

Reform of maternity work has begun at the wrong end. A great deal of that work—probably 50 per cent. at least—has been taken out of the hands of the general practitioner and has been handed over to less-experienced midwives, with no better results. Maternity work used to be considered the general practitioner's specialty and was the foundation of his practice. What is at fault is the training of the student—the lack of training after graduation. A few years ago I wrote in the *British Medical Journal* that every practitioner who intended to practise midwifery should either have had a term as house officer in a maternity hospital or an assistantship with a practitioner who had a large midwifery practice. This elicited no criticism.—I am, etc.,

Erdington, Birmingham, Feb. 7.

ROBERT ANDERSON.

Expulsion of Placenta Praevia in Advance of Foetus

SIR,—With reference to the recent correspondence on this subject the following case may be of interest.

An eight-months-pregnant Burmese woman, aged 29, who had given normal birth to six children, was admitted to hospital on September 27. The pregnancy had been normal except for slight bleeding for a day in July. On the day of admission pains had begun at 6 a.m., and were accompanied by some haemorrhage. Twelve hours later the placenta was ejected with profuse bleeding. The cord was then tied but not cut, and the patient was removed by bus to a hospital ten miles distant. On the journey the cord snapped, and the placenta was thrown into the jungle by the bus conductor. On admission to the second hospital at 10 p.m. the patient had collapsed and was almost pulseless. Uterine contractions were present and foetal heart sounds absent. Vaginal inspection revealed no bleeding, but there was evidence of recent haemorrhage. The cervix was fully dilated with the head presenting, and an arm and the severed cord prolapsed—an appearance suggestive of a twin labour in which the first child had been born. After catheterization, the administration of intravenous glucose-saline, and amputation of the foetal arm, a dead child was delivered by the breech. Intravenous glycerin, anti-streptococcal and anti-tetanus sera, intravenous calcium and soluseptasine supplemented the usual treatment for shock. The following day a piece of membrane was passed and the general condition of the patient was improved. Later, however, fever developed, and the patient died on the sixth day.

—I am, etc.,

Rangoon, Dec. 1, 1937.

KENNETH LINDSAY.

Technique of Blood Transfusion

SIR,—The article on methods of giving blood transfusion by Dr. H. F. Brewer in the *Journal* of January 29 (p. 241) prompts me to refer to a few practical points.

Apropos of technique, I can only speak from experience of three methods—namely, (a) the funnel gravitation method; (b) Keynes's flask; (c) Jubé's syringe. The first two have been described in detail by Dr. Brewer, but I am unable to agree with his method of using Jubé's syringe, and, I think, it is not the method suggested by the designer.

I have used this syringe (5 c.cm.) on many occasions during the past ten years for transfusion of undiluted blood direct from donor to recipient, and have found it satisfactory in all cases where the donor was of robust type with large veins. I use sterile liquid paraffin to flush out the syringe and fittings and have a second syringe in readiness if necessary. A pneumatic tourniquet is fixed to the arms of both persons, and after infiltration of a small area of skin with 1 per cent.

novocain the largest-size cannula is inserted into the vein of the donor pointing against the flow of blood, and in the opposite direction in the recipient. No incision of the skin is made, as by doing so one loses the natural elastic grip which the skin exerts on a large needle (excepting those frequent cases in which the recipient's vein must be completely exposed, and for these I would recommend the citrate method). The syringe is filled with blood from the donor and the liquid paraffin ejected immediately before the fitting—on the recipient's side—is connected, to avoid any air embolus. The suction and plunging movements of the syringe must then be carried out as quickly as possible, when it will be found that 250 to 300 c.cm. of blood can be given within five or six minutes. The only difficulty I have encountered is clotting in the needle of the recipient, but this does not usually arise until about fifty syringe-fuls have been administered. This method is perhaps difficult to begin with, but, like most operations, technique improves with experience. In practised hands I believe it is one of the best methods at our disposal for the repeated administration of blood, and this can be taken from the same donor—a valuable consideration when one has not an organized team of donors to draw from.

For those who are only called on to carry out blood transfusion infrequently I would recommend Keynes's flask, using citrated blood, or a flask and a three-way 50-c.cm. syringe (specially made for the purpose). The disadvantages of the citrate method are: (1) It is not an infallible remedy against clotting. (2) Exposure to air destroys some of the blood platelets—a serious matter in purpuras and certain forms of anaemia. (3) There is greater risk of contamination. (4) Reactions appear to be more frequent after using citrated blood.

With regard to the typing of blood it is not necessary to use any stock grouping sera and it is not advisable (as Dr. Brewer points out) to depend on this test alone. The best practical results will be obtained by testing the serum of the recipient against the corpuscles of the donor, and it is also advisable to test the serum of the donor against the corpuscles of the recipient. By this method the presence of minor agglutinins in the respective sera can be detected and the possibility of subsequent reaction in the patient further eliminated.

We are all agreed on the value of blood transfusion, even though we may differ slightly on the indications. Out of four cases recently treated in hospital (diagnosed as secondary anaemia and debility) three had 20 per cent. haemoglobin and one had only 15 per cent. (Haldane's method). None of these patients received a transfusion, although it was indicated in all, owing to the failure to obtain donors. The patients themselves made a fair recovery, though this was naturally slow and prolonged. The point, however, I wish to stress in referring to these cases is that it is difficult to decide when a transfusion becomes "imperative," and it may be of interest to some readers to know that a patient with secondary anaemia, a haemoglobin of 15 per cent., and red cells 1,280,000 per c.mm. could even exist.

The fact that patients so seriously ill in a Poor Law hospital did not receive a blood transfusion elicits the question, Why? The answer is simple: Donors could not be procured. This is a matter which might receive attention from the Public Health Department. Pending the advent of an organized scheme I am afraid that such a valuable remedy as blood transfusion will continue to remain a privilege for the minority of our sick population, and, as a therapeutic measure, will still be conspicuous by its absence in the practice of Poor Law and other hospitals.—I am, etc.,

J. F. O'CONNOR, F.R.C.S.I.

Limerick County Hospital, Feb. 7.