

his brother, he replied, "I know what it was"; and one or two other such errors occurred. In about one month our poor patient sank exhausted, becoming physically weaker and weaker, as though worn down by fever. There was no palsy, but a good deal of twitching and starting of all limbs continued during the last week or ten days of life. There was no coma or convulsion proper, nor even any change in the pupils. No ophthalmoscopic examination could be made on account of the large well-lighted room and the position of the bed.

We very urgently pressed for post-mortem examination, as we had taken the friends into full confidence throughout, both during our early times of doubt and afterwards. This was at first opposed, but afterwards, to the great credit of all concerned, full permission was given to us. The examination was made, in my unavoidable absence, by Mr. Crocker, assisted by Mr. F. Wright, my house-surgeon at the Leeds Infirmary. Mr. Wright had no knowledge of the history of the case, and I abbreviate simply from his notes.

*Autopsy June 7th, thirty-eight hours after death.*—Body fat and well nourished. Rigor mortis slight. Decomposition .....somewhat advanced. .... There was meningitis over the surface of the left hemisphere; ..... brain-substance normal everywhere except in the anterior lobe of the left hemisphere on its upper surface, where the tissue was soft, of a uniformly greyish colour, and readily broken down under the touch. .... Lateral ventricles contained a small quantity of reddish fluid. No arteritis. Heart healthy. .... Other viscera healthy, save the kidneys, which were both rather larger and paler than natural, and presented an early stage of fatty degeneration. Parts were removed for microscopic examination; but the autopsy was made in the evening, and on the next day the parts were too much decomposed for the purpose.

This case is full of interest. The mischief in the anterior lobe of the left hemisphere was attended, not exactly with common aphasia, but with a decay of conversational power. The patient looked intelligent enough, but was unable to speak more than a few words—the few spoken being, however, for the most part, quite appropriate, and varying with the questions. In a word, he was rather mute than aphasic; and this muteness and disinclination to converse (apart from any sulkiness) had been creeping on for some time. He had had two several attacks of common aphasia during the preceding six months, which, however, were transient; his sudden attack in December commenced with aphasia; and I should have added that at the outset of his final illness, Mr. Crocker, at his first visit, found Mr. X. sitting in his chair, not seeming very ill, but quite unable to reply to him for a few seconds. This was so transient as scarcely to attract much notice at the time. On the other hand, he had been able to go through with a heavy stock-taking without any errors.

Another very interesting point is the indication of the thermometer. By the thermometer alone did we learn at first that we had any serious ailment to deal with, the skin having a natural feel, and the pulse being of a natural rate. I may add, indeed, that this very contrast between pulse and temperature did more—it put us on the traces of the kind of disease that was insidiously at work. Of meningitis we had scarcely a single acknowledged symptom from first to last, except the high temperature and the initiatory headache. I should perhaps add that all evidence opposed any suspicion of syphilitic taint.

P.S.—Since the above was placed in the hands of the printer I have had a case almost exactly like it, both in symptoms and in pathological appearances, under my care at the Leeds Infirmary. I must not venture to occupy another column of THE LANCET, but I may shortly say that the symptoms were almost the same, so much so that I referred to Mr. X.'s case, and prophesied the same lesion. In my Infirmary case, as in the other, we had not so much to deal with common aphasia as with muteness and a tendency to speak in short sentences. The more we see of common aphasia, indeed, the more we see instances of its melting off into defect of memory and of mind at one end, and into faulty articulation at the other. It is an interesting fact to note that the districts of softening in both cases were rather on the upper and inner tracts of the left anterior lobe than on the outer and lower portion.

Leeds, July, 1872.

## A SUCCESSFUL CASE OF IMMEDIATE TRANSFUSION.

By J. H. AVELING, M.D.,

PHYSICIAN TO THE CHLSEA HOSPITAL FOR WOMEN.

THE following satisfactory case of transfusion proves that the old "immediate" method of performing the operation has many advantages—so many, indeed, as to lead to the belief that it must ere long be adopted by the profession. For one hundred and fifty years no other plan was known; and it is only during the last half-century that "mediate" transfusion has been in vogue. The delay and difficulty in operating and the deteriorated condition of the blood transmitted are the great objections to this latter method. If it can be shown that the immediate plan is as successful as it is simple, transfusion will assume its proper place among the remedies of the healing art, and will be used both by physician and surgeon in all cases where deterioration or loss of blood threatens extinction of life.

Mr. F. E. Webb, of Maida-vale, has kindly furnished the following notes of this case previous to the time of my being called in:—

"Mrs. W—, a small, fair lady, aged twenty-one, of rather delicate constitution, was seized with abdominal pains on the evening of March 24th. Early on the morning of the 25th I was sent for. The pains were frequent, but there were no expulsive efforts. The os was slightly dilated and the vaginal secretion abundant. Labour proceeded slowly, owing to the brim of the pelvis being narrow; and the child's head did not descend into the cavity of the pelvis until one o'clock, when sharp expulsive efforts commenced. At two o'clock I began to give her chloroform at intervals, but not to insensibility at any time, until the child was born at 3.30 p.m. As soon as the child was detached smart hæmorrhage set in. I sent for ice, gave ergot and brandy freely, and, grasping the uterus, excited it to vigorous action. The hæmorrhage continuing, I found it necessary to detach the remaining half of the placenta, which was unusually adherent to what felt like the partially inverted fundus of the uterus. This I endeavoured to replace, but without success, as I was obliged to desist my efforts at the time lest the shock should entirely extinguish life. Blood continued to flow freely, and the patient became rapidly exhausted and faint, and no pulse could be felt at the wrist. Ice in the vagina at length checked the bleeding; but, as there seemed every probability of the patient dying, the husband was requested to go for further advice. Dr. Cheadle came first, and shortly after Dr. Meadows. At this time (4.30 p.m.) there was no great amount of hæmorrhage, but we all agreed that the only prospect of saving the patient's life was to transfuse some blood into her veins. Dr. Cheadle kindly went for Dr. Aveling, knowing that he would probably have the necessary apparatus, and would be ready to perform the operation."

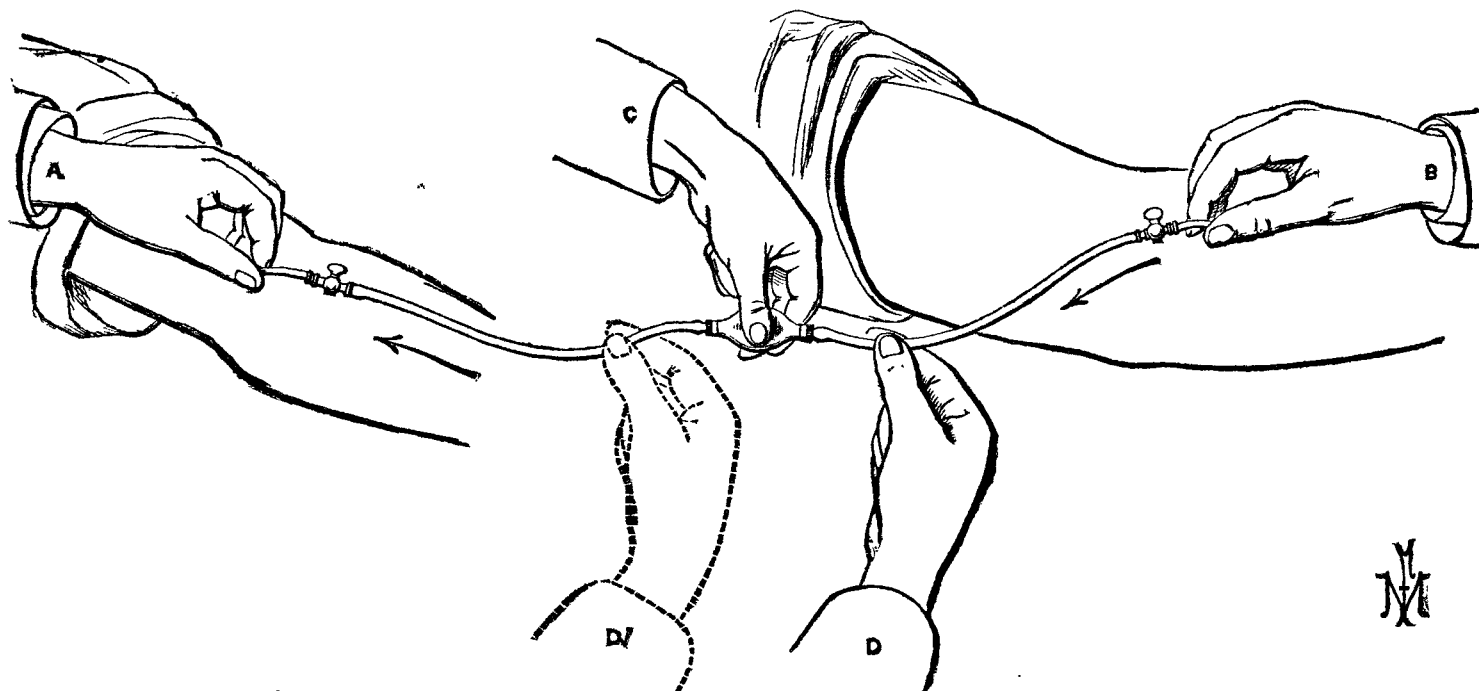
I found the patient in a most dangerous state of exhaustion, insensible, and no pulse to be found in either the temporal or radial arteries. The pupils were dilated, and did not contract when a light was placed near them. The hands and feet were cold, and the lips and face blanched. The heart's action was weak, and growing perceptibly more feeble. It was evident there was no time to be lost. A fold of skin at the bend of the patient's arm was raised, transfixed, and divided; when a large flattened blue vein became visible. This was opened, and the afferent tube with some difficulty, on account of the insufficient light of two candles, was adjusted. The arm of a coachman in the employ of the family was next prepared as in ordinary bleeding, and an incision made directly into the vein sufficiently large to admit the efferent tube. The man was then seated in a chair beside the bed, and the india-rubber portion of the apparatus filled with water having been attached to the tubes, the process of transfusing commenced. After a few drachms had been transmitted, Dr. Meadows, who kindly took charge of the afferent tube, thought he felt the skin rising near the incision, and suggested that the tube was not in the vein, but in the cellular tissue beside it. This proved to be true, and the tube had to be taken out and inserted into the vein. Its collapsed con-

dition and the want of light made this no easy task; but it was at length effected, and the transfusion then went on steadily and easily until more than sixty drachms of blood had been injected. As the operation proceeded, the pulse at the wrist became perceptible, the lips less blanched, and warmth returned to the hands. The patient also became conscious for a short time, and said she was "dying." The mental improvement was not as marked and rapid as I anticipated; but this was, perhaps, due to the quantity of brandy she had taken. In a few hours, however, she became quite conscious, spoke, took nourishment, and began her fresh lease of life. The wound in her arm healed by first intention; but it opened again a few days after to allow some pus to escape, the result of the accident already alluded to. When the patient was sufficiently recovered she was placed under the influence of chloroform, and the uterus, which had become completely inverted, was returned to its normal position. After this operation Mrs. W— improved rapidly, and is now quite well. It would be ungrateful not to admit that a large part of the success of the operation is due to the able assistance I received from Dr. Meadows and Mr. Webb, and, I must add, from the coachman, who was not only collected and cheerful, but able to make several useful suggestions during the process of transfusion.

*Mode of operating.*—The patient having been brought to the side of the bed and the arm bared, a fold of skin over a vein at the bend of the arm is raised, transfixed, and divided. The flattened vein now brought into view should be seized with a pair of fine forceps, and raised while an incision is made, and the bevel-pointed silver tube inserted into it. The tube should be filled with water, and kept full by placing the thumb over its larger opening. While the

operator is doing this an assistant should prepare the arm of the blood-donor as in ordinary bleeding, making an incision direct into the vein, and passing the round-pointed tube into it, with its point towards the fingers. This person should then be brought to the bedside of the patient, and seated in a chair. No ligatures are required. B represents the hand of an assistant holding the efferent tube, and the lips of the small wound together, and A shows the afferent tube secured in the same manner. The india-rubber portion of the apparatus, filled with water and kept so by turning the cock at each end, is now fitted into the nozzles. The cocks are then turned straight, and the operation commenced by compressing the india-rubber on the efferent side, D, and squeezing the bulb C. This forces two drachms of water into the afferent vein. Next shift the hand D to D', and compress the tube on the afferent side; then allow the bulb to expand slowly, when blood will be drawn into it from the efferent vein. By repeating this process any quantity of blood can, at any rate, be transmitted, the amount being measured by counting the number of times the bulb is emptied.

This instrument was invented and shown to the Obstetrical Society in 1864. Dr. Oré, who published an excellent work on transfusion in 1868,\* describes an apparatus similar to mine, except that it has valves. These are objectionable, inasmuch as they get out of order, and whip the blood when passing through them. He agrees with me, however, concerning the relative values of the "immediate" and "mediate" methods. He says, in performing transfusion by the immediate plan, his experience has shown that embolism is easily avoided, and that the defibrination of the blood is useless in man, as it does not coagulate for four or five minutes after it has left the vessels.



Upper Wimpole-street, June, 1872.

## OPHTHALMIC NOTELETS.

BY J. F. STREATFEILD, F.R.C.S.

### IV. ON THE USE OF A FORCIBLE JET OF COLD WATER SPRAY IN CASES OF PHLYCTENULAR OR OTHER OPHTHALMIA WITH MUCH INTOLERANCE OF LIGHT.

SOME few years ago a new method of treating the cases of ophthalmia in children with much intolerance of light was introduced into this country from Germany. The treatment was, I believe, von Graefe's. It has been very successful whenever I have tried it; but there are many objections to its employment. A large basin is nearly filled with cold water, and an attendant takes the refractory child round the waist, with its arms beside it, under his right arm. The child's head is then brought down, and held under water by the left hand of the attendant for a quarter

of a minute or more. If then the child will not, or cannot open its eyes, it is again inverted, and the head immersed. And, as I have said, it hardly ever fails soon to effect a cure. But the child, and the attendant also very probably, get very wet; and the mother of the child, and the child also I suppose, think it will be drowned. And that the cold water should be applied even to the whole face and head of the patient does not seem to be necessary.

When the grand new system of baths in the skin department of University College Hospital was started by Dr. Tilbury Fox, I resolved to ascertain for myself, with such facilities as I then had close at hand, if the cold-water treatment of these eye cases might not practically be improved. There were to be, amongst others, douche-baths of all kinds—descending, ascending, and horizontal jets. I began to make use of the latter as soon as the baths were completed; and I have not been able since that time to

\* *Études Historiques et Physiologiques sur la Transfusion du Sang.* Paris: 1868.