Subdural catheterization and opiate administration in a patient with Harrington rods

To the Editor:

We were interested to read the article "Obstetric epidural anaesthesia in patients with Harrington instrumentation" by Crosby and Halpern and agree with the authors' conclusions regarding the expected high incidence of complications in this group.¹ We recently administered epidural analgesia to a patient with a history of previous Harrington instrumentation who subsequently experienced a complication which we feel was highly likely to be related to her spinal surgery.

A 31-yr-old multiparous patient with a twin pregnancy at 36 weeks gestation was admitted for induction of labour due to the presence of mild pre-eclampsia. Harrington rods had been inserted approximately ten years earlier to the 3rd lumbar vertebra for idiopathic scoliosis; she was otherwise well. She had not received epidural analgesia for either of her previous pregnancies. She was referred to the obstetric anaesthesia service at two hours following induction. An epidural catheter was placed on the second attempt at the L₄₋₅ level, false loss of resistance occurring initially with an inability to pass the catheter. Following a negative test-dose of lidocaine 3 ml with epinephrine, 50 µg fentanyl were administered resulting in excellent pain relief of three hours duration, the only complication being a subjective feeling of drowsiness. After this time she complained of some discomfort and an infusion of bupivacaine 0.125 per cent at 10 ml · hr⁻¹ was commenced. Thirty minutes later she was still uncomfortable and a bolus of 5 ml bupivacaine 0.125 per cent was given; 20 min later she had a sensory block to T₄ bilaterally, the infusion was reduced to 5 ml · hr⁻¹, 20 min following this her sensory level was at C3 and the infusion was terminated. There was no accompanying hypotension or motor block and the patient remained comfortable for the remaining three hours of labour and low forceps deliveries. Both babies emerged with Apgar scores of 8/9. The block completely resolved within two hours of delivery. No further complications ensued and the patient was completely satisfied with the analgesia provided.

The clinical course of the patient, with extensive spread of local analgesia, delayed onset and motor sparing without hypotension are consistent with subdural injection, and we feel this is the most likely explanation. The prolonged effects and drowsiness following fentanyl may also have been due to this route. As far as we are aware there have not been any other reports of subdural narcotic placement. The incidence of subdural catheterization is

low (0.05–0.82 per cent) but it has been suggested that multiple attempts and a history of dural tap may be predisposing factors.² It is interesting that these are also the complications likely in patients who have had previous spinal instrumentation, and in the light of this and our own experience we would recommend increased vigilance with regard to subdural catheter placement in this group.

R. Howard FFARCS

W. Anderson MD

Stanford University Medical Center

Stanford University School of Medicine

Department of Anesthesia

Stanford, California 94305

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- 2 Stevens RA, D'arcy Stanton-Hicks M. Subdural injection of local anesthetic; a complication of epidural anaesthesia. *Anesthesiology* 1985; 63: 323–6.

The evolution of anaesthesia as a specialty in Canada

To the Editor:

I very much enjoyed the interesting account presented by Dr. David Shephard in the January issue.¹ While I will leave to others commentary on what Dr. Shephard refers to as Phases 1 (1847–1898) through 5 (1944–1971), I wish to point out what I consider to be a number of major omissions in his description of Phase 6 (1972–1989).

Dr. Shephard notes that the changes during Phase 6 were not as obvious as those in the earlier phases. He has chosen to emphasize only two developments. The first was the assumption by Canadian Universities of the responsibility for postgraduate training in anaesthesia. The second was a change in the size of the Canadian Anaesthetists' Society Journal and its change of title to the Canadian Journal of Anaesthesia. As I will outline below, there were a number of significant other changes and events during the period 1972–1989 which deserve recognition.

With respect to the role of the Universities in the supervision of postgraduate education, the changes which took place in anaesthesia were part of the global change affecting all internship and residency programs in Canada. While this change has had important positive implica-