

Thus, amongst the persons who had only been vaccinated in one place, and the cicatrix was imperfect, twenty per cent. took the small-pox; whereas, when there were four cicatrices, and these were good, the number who took small-pox after vaccination was only one per cent. The medical public had relied upon the circumstance of Jenner having at one time vaccinated in only one place: but he (Mr. Marson) knew that Jenner did not confine himself to one, for he had seen a patient whom Jenner had vaccinated in 1806, and the person had four cicatrices.—*Assoc. Med. Jour.—N. Y. Journal of Medicine, November, 1853.*

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TRANSFUSION OF BLOOD.

In this memoir, Dr. Polli collects twenty-three cases in which the operation has been practised in the ordinary way, that is, with human blood. In five of these, death happened, either because the operation was too late, or because death was about to happen from some independent and inevitable cause; in all the rest, life was saved—in many, from the very jaws of death. In no one case did the operation give rise to any serious inconvenience.—The majority of the cases were those of parturient females, reduced to death's door by flooding; the rest, those of persons suffering from other kinds of hemorrhage, induced upon the hemorrhagic diathesis.

Dr. Polli also enumerates some cases in which the *blood of animals* was successfully substituted for that of man. Four of these are on the authority of M. Denis, who wrote his *Lettres sur la Transfusion* at Paris, in 1667.—Another is taken from an Italian work by Dr. Manfredi of Lucca (*De Nova et Inaudita Medico-Chir. Operatione, &c.*, Romæ, 1668). Another, by MM. Tower and King, from the *Gaz. Medicale de Paris*, p. 65, 1818. The particulars of the last two experiments are not given, and we are only told that the blood of a lamb was employed in the one, and that of a calf in the other, and that the result was successful. The particulars of M. Denis's experiments are as follow:

*Exp. 1.*—M. Denis took ten ounces of blood from the arm of a strong and healthy butcher, aged forty-five, and injected through the same opening twenty ounces of the arterial blood of a lamb, after which the butcher, without any alteration in his manners and feelings, proceeded to kill and dress the animal which had furnished the blood, and then went to the public house to dispose of the gratuity which had been given him by the operator. The next day, according to his own account, he felt in better health than usual, and he underwent the same operation with the same results.

*Exp. 2.*—Nine ounces of the arterial blood of a lamb were injected into the arm of a youth, aged sixteen, who had suffered during two months from fever, and who, from this cause, and from having been bled twenty times, lay in a moribund state, when he immediately calmed and slept, and this rallying eventuated in complete recovery.

*Exp. 3.*—A madman of eight years' standing, whose madness showed itself in attacks of complete restlessness and wakefulness of eight or ten months' duration, was treated with transfusion in the fourth month of such an attack. Ten ounces of blood were abstracted, and six ounces of the arterial blood of a calf injected in their stead, with much relief to the symptoms. Afterwards a pound of the same blood was injected. The immediate result of the second transfusion was vomiting, purging, and sweating. These ended in a sound sleep, which brought about a favorable crisis, for from this time the patient continued to improve until he was quite well.

*Exp. 4.*—The patient in this experiment was lethargic, convulsed, and almost pulseless, in consequence of a violent and protracted attack of vomiting and purging. M. Denis injected eight ounces of blood (of what animal