uterus contracted; but the question at issue, is not whether the contraction or the recovery is the primary occurrence; but whether we shall employ cordials to revive the patient before we employ means for inducing contraction of the uterus. Besides, the advice seems as erroneous in principle, as it is contradictory to experience, for if the organs be incapable of being stimulated during syncope, how can stimulants introduced into the stomach revive the patient; this practice shows that the stomach, at least, is excitable, and if the stomach, why not the uterus?