over the patient and attached to the wall suction. The facemask now becomes the scavenging unit to minimize room contamination. Using flows of 2 litres of nitrous oxide and 1 litre of oxygen, sevoflurane can now be administered at clinically useful concentrations and measured by the end tidal monitor.

Experience has shown me that after five to ten minutes, a stable level of light sedation can be achieved with typical dial settings of 2% - 3% yielding a sleepy yet easily aroused patient. This method works best with procedures where the analgesia has been provided by another modality (local, spinal, etc.) to avoid the necessity of higher concentrations and the associated "excitement" phase of inhalation anesthesia. Room contamination is minimal and this has been confirmed by sampling with a portable mass spectrometer (Marquette RAMS m-2000). Calculations suggest that the cost of sevoflurane used in this manner averages \$15.00 per hour.

David Halpenny MD FRCPC
Calgary, Alberta

Reference

- 1 Philip JH, Myers TP, Philip BK, et al. Inhalation sedation/analgesia with sevoflurane (Letter). *J Clin Anesth* 1997; 9: 608-9.
- 2 Savrski A, McClean R, Ikeando A, et al. Sevoflurane versus midazolam for conscious sedation in patients undergoing elective procedures: safety results. *American Society of Anesthesia Abstracts*, 1999.

Stroke

To the Editor:

Stroke is a leading cause of death and disability among adults in Canada. While thrombolytic therapy has been used for the treatment of acute ischemic stroke, its use is controversial. We reviewed our experience of thrombolytic treatment for acute ischemic stroke at the QEII HSC using a protocol developed by the Canadian Stroke Consortium.¹

We conducted a retrospective case series study involving 12 patients (eight who received thrombolytic therapy and four who did not (patients with ischemic stroke not candidates for thrombolysis)). They were admitted to the ICU following acute ischemic stroke between December 1997 and January 1999. Chart and computed tomographic scans were reviewed and data collected and analyzed. Seven out of eight patients in the thrombolytic group received tPA and one received streptokinase. Two patients that

received tPA had an intracranial hemorrhage and both died. In total, five patients died in the thrombolytic group and all patients that did not receive thrombolytic treatment died. Patients in the control group tended to stay longer in the ICU, received more laboratory tests, but fewer CT scans compared to thrombolytic patients. We conclude that, in this small series, administration of thrombolytic drugs following current guidelines for therapy for acute ischemic stroke was associated with a high mortality rate which is, however, in-keeping with the mortality rate in reports from large scale clinical trials.² Good functional recovery occurred in 30% of patients. Our results suggest that use of the guidelines for thrombolytic treatment of acute ischemic stroke will produce results similar to that found in large scale clinical trials and serves to validate the original findings.

Rosmadi Ismail
Richard I. Hall MD FRCPC FCCP
Halifax, Nova Scotia

References

- 1 Norris JW, Buchan A, Hachinski V, et al. Canadian guidelines for intravenous thrombolytic treatment in acute stroke. *Can J Neurol Sci* 1998; 25: 257-9.
- 2 Wardlaw JM, Warlow CP, Counsell C Systematic review of evidence on thrombolytic therapy for acute ischemic stroke. *Lancet* 1997; 350: 607-14.