

SIXTEEN CASES OF POST-PARTUM HÆMORRHAGE TREATED BY THE INJECTION OF HOT WATER INTO THE UTERUS.

WITH REMARKS.

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AT the December meeting of the Dublin Obstetrical Society I gave the details of two cases of post-partum hæmorrhage treated by the intra-uterine injection of hot water. Since then, the practice has been carried out in all suitable cases occurring in the hospital and in the extern maternity in connexion with it. Appended is a table of all these cases, with an abstract of the leading features of each, for the preparation of which I am indebted to Dr. J. C. Cameron, of Montreal, who is at present studying here. These details speak

for themselves. I shall merely add—1st, that we do not, as a rule, employ hot water in cases of post-partum hæmorrhage till the application of cold has failed to arrest it; 2nd, that it is most markedly beneficial in the case of weakly, delicate women, and in those in whom, profuse hæmorrhage having been checked, blood continues to be lost in small quantities, the uterus alternately relaxing and contracting; 3rd, that, for its successful application, the tube of the syringe must be carried fairly into the uterus; 4th, that the temperature of the water must not be under 110°, and that it may safely be used at 115°.

In no single instance did any unpleasant symptom follow; and all the patients, with the exception of case No. 9, stated that they experienced feelings of the greatest comfort and relief from the treatment. In the case referred to, in which pain followed the injection of the hot water, we were uncertain whether the ovum had been expelled or not. I had but once previously injected hot water in a case of abortion, but this woman was in a very critical state; she was cold and faint, and I stated to the class that if the ovum had not come away the hot water might stimulate the uterus to expel it, and that if the uterus were empty I believed it would arrest the draining which still continued. This case is, in my opinion, a very important one, and will lead me for the future to treat hæmorrhage occurring in cases of abortion in a similar manner.

Cases in which Hot Water was injected into the Uterus for Post-partum Hæmorrhage.

No.	Date.	Name.	Age.	No. of pregnancies	Hours in labour.	Minutes in third stage.	Pulse before injection.	Pulse immediately after.	Pulse next day.	Intern or extern patients.
1	Nov. 20th, 1877	Mary M.	33	14	2½	15	162	120	112	Intern
2	" 30th "	Mary M.	25	3	17	15	152	130	118	"
3	Dec. 10th "	Rosa F.	20	1	22	10	145	90	95	"
4	" 16th "	Bridget M.	28	5	13	15	130	110	100	Extern
5	" 22nd "	Sarah S.	29	1	10½	30	140	126	130	Intern
6	" 24th "	Eliza D.	21	1	24	5	150	120	90	"
7	" 27th "	Julia D.	24	3	17	10	130	110	105	"
8	" 29th "	Margt. R.	35	1	10	15	140	128	130	Extern
9	" 30th "	Maria D.	26	3	—	—	120	110	106	Intern
10	" 31st "	Ann G.	30	7	8	5	144	120	104	Extern
11	Jan. 2nd, 1878	Agnes W.	19	1	10	2	160	132	120	"
12	" 3rd "	Mary K.	30	3	5	5	120	90	104	"
13	" 4th "	Margt. F.	28	1	15	15	160	140	120	"
14	" 14th "	Jane W.	29	5	7	5	110	88	74	Intern
15	" 16th "	Mary M.	24	3	16½	15	Could not be counted.	106	72	"
16	" 19th "	Ellen F.	36	12	—	—	120	108	110	"

CASE 1.—Profuse hæmorrhage came on immediately after the placenta was expelled. Cold was applied to the vulva, fundus, and thighs; ergot was administered, and cold water was injected into the vagina; trickling notwithstanding kept on, until the patient was cold, clammy, and almost pulseless. The vaginal tube was then passed well up to the fundus, and water at the temperature of 110° F. injected by Dr. Atthill. The woman began to rally immediately, hæmorrhage ceased, the pulse improved in volume and became less frequent, and her life was saved. Recovered without a bad symptom.

CASE 2.—Hæmorrhage was mainly *internal*. Three hours after delivery she seemed weak, and was noticed to sigh heavily. The uterus was found distended with clots, which were readily expelled by applying friction and pressure to the fundus. Trickling went on incessantly, which ergot, cold, and pressure failed to check. Hot water was at last injected; bleeding ceased immediately, and the patient experienced instant relief from severe uterine pain which had caused her great suffering from the time of delivery. A fibroid existed in the anterior wall of the uterus in this case.

CASE 3.—Trickling came on shortly after the expulsion of the placenta. Ergot was administered by the mouth and hypodermically, but without effect. The injection of hot water at once stopped the bleeding, and the patient made a rapid recovery.

CASE 4.—The head was detained at the brim by undue prominence of the promontory of the sacrum. Forceps were applied. After the expulsion of the placenta oozing kept up, which administration of ergot hypodermically failed to check. The injection of hot water stopped the hæmorrhage immediately and completely. Recovery excellent.

CASE 5.—Forceps were applied on account of delay in the second stage. Several large subperitoneal fibroids existed on the upper border and anterior surface of the uterus. After the expulsion of the placenta, which had been allowed to remain for half an hour, the uterus remained very flabby, and showed no tendency to contract; and oozing kept up. Ergot, hypodermically and by the mouth, failed to produce any effect; hot water was accordingly injected, with immediate and complete success. No cold applications were made in this case.

CASE 6.—Forceps were applied for delay in the second stage. Considerable hæmorrhage came on an hour after delivery, which pressure, ergot, and cold failed to check. Hot water was injected, and the uterus contracted at once. A short time afterwards it relaxed somewhat, and slight trickling went on for two hours. A dose of ergot made the uterus contract, and no more bleeding occurred.

CASE 7.—After delivery, oozing went on so quietly that it was not noticed. At the end of six hours a quantity of blood had escaped into the bed, and the uterus was found to be relaxed, and nearly up to the ensiform cartilage. A quantity of serum, mixed with small clots, was escaping from the vagina. The pulse was very weak. Pressure failed to dislodge the clots. Hot water was injected, the uterus contracted somewhat, bleeding ceased, and the pulse improved in volume. Infusion of ergot was given every hour, and at the end of six hours and a half a clot as large as a placenta was expelled; the uterus contracted firmly, and no more bleeding occurred.

CASE 8.—Profuse hæmorrhage came on immediately after the expulsion of the placenta. Pressure and friction over

the fundus, cold applications to the thighs, vulva, and fundus, ergot by the mouth, the injection of cold water into the vagina, and, finally, into the uterus, were all tried in succession, and utterly failed to stop the bleeding. A trickling, not much, but persistent, kept on in spite of everything. Hot water was at last injected; the uterus contracted, and the bleeding was controlled. In this case there was a severe laceration of the perineum, and the pulse and temperature remained high for a week, but eventually a good recovery was made.

CASE 9.—An abortion at the third month. In her first pregnancy the child was born alive; in her second, she aborted at the sixth month. On the present occasion bleeding began on Dec. 26th, and continued slightly, with little pain, till the 30th at noon, when severe pain in the back and bearing-down pains came on. At 5 P.M., a great gush of blood and clots made her very weak. She reached hospital at 7.15, faint and helpless, her clothes dripping with blood. On examination, the os was found to be very high up, and patulous. Although nothing could be felt protruding, blood flowed freely. Hot water was at once injected into the uterus. Instead of a feeling of relief and comfort, such as was experienced in the other cases, severe pains, similar to labour pains, at once set in, the uterus contracted firmly, and no more bleeding occurred.

CASE 10.—A delicate, anæmic, phthisical woman. Has had six miscarriages, this time having borne her first living child. A great gush of blood came before the placenta was expelled, deluging the bed and reducing the pulse to a flicker. The placenta was at once expressed, along with the clots, which filled the uterus. Pressure and ergot failing to check the bleeding, cold water was injected into the uterus; slight contraction was produced, but the ooze still kept up. Hot water was at length injected into the uterus; firm contraction came on at once, the clots were expelled, and bleeding ceased. The pulse improved in volume markedly, and in four hours had fallen to 90. This patient's life was in imminent danger.

CASE 11.—Premature labour at the eighth month. Hæmorrhage began immediately after the birth of the child, and the placenta was expressed at once. Pressure, cold, and ergot failed to stop the bleeding, and in half an hour the woman was blanched and almost pulseless, the uterus alternately relaxing and contracting. The clots were removed as much as possible, and hot water injected; slight contraction took place, but the ooze still went on. A portion of membrane which had been nipped by the os internum was then removed, and cold water injected into the uterus, but the ooze still went on. Hot water was a second time injected, and the uterus, responding to the stimulus, contracted firmly, expelled clots, and no more bleeding occurred. In three hours the pulse had fallen to 120, and had improved in volume.

CASE 12.—Profuse hæmorrhage came on immediately after the birth of the child, and the placenta was at once expressed. Ergot, hypodermically and by the mouth, and cold applications, failing to check the ooze, hot water was injected. The uterus contracted firmly, and the bleeding stopped. Slight oozing came on again for an hour, and then finally ceased.

CASE 13.—The foetal head was large and much ossified. After five hours' arrest in the second stage forceps were applied. After extraction of the child the uterus contracted well, but several gushes came on just before the expulsion of the placenta. After the placenta came away the contraction remained good for fifteen minutes, when suddenly the uterus relaxed, and as suddenly contracted, sending a great gush of blood fully a yard from the bed. Friction and pressure were applied to the fundus. Ergot was given, and cold water injected into the uterus. Notwithstanding all this, another heavy gush deluged the bed and floor, and the woman lay in a very critical state, blanched and fainting. Hot water was injected without delay, and the uterus contracted firmly; bleeding ceased, and the patient recovered without a bad symptom.

CASE 14.—Patient has in previous labours been subject to post-partum hæmorrhage. Immediately after the expulsion of the placenta two gushes of blood came, followed by a continuous ooze. The uterus was soft and flaccid. Ergot was given, cold applied to the vulva, and cold water injected into the uterus; but the ooze kept up, and the pulse rose from 90 to 110, and grew feebler. Hot water was then injected, and bleeding ceased. After the lapse of an hour some clots were expressed, and no more bleeding occurred.

CASE 15.—A very flabby, anæmic patient. After the expulsion of the placenta, the ooze kept up slightly, in spite of ergot and cold applications to the vulva, till the woman became blanched, and the pulse so feeble that it could not be counted. Hot water was injected, and bleeding ceased, and the pulse improved in volume. A slight ooze returned after an hour, but a hypodermic injection of ergot stopped it. Next day the pulse was of good volume. The patient made a good recovery.

CASE 16.—An abortion at the fourth month. Received a blow on the abdomen on the 17th; pains began on the 18th, and at 11.30 P.M. she began to bleed profusely. She lost a large quantity of blood, and when she reached the hospital at 1.30 A.M. on the 19th she was weak and blanched. The os was patulous, with the ovum protruding through it. The ovum was removed without difficulty, but the uterus was full of clots, and bleeding still continued. Pulse very feeble; hot water was injected, and the clots washed away. Bleeding ceased at once, and the pulse improved in volume. No more bleeding came on, and the patient made a good recovery.

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