

the exhibition of chloroform this source of disturbance of the uterine action is at once removed. Except in these special cases, however, I would not use chloroform in any instance where there was reason to dread the occurrence of flooding.

It must be admitted that not a few cases of *post-partum* flooding present themselves without any warning whatsoever, and where consequently we could not have anticipated it unless by the experience of the woman's previous labors. If flooding followed delivery in any former confinement, it should then be our duty to adopt precautionary measures against it, and at the same time be prepared to meet it.

The prophylactic measures against *post-partum* hæmorrhage are based on the principles I have just endeavored—though very briefly—to point out. It is always desirable that the circulation should be not only free from excitement, but, moreover, not in an excitable state when labor comes on. "That disturbance of the circulation," writes Mr. Robertson, "plays an important part in uterine hæmorrhage, and that it consequently deserves the especial attention of practitioners, is most true." In cases where the history of the patient's previous labors lead us to apprehend flooding, attention to the pulse is of paramount importance. To secure the desiderated quietude of the vascular system, all that is required in ordinary cases is open-air exercise, abstinence from stimulants, and regularity of the bowels; in addition to these means, we might give digitalis and cooling medicines; and in full plethoric persons, I have no doubt the abstraction of blood from the arm, as recommended very strongly by La Chapelle (and at one time commonly resorted to in the management of pregnancy), would be very serviceable. Although the use of the lancet is still out of favor—or rather out of fashion—I am one of those who believe it will yet regain its true place as one of the most potent of our therapeutic agents. To Dr. Gooch belongs the merit of directing the special attention of practitioners to the important part which the circulation plays in the production of *post-partum* flooding, but I long ago expressed doubts of the propriety of styling the hæmorrhage where this symptom is prominent "a peculiar form of hæmorrhage,"* as it does not differ essentially from hæmorrhage the result of simple atony of the uterus, and, once it sets in, is to be treated on the same principles.

We occasionally meet with pregnant patients in whom rapidity of the circulation depends on causes quite the opposite of plethora or over-sanguification. Here a line of treatment, totally differing from that above described, must be pursued.

Where the premonitory symptoms, or the result of previous labors, furnish grounds for expecting hæmorrhage, there are two means which should be employed in addition to the slow extraction of the fœtus, and following down of the uterus with the hand, &c. These two are, letting off the liquor amnii by artificial rupture of the membranes, and the adminis-

tration of ergot of rye. That the discharge of the waters early in the second stage increases the energy of the pains, and favors the tonic contraction of the uterus after its contents have been expelled, not only coincides with every-day experience, but is in accordance with the well-established law of uterine contraction, that to be permanent and enduring it must be gradual and not sudden. The principle, then, on which this practice rests, is perfectly clear and rational, and the practice itself has been recommended by many obstetric writers, some of them of the highest eminence. Both the principle and the practice deduced from it were clearly and fully described by Levret over 110 years ago. Dr. Robert Lee, in his lectures upon Midwifery, published in 1839, (in *London Medical Gazette*), very strongly advocates rupturing the membranes early in labor where we have reason to fear *post-partum* hæmorrhage, and he narates some striking examples of the good effects of the measure. That so comprehensive a writer as Dr. Churchill should make no mention of the practice in question appears to me very strange, and supplies some palliation for the complete silence of Dr. Whittle and Dr. Atthill on the same point. The time to select for this puncture of the membranes is when the os is nearly fully dilated—the presentation, of course, being known to be a head or pelvic extremity. It is important for the success of the measure that the waters drain off, and to aid in this object it may be requisite, as Lee points out, to push up the head during a pain.

Where hæmorrhage after delivery is threatened, Levret advises the patient to be restricted to a lying posture from the beginning of the labor, in order, as he says, to guard against acceleration of the process; but another advantage from this precaution, which Dr. Dewees pointed out, is that it tends to keep the circulation more tranquil. Denman gives quite the opposite advice. He writes:—"When from former events there is reason to be apprehensive of hæmorrhage subsequent to the exclusion of the placenta, that has been altogether prevented, or very much lessened by delaying the time of the patient's going to her bed till the child was upon the point of being born, or even suffering it to be born while the woman sat upon the lap of one of her attendants." Great though my respect is for the authority of Denman, still I must candidly admit he leaves himself open to the severe but just criticism which Dr. Dewees pronounces on this piece of advice:—"Now," Dr. Dewees writes, "we would ask any one at all conversant with the economy of the uterus during and after labor; how an erect position, and the sudden evacuation of the waters at the moment the child was about to be born, can possibly contribute to the only circumstance at all available in the case under consideration—namely, the permanent contraction of the uterus? In the first place, an erect position will always be attended with a quicker circulation than a recumbent one; it will permit the waters to escape with more suddenness and rapidity than a horizontal and, consequently, the risk of atony must be increased."

In Dr. Hardy's and my "Midwifery," we devote

* McClinton and Hardy's Midwifery, p. 217.