

## Correspondence

### *Specific risk factors of spinal epidural haematoma*

To the Editor:

The brief review by Wulf<sup>1</sup> in the *Journal* is on a topic which all anaesthetists who use epidural techniques, view with grave concern. Spinal haematoma carries with it a rare but well-recognised risk of cord damage and paralysis or permanent anaesthesia. I therefore read the review with great interest. I was surprised to see that "epidural catheter inserted during general anaesthesia" was noted in the abstract findings as a risk factor. On reading the review it appears that what was meant was that in 3 of the 51 reports the epidural was inserted while the patient was under general anaesthesia. This cannot be a risk factor unless the relative frequency of the use of general anaesthesia with epidural is known. The same argument applies to the other "risk factors" such as the use of low molecular weight heparin (two cases), and indeed this "risk factor" seems to be discounted in the discussion – "it is unlikely that low molecular weight heparin present a special risk."

It is a great pity that Dr. Wulf, after going to the trouble of collecting as many cases as possible, then fails to analyse them critically and consistently. One further example will suffice. In Table II, six cases of haematoma in 1,334,506 patients are given (an incidence of 1 in 222,420), yet the text on page 1266 says seven cases and an incidence of 190,000).

I am very disappointed that such an important topic seems to have been given such an uncritical review which is more likely to mislead than assist practitioners.

W.J. Russell  
Adelaide, South Australia

#### REFERENCES

- 1 Wulf H. Epidural anaesthesia and spinal haematoma. *Can J Anaesth* 1996; 43: 1260–71.

#### REPLY

*I appreciate very much the opportunity to respond to Dr. Russell's letter and clarify some points he raised. In Table II seven spinal haematomas are given, in accordance with the statement in the text.*

*As Dr Russell correctly states, it is not possible to give exact figures for risk ratios for any of the factors involved,*

*since the relative frequency of the use of epidural anaesthesia in combination with potential "risk factors" is not known. As a consequence, the review gives the facts and lists the cases individually. This is not "misleading" but allows readers to draw their own conclusions. Nevertheless, some (qualitative) assumptions are offered.*

*Since the combination of ankylosing spondylitis or fibrinolytic therapy and epidural catheter insertion is uncommon, even a few reports of complications should raise attention. The same is true for application of epidurals during general anaesthesia, since this practice has been discouraged very intensively in many countries. On the other hand, at least in Europe, many anaesthetists use epidural catheters in patients after low dose heparin prophylaxis or in patients receiving NSAIDs. Millions of patients take aspirin during the week before surgery, often without remembering or reporting it to their anaesthetists. There are very few reports of complications associated with common factors such as NSAIDs or low dose heparin leading to the assumption given in the review that this is "probably indicating no increased risk."*

Priv. Doz. Dr. med. Hinnerk Wulf  
Kiel, Germany

### *Combined epidural/general anaesthesia and postoperative outcome*

To the Editor:

Dr. Carli's reasoned criticism<sup>1</sup> of the paper by Garnett *et al.* on perioperative ischaemia in aortic surgery<sup>2</sup> has not been satisfactorily addressed by the retort "Nothing could be further from the truth."<sup>3</sup> The hypothesis at issue is deceptively simple: that continued afferent neural blockade will prevent harmful reflex responses to major surgery. Contrary to Dr. Garnett's assertion, this hypothesis was not tested; effective bilateral epidural blockade was not verified from the time of incision onwards, and motor responses to possible inadequacies of segmental analgesia were masked by full curarizing doses of pancuronium. Postoperatively, steps were not taken to ensure that the segmental level of blockade remained above T5 bilaterally for the duration of the experimental period.

Dr. Garnett's article now joins a distinguished group of elegant, peer-reviewed papers in major journals, all suffering from the same basic flaw of reliance on muscle