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The Treatment of Internal
Hæmorrhages.

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NERVOUS DISEASES IN THE SUMMER
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THERE are few more trying positions which the practitioner of medicine can find himself suddenly forced to occupy than that of facing a severe internal hæmorrhage—cerebral, pulmonary, gastric, intestinal, or uterine. At the lonely hour of midnight and far away from consultation he may be called upon to act; and it is well to have one's mind already made up as to the course that should be pursued in the various forms of hæmorrhages, for "to be forewarned is to be forearmed." It is with the view of summing up our knowledge on this subject, and with the hope of adding a few new points, that this contribution is offered to the medical profession.

In the first place, it is very apparent that the amount of blood that will flow through a rent in the wall of any vessel must be greatly influenced by the total amount of blood in the system and the amount of pressure upon the vessel from within. This being the case, the first step to take in dealing with a hæmorrhage is to cut off the supply of liquids. In this way the amount of blood is kept down, while it becomes thicker in quality and better fitted for the

forming of a good, firm clot in the torn or ruptured vessel. Another step in the same direction is to reduce the volume of blood by actively eliminating water from the system. The hypodermic injection of pilocarpine rapidly unloads the body of water and inspissates the blood left behind, lessening thereby the freeness of the flow. This would not, however, be suitable in cases of pulmonary bleeding. Other diaphoretics might be selected, according to the judgment of the physician, or the nature of the case and the condition of the patient.

Another group of remedies is of much value in dealing with such cases. Those purgatives that produce copious watery stools, and at the same time are not irritating or depressing, must be placed high on the list of things we may use for the relief of the sufferer intrusted to our charge. Of these purgatives there is none so good as Epsom salts—the sulphate of magnesium. When given in saturated solution, without water, in free doses, and oft repeated, very free watery evacuations are produced, the amount of fluid in the vascular system is speedily lessened, and the hæmorrhage to this extent controlled. By maintaining this action for some time, the ruptured vessel has time to heal, because the pressure is largely taken off it, and it is put into the condition of rest. In addition to this, however, the blood is thickened. In some cases of cholera—sporadic or epidemic—where the rice-water stools have been very abundant, the blood becomes so reduced in volume and so inspissated as not to flow from a wound made in a large vein. In the event of the hæmorrhage being due to the ulceration of typhoid fever, this plan could not be had recourse to, although I have used it with advantage in the bleeding of gastric ulcer. In the hæmorrhage, often so free, from soft and rapidly growing uterine fibroids, it is specially useful, if continued long enough—say for months.

Some persons have a strong tendency to bleed, and any hæmorrhage is hard to stay. The mucons membranes of the nose, stomach, bowels, or bronchial tubes ooze away, and though the flow may not be very rapid at any one time, the total amount lost is very considerable. I once saw a girl of thirteen brought almost to death's door by such a hæmorrhage from the mucons membrane of her lip. In purpura we know how readily patients suffer from subcutaneous extravasations. For this form of slow, continuous oozing the following formula may be found highly serviceable: Mix one ounce each of absolute alcohol and oil of turpentine in a glass or Wedgwood mortar. To this add very slowly, stirring all the while, one ounce of sulphuric acid. When all chemical action is over, the mixture may be bottled. Of this, ten or fifteen minims may be ordered every two, three, or four hours as needed. I have found these "black drops" of very great value in some exceedingly troublesome cases.

In the event of a very severe post-partum hæmorrhage the medical attendant may try ergotine hypodermically, or hot vaginal or rectal injections; but these may fail. It is a belief, not yet quite dead, that the uterine sinuses are closed by clots. This is quite erroneous. The uterine vessels and sinuses are interlaced by muscular fibers, and it is the contraction of these that arrests the hæmorrhage. This muscular tissue, as it were, ligates the vessels that would bleed; and so long as the contraction is good there is no danger. Now, for the maintenance of this tonic action of the muscular tissue in the uterus I have found the application of heat to the lumbar portion of the spine very useful. It stimulates this portion of the nervous system by bringing more blood to it. There is a greater influx of nerve energy to the uterus and contraction is brought about. It is true that the uterus seems to be very independent of the spinal cord, and labor may take place in a paraplegic. This does

not, however, invalidate the fact that heat—applied to the spine by a large sponge dipped into hot water—does much good in the way of rousing the uterus to action. But when all things fail, as fail they will at times; when ergotine, acetate of lead in large doses, hot injections, and heat to the spine disappoint us, we have one last resort: Tampon the uterus and vagina thoroughly with iodoform gauze, or, if this is not at hand, some cloths to which glycerin is added. This plan I am quite sure will not fail. The bleeding is soon arrested, the uterus begins to contract, tone in its walls is secured, and one can feel at ease that the patient is out of all immediate danger.

As a means of arresting hæmorrhages and gaining time for other remedies, I would suggest the following plan, one great feature of which is that it is always available and does good. It is applicable to cases of capital operations on the body, such as the removal of large and vascular tumors from the neck, the female breast, etc. The plan is simply to tie bands around the legs and arms close up to the body. This arrests the return of blood to the body, while the flow of blood into the limbs still goes on. By this means a very large amount of the blood in the body is rapidly collected into the four extremities and the pressure taken off the central vessels. One day, when in my last year as a student, in 1879, I was walking along the streets, when I came upon an excited little crowd of people. I saw that one of the number, a young man of about thirty years, was bleeding freely from his lungs. I had nothing with me, but had just been thinking about venesection and the swollen condition of the veins in the arm. I seized the present opportunity, tore up a handkerchief, and tied the strips very firmly around the four extremities. The results were very gratifying. Ever since I have made extensive use of these bands, and now feel a good deal of confidence in recommending them to others.

I have already mentioned the usefulness of the hot sponge to the lumbar region in post-partum hæmorrhage. Now, in other cases of internal hæmorrhage—as from the mucous membranes of the stomach, nose, and bowels—the spinal ice bag is no mean therapeutic agent. It induces anæmia of the spinal cord and a marked dilatation of the surface blood-vessels. The internal strain is reduced, and consequently the hæmorrhage lessens.



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