Correspondence

Epidural Morphine for Analgesia After Caesarean Section

To the Editor:

In a recent study of epidural morphine after Caesarean section Carmichael *et al.* conclude that 'This technique of pain management is reliable and safe using a 4 mg dose Our experience suggests that patients would be adequately monitored postpartum on the ward if vital signs were taken hourly for the first 8 to 12 hours after each epidural dose of morphine.'¹

Only 29 patients were studied, ten receiving morphine 4 mg epidurally. Respiratory rate was the only way of monitoring the ventilation and blood gases were not checked in the group receiving morphine 4 mg.

Rare, but serious late respiratory depression has been a major problem in epidural morphine analgesia,²⁻⁵ a fact which was stressed in your epidural 'Déjà Vu' less than a year ago.⁶ In the same volume Knill *et al.*⁷ showed that epidural morphine changed the respiratory pattern in healthy individuals, and that ventilatory depression primarily was due to reductions in tidal volume.

Accordingly I question the appropriateness of a general statement such as the one cited above, based upon the study reported. Carmichael's recommendation to keep these patients in ordinary obstetric wards may sooner or later bring about serious or even catastrophic consequences. Patients receiving epidural morphine would be safer in intensive care units.

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- 6 Wyant GM. Déjà Vu. Editorial. *Can Anaesth Soc J* 1981; 28: 551-2.
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REPLY

Thank you for the invitation to reply to Dr. Haavik's letter concerning our article 'Epidural Morphine for Analgesia after Caesarean Section' published in the July 1982 issue of the *Journal*.

Our study was a randomized double blind placebo controlled study of efficacy, duration and safety of epidural morphine for the management of postcaesarean section pain. Dr. Haavik is concerned, as indeed we are, about the safety of this technique. To date, epidural morphine administration to more than 8,000 patients has been reported. One recent survey of practice in Sweden¹ reported respiratory depression in 23 patients out of 6,000 who received epidural morphine. Delayed respiratory depression after epidural narcotics is more frequent if the patient is elderly, debilitated, has impaired respiratory functions or has received both epidural and systemic opiates. All of the case reports referred to by Dr. Haavik are in this category except possibly the case reported by Reiz and Westberg² who unfortunately did not state the age of their patient. We are not aware of any case reports of delayed respiratory depression in young healthy patients following epidural morphine in acceptable doses (e.g. less than 5 mg).

The investigations by Knill *et al.*³ were done in normal healthy individuals who had not undergone surgery. Postoperative patients receiving epidural morphine need to be compared to those receiving parenteral morphine. The clinical applicability of such studies is more obvious.

Lastly, we are not recommending the use of epidural