LETTER TO THE EDITOR

Department of Anaesthetics,
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Edinburgh,
3rd August, 1961.

SIR:

I read with great interest the article by Drs Grennell and Vandewater (July 1961) in which they reported two instances of the supine hypotensive syndrome occurring in near-term gravid patients under peridural analgesia.

The authors state that the syndrome was present in none of their eight patients, including the two reported, before the induction of peridural analgesia but they do not make it clear that a preoperative attempt to elicit it had, in fact, been made. This is an important point because these patients eschew the supine position, unless forced to adopt it. I have never met a patient who complained of the syndrome, unless prompted, probably because these subjects avoid instinctively its occurrence. I feel that, in Case I at least, a preoperative diagnosis might have been made because this woman appears to have been grade V or VI supine hypotensive.² With regard to Case II, this patient was apparently a mild grade supine hypotensive and the preoperative presence of the syndrome in this case could easily have escaped notice, particularly as she was in labour. I have drawn attention to the repeated observation that the syndrome becomes less marked or disappears when the foetal head becomes engaged or uterine contractions commence.^{2,3} In this connection, I was greatly interested in the observation by Drs Grennell and Vandewater of different blood pressure readings being obtained during and after contractions. This is a most valuable observation.

To what extent the preoperative degree of supine hypotension is aggravated by spinal analgesia, whether subdural or extradural, depends entirely on the extent of sympathetic blockade accompanying it and if vasomotor paralysis is extensive or complete, then a previously mild degree of supine hypotension can become grave. I believe that, in these circumstances, subdural is less hazardous than extradural analgesia because, in my experience, the extent of sympathetic involvement can be more easily controlled with the former as long as the points of management which I have suggested³ are observed.

My statement, quoted by Drs Grennell and Vandewater, was intended to refer to preoperative supine hypotension of sufficient severity to predispose to peripheral circulatory failure when extensive sympathetic blockade is induced. I believe that cases of such severity can always be elicited preoperatively but it should be stressed that occasionally I have observed hypotension to develop only 12–15 minutes after the supine posture had been adopted. My interest in the problem was originally confined to trying to understand the reported frequency of sudden maternal death under spinal analgesia. Considering that the majority

of such fatalities are likely to remain unreported, those found recorded up to 1956¹ suggest that spinal analgesia is indeed dangerous in late pregnancy. However, it is hoped that an understanding of the problem will help anaesthetists to view this question in its proper perspective because conduction analgesia has special merits in operative obstetrics.

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REFERENCES

1. Holmes, F. J. Obst. & Gynaec. Brit. Emp. 64: 229 (1957).
2. ——— J. Obst. & Gynaec. Brit. Emp. 67: 254 (1960).
3. ——— Anaesthesia 15: 298 (1960).