

Philadelphia, reports a number of cases successfully treated by the hot vaginal douche. In the *American Journal of Obstetrics* for 1876 the assistant surgeon of the New York Woman's Hospital strongly advocates the use of hot water injections, and cites several cases in support of its value. Dr. Emmet of this same hospital, in uterine operations controls hemorrhage with hot water injections in many cases. In the *London Lancet* for Aug. 23, '79, Dr. Arthur Perigul reports a severe case of flooding in abortion. The os would not admit the finger, the hot water injections not only stayed the flow but dilated the os so that the finger could be introduced and the placenta removed. In the *American Journal of Obstetrics* for April last, there are some abstracts from the German Archives of Gynecology, detailing experiments upon rabbits, conducted by Dr. Max Runge. Water was injected into the uterus of the rabbit at 122° Fah.; this caused vaginal contraction of the uterus. He observed that the hotter the water the more vigorous the contraction, but the duration of the contraction was correspondingly shorter. A still higher temperature destroyed entirely the contractility of the uterine fibre. Max Runge makes this deduction from his experiments "In case of uterine hemorrhage dependent upon atony of the organ the injections of hot water are a most powerful and reliable means to excite contractility of the uterine muscles."

I now relate a case of severe post partum flooding, occurring in my practice about a year ago. Mrs. P., æt. 35 years, confined at full time of her third child. She was a small, delicate, pale woman; her previous history not assuring, having suffered in her former accouchements from excessive flow. I found the os well dilated and all normal. In 1½ hours the child was born. Half dr. fld. ext. of ergot was given and gentle pressure maintained over the uterus. No pains occurring, after a lapse of half an hour I gave brandy; a slight pain soon followed, crepitation was felt under the hand, and the placenta came away. It seemed to me to be a very small one. However, moderate contraction following I proceeded to apply the binder. I observed that the hemorrhage reappeared briskly. I then gave ergot, applied cold externally, and examined for clots, when I found scatted masses of attached placenta. These were carefully and thoroughly removed. The stimulus of the hand in

the uterus caused slight contractions, yet the flow was alarming. My patient, although hopeful and courageous, began to feel faint and could not see well. My experience with the whiskey and the tincture of iron made me feel the weakness of the one and the danger of the other. All other means being exhausted I resolved to try hot water, and to each pint I added an ounce of powdered alum suggested to me by seeing some lying on the table. The usual precautions about air being taken, I slowly injected into the uterine cavity until a pint was used; the flow ceased instantly without pain or shock to the patient, or any signs that air had entered the sinuses. Hemorrhage reappeared at intervals, but the syringe being left in situ and hot alum water in readiness, the injection of a few ounces checked it at once. This patient made an excellent recovery. I was very favorably impressed with the action of the hot water compared with that of the iron, and shall return to its use with confidence when occasion may require. My fellow practitioners who have used hot water speak favorably of its action.

From a study of this subject, from the evidence afforded, and my own experience, I have reached the following conclusions:

1. That we possess two powerful topical remedies for post partum hemorrhage.
 2. That the iron is the more powerful to control hemorrhage, but by far the more dangerous one.
 3. That hot water is nearly equal in hemostatic power and without danger.
 4. That we are rarely justified in using the iron before the hot water has been tried.
 5. When the hot water fails it is the *duty* of the accoucheur to use the iron.
 6. The hot water has these advantages over the iron; it can always be procured; it washes away all clots, leaves the uterus clean and therefore no danger from thrombus or septicæmia.
 7. Alum is a valuable addition to the hot water, securing two forces, viz: the contraction of the uterus and the coagulation of the blood.
 8. That we have not yet reached perfection in the treatment of the hemorrhage, and that abundant ground is open for observation and research.
- In conclusion although we may not rest, we may be thankful that obstetrics is advancing. The use of the forceps is no longer empirical but rational,