CORRESPONDENCE

CONDUCTION ANAESTHESIA, BLOOD PRESSURE AND HAEMORRHAGE

Sir,—Blood loss studies in patients anæsthesized by epidural block are scarce, and Dr. Bond is to be congratulated on his contribution to the literature (Brit. J. Anaesth. (1969), 41, 942).

He described an interesting clinical investigation in which 45 patients destined for vaginal surgery had a lumbar block induced. They were divided into two groups, the first sedated and the other anæsthesized by a conventional inhalational technique. A small, but statistically significant, difference in blood pressure was observed between these groups and a small, but statistically insignificant, fall of blood loss in the more hypotensive group. He concluded from this observation that lumbar epidural block had conferred an avascularity upon the operating site which was independent of the associated induced hypotension.

It may be maintained that this conclusion is not justified by the evidence presented. No data were recorded of blood loss from similar groups of patients anæsthesized without epidural block or from patients in whom hypotension was induced by other methods.

It could be concluded from this, and other studies (Loudon and Scott, 1960; Moir, 1968; Donald, 1969) that the relationship between blood loss and blood pressure was not linear. A steep fall of blood loss occurred until systolic blood pressure was about 90–100 mm Hg, and at lower levels of blood pressure only a small and clinically insignificant improvement in the operating field was observed. Since all but one of Dr. Bond’s patients showed a substantial degree of hypotension, it may be that it was this small fall in blood loss at lower levels of blood pressure which was observed.

In a recent study (Donald, 1969), which would not be available to Dr. Bond, blood loss in patients during vaginal surgery was not significantly different when systolic blood pressure was reduced to 60–80 mm Hg, by ganglionic blockade or by epidural anaesthesia. This observation remains unconfirmed, and no data are available to suggest what is the optimum BP level for hypotension induced by ganglionic block but the inference is that so far as blood loss is concerned, epidural blockade is no more than a difficult and inconvenient method of inducing hypotension.

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REFERENCES

HALOTHANE AND NEUROSURGERY

Sir,—I feel I have to comment on the letter in the British Journal of Anaesthesia, 41, 1014 (Jennett and Barker).

The reply to the question about deterioration of patients under general anaesthesia is twofold. If the pressure is known to be raised beforehand, halothane is given in such a way, i.e. with controlled ventilation, that a significant rise does not occur. Secondly, if the surgical procedure is one which relieves the cause of the increase, any deterioration after the operation could well be due to the surgery.

We did not, it must be noted, comment on the article by the above-mentioned, only on the Editorial in the British Journal of Anaesthesia.

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