CORRESPONDENCE

A BLOODLESS FIELD WITHOUT HYPOTENSION

Sir,—I write to ask whether any of your readers have encountered a phenomenon which, if it prove regularly obtainable, may be a more acceptable method of achieving a bloodless field of operation than those at present in use. The phenomenon consists of a slight fall in systolic blood pressure (10–20 mm Hg), without alteration of the diastolic pressure, occurring in patients who are horizontal, and associated with a virtually bloodless field.

I have seen this state in patients who have been given ordinary premedication plus chlorpromazine or promazine 30–50 mg, intramuscularly, 1½ hours before operation, and who have received at operation a very dilute and slow intravenous infusion of one of the hypotensive drugs. The technique of anaesthesia appears to be immaterial.

In a recent lumbar sympathectomy, this phenomenon was obtained for 30 minutes with 70 ml of a 0.05 per cent solution (35 mg) of phenacylhomatropinium (Trophenium), the total haemorrhage being less than 10 ml. In another case, one in which the middle ear was being explored and haemorrhage was interfering with the surgery, excellent haemostasis was maintained for 3 hours with 380 ml of a 0.05 per cent solution (190 mg) of camphor sulphonate (Arfonad).

In my few cases, the reversal of the state has been immediate on termination of the infusion, tachyphylaxis has not occurred, and the phenomenon has been seen in young adults with moderate blood pressures, such as are usually resistant to the more orthodox methods of hypotension.

Since there are few cases in my practice in which deliberate hypotension is induced, I should be very glad to know if others have encountered this peculiarity.

Because, in this condition, blood flow in some parts, if not the whole, of the body is obviously altered, there is a potential risk of ischaemic damage to vital organs; however, with a blood pressure altered but little and the patient horizontal, it seems possible that the risk is less than with other techniques of induced hypotension. If others find that the phenomenon can be produced regularly, it may well prove a useful technique in suitable cases.

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COMPARISON OF SEVEN INTRAVENOUS ANAESTHETIC AGENTS IN MAN

Sir,—Dr. J. S. Ruddell has commented in your correspondence column (Brit. J. Anaesth. (1957), 29, 472) on an apparent inconsistency between our conclusions reached in an article published in your Journal and one entitled “The Physiological Effects of Intravenous Anaesthesia on Man” in the Canadian Anaesthetists’ Society Journal.

May I emphasize first that the paper in the Canadian Anaesthetists’ Society Journal analyzes a number of additional parameters which were not touched upon in the other publication. I am making this point because from the wording of Dr. Ruddell’s letter it might be erroneously concluded that the same experiments were republished in the Canadian Anaesthetists’ Society Journal. This is not so. As far as tidal volumes and minute volumes of respiration are concerned, hexobarbitone compared favourably with the other agents, and this is brought out in the respective tracings which are reproduced in the publication. However, there was marked irregularity of breathing patterns, crowing, periodic respiration and spontaneous movements of the extremities—all of which were discussed in the first paper. These were incidental manifestations to which we referred in the statement to which Dr. Ruddell objects.

The paper in the Canadian Anaesthetists’ Society Journal dealt in addition with cardiac output, oxygen consumption, etc., factors which were not being considered in the other publication. Respiration was discussed only from the point of view of adequacy or otherwise of pulmonary ventilation, which indeed was satisfactory.

It appears that the misunderstanding arises from the fact that we were not sufficiently specific