

method. The nozzle was taken out of the husband's arm, and he was bled about ten ounces. This blood was thoroughly beaten with a twig, and strained through a cambric handkerchief. The temperature was kept up by immersing the vessel in water of the normal heat of blood, and about six ounces injected, making eight ounces altogether. A small quantity of spirits of ammonia was mixed with the injected blood, as well as with the water first used to fill the tube, thus a tendency to clot was prevented, and a diffusible stimulant introduced into the circulation. In spite of the utmost care and caution in regard to all the details, alarming symptoms supervened. The temperature of the body fell to such an extent that the finger nails, lips, and nostrils became livid, the "goose-skin" showed prominently, the pulse was scarcely perceptible and weak, and the patient complained of feeling exceedingly cold. It was impossible at that time to procure a thermometric test, but the physical signs were such as to indicate a speedy death unless the animal heat could be restored, and the circulation stimulated. Brandy and ammonia were freely administered. Hot fomentations were applied to the legs, arms and trunk. Friction was used vigorously to the limbs until nature began to react, and assert its power. When the heat began to return and reaction set in, violent hæmoptysis followed, and large quantities of blood and mucus were coughed up. Vomiting brought up a small quantity of blood. It is possible, however, that this had been swallowed, when it escaped into the throat from the lungs. A few hours afterwards blood was found in the stools, probably finding its way to the intestines by the mouth. Violent pains were felt in the limbs, flying in an erratic way from one to the other, and the uterus was excessively tender upon external pressure. In a few hours after the operation, the menses came on with copious discharges, (or possibly it would be more correct to call the flux menorrhagia,) although they had only been absent four days. It became evident to me that more blood had been thrown into the system, than it could temporarily dispose of or find room for, and that nature sought relief from its superabundance through its weakest barriers, or in other words, the blood vessels gave way to the strain on their capacity. It is needless to say that Dr. M. and myself passed an anxious and unenviable half hour, in watching and assisting

the patient's excellent nurses by every means at our command, to prevent a fatal termination to our efforts. The sudden fall of temperature has not yet been accounted for in my own mind. In all the cases I read of the temperature rose; Why the difference in this instance? The injected blood was of normal heat. The ammonia could undergo no decomposition to produce such results. The blood could not chill sufficiently *in transitu* to lower the heat of the whole body to such an extent. It was not a "nervous" chill, for the woman had been perfectly cool, and showed no signs of trepidation during the operation, at the same time there was an absolute want of heat. Whence this coldness? It may have been from a partial shock to the heart, consequent on distension, seeing that an unusual demand had been made not only on its capacity, but also on its vital action, which it was unable to fulfil, hence languid circulation, imperfect oxidation of blood, and thus a partial suspension of natural processes for the production of animal heat. In about 20 hours afterwards violent reaction set in, and fever supervened. The pulse rose to 120, and the temperature ranged from 97° to 99°. Copious perspiration followed the rise in heat. The cough was slight and dry. No blood from the lungs flowed after the first 48 hours, and the expectoration ceased. After a few days the patient enjoyed her meals more than she had for months, and not only has been able to take considerable exercise about the house, but has been visiting friends a number of miles from home. The operation was performed on the 23rd of January, and it yet remains to be seen what success will result permanently. Auscultation and percussion indicate no change in the parts affected. Will the diseased lungs heal and cicatrize, as many have done by nature's efforts? will the tubercular deposit and disintegration only receive a temporary check from the introduction of healthy and active corpuscular workers into the system?

The second case was also a woman of middle age, residing about six miles south of Woodstock. She had been an invalid about a year with phthisis pulmonalis, and for a short time previously under the care of Dr. A. H. Millar, of Burford village. A healthy young man of 19 years of age was selected to furnish the blood, and the same method was adopted. No such results as the