

REFERENCES

- 1 Breen MT, Kageler WV. Puncture of the trachea during catheterization of the subclavian vein (Letter). *N Engl J Med* 1989; Apr 27; 320: 1148.
- 2 Barker P. Guidewire embolism (Letter). *Anaesthesia* 1991; 46: 595.
- 3 Schwartz AJ, Horrow JC, Jobes DR, Ellison N. Guide wires—a caution. *Crit Care Med* 1981; 9: 347.
- 4 Panos AL, Common AA, Salerno TA. Unusual complication of J wire used for central venous cannulation (Letter). *Ann Thorac Surg* 1991; 52: 581–2.
- 5 Hickman JA, McCrirrick A. Failure of a spring guide wire (Letter). *Anaesth Intensive Care* 1990; 18: 587.
- 6 Chacko J, Litz S, Morrison J. Complications with guide wires for central venous cannulation (Letter). *Can J Anaesth* 1991; 38: 258–9.
- 7 Gravenstein JS, Paulus DA. *Clinical Monitoring Practice*. 2nd ed, Philadelphia: Lippincott, 1987; 105–56.
- 8 Eissa NT, Kvetan V. Guide wire as a cause of complete heart block in patients with pre-existing left bundle branch block. *Anesthesiology* 1990; 73: 772–4.

Dental restoration using oral ketamine

To the Editor:

In recent months, several reports have appeared^{1,2} concerning the use of oral ketamine in mentally handicapped young adults requiring dental treatment. The following case illustrates a recent experience with this technique.

A 20-yr-old man with cerebral palsy and a mental age of eight was scheduled for dental restorations under general anaesthesia. His weight was 100 kg. An attempt to perform the procedure one month earlier had been abandoned. He arrived at the hospital one hour before his scheduled surgery. He drank 40 ml of a mixture of grape juice, sugar and 1000 mg ketamine. He sat in a chair for 10 min and after 30 minutes, an *iv* was started and oxygen applied. At 45 min he was transferred to the operating room. Induction of anaesthesia was completed with propofol and tracheal intubation was facilitated with succinylcholine. He was suctioned for secretions prior to intubation. Anaesthesia was maintained with isoflurane, nitrous oxide/oxygen and morphine. Isoflurane was discontinued 30 min before completion and a propofol infusion was instituted in an attempt to facilitate early awakening. At several times during the procedure, desaturation was noted each time associated with inspiratory and expiratory wheezes and increased airway pressures. Thick white secretions were suctioned from the endotracheal tube and inhaled salbutamol was used to restore oxygenation and decrease airway pressures. The dental

restoration took 150 min. The patient awoke promptly upon discontinuation of anaesthesia, 240 min after the oral ketamine. No post op desaturation was noted.

The use of oral ketamine in the mentally retarded patient is not new.^{1,2} Previous clinical reports have attested to its safety and effectiveness.³ Theoretical considerations for deciding on the appropriate dose have been described by Grant *et al.*⁴ We doubt that the relative ease of this man's anaesthetic course could have been successfully duplicated with another agent.

The concern about secretions both oral and endobronchial is important. One previous report describes excessive salivation during emergence as a problem in a child given a higher dose of oral ketamine.⁵ This patient had increased secretions at time of induction and continued to produce secretions during the case. His history of smoking and a prolonged induction with a medication which is known to increase respiratory secretions would have contributed to the secretions which were apparent during the procedure.

Given the circumstances, the outcome was satisfactory and would only be modified by the use of an antisialagogue during the procedure.

Saifee Rashid MD
 Craig Guenther MD
 University of Alberta Hospital
 Edmonton, Alberta

REFERENCES

- 1 Gustein HB, Johnson KL, Heard MB, Gregory GA. Oral ketamine preanesthetic medication in children. *Anesthesiology* 1992; 76: 28–33.
- 2 Petros AJ. Oral ketamine. Its use for mentally retarded adults requiring day care dental treatment. *Anaesthesia* 1991; 46: 646–7.
- 3 Bragg CL, Miller BR. Oral ketamine facilitates induction in a combative mentally retarded patient. *J Clin Anaesth* 1990; 2: 121–2.
- 4 Grant IS, Nimmo WS, Clements JA. Pharmacokinetics and analgesic effects of i.m. and oral ketamine. *Br J Anaesth* 1981; 53: 805–10.
- 5 Hain WR. Oral ketamine (Letter). *Anaesthesia* 1983; 38: 810–1.