

CORRESPONDENCE

Analogies to comparisons of apples *versus* oranges will not settle this dispute; data will. The purpose of my editorial was to express appropriate scientific skepticism and to place the burden of proof regarding the safety of sevoflurane in humans where it belongs, *i.e.*, with those who wish to replace proven safe and effective inhaled anesthetic agents with new ones.

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Epidural Anesthesia and Anticoagulation: I

To the Editor:—The case report by Onishchuk and Carlsson¹ shares many similarities with a recent case report by Tekkok *et al.*² In both cases, an epidural hematoma developed painlessly in patients receiving anticoagulants after the epidural catheter was removed. It is important to note that both patients were anticoagulated at the time of epidural catheter removal. The first patient was anticoagulated with heparin and a recent dose of urokinase and the second patient with heparin and Dextran 40. In addition, a timely diagnosis of epidural hematoma was not made in each case because of an unusual "painless" presentation.

Rao and El-Etr³ were careful to remove epidural catheters in his study "prior to the administration of the maintenance dose of heparin" and to evaluate patients for postoperative neurologic complications. The decision to remove an epidural catheter should be considered as carefully as when to place the catheter. If a clot is dislodged or bleeding initiated during catheter removal, hemorrhage may occur in the patient receiving anticoagulants. The presence of adequate mechanisms of hemostasis is required at both placement and removal of an epidural catheter.

The atypical presentation of these and other patients^{4,5} is cause for concern. Epidural hematoma is a rare occurrence for which we rely on the typical symptoms of severe back pain and neurologic deficit to avoid disastrous consequences. Clearly, some of these patients may experience a neurologic deficit painlessly. Patients who have an epidural catheter removed during or immediately before anticoagulation should have their neurologic status followed until

adequate mechanisms of hemostasis exist. This may aid in the early diagnosis of "painless" epidural hematoma.

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