R. WILLIAM MCINTYRE, M.D.

Assistant Professor of Anesthesiology

Department of Anesthesiology, AA3094-160

Duke University Medical Center Durham, North Carolina 27710

REFERENCES

- Shin B, Mackenzie CF, Helrich M: Hypokalemia in trauma patients. ANESTHESIOLOGY 65:90–92, 1986
- D'Silva JL: The action of adrenaline on serum potassium. J Physiol (Lond) 82:393-398, 1934
- Brown MJ, Brown DC, Murphy MB: Hypokalemia from betagreceptor stimulation by circulating epinephrine. N Engl J Med 309:1414-1419, 1983

- Nordrehaug JE, Johannesen KA, von der Lippe G, Myking OL: Circulating catecholamine and potassium concentrations early in acute myocardial infarction: Effect of intervention with timolol. Am Heart J 110:944-948, 1985
- Williams ME, Rosa RM, Silva P, Brown RS, Epstein FH: Impairment of extrarenal potassium disposal by α-adrenergic stimulation. N Engl J Med 311:145-149, 1984
- McIntyre RW, Knopes KD, Ossey KD: The relationship between sympathoadrenal activity and extrarenal potassium regulation. ANESTHESIOLOGY 63:230-231, 1985
- Hill AB, Nahrwold ML, Noonan D: A comparison of methods of blood withdrawal and sample preparation for potassium measurements. ANESTHESIOLOGY 53:60-63, 1980
- Fell D, Derbyshire DR, Maile CJD, Larsson IM, Ellis R, Achola KJ, Smith G: Measurement of plasma catecholamine concentrations. Br J Anaesth 57:770-774, 1985

(Accepted for publication November 6, 1986.)

Anesthesiology 66:444, 1987

Abolishing Pain on Injection of Etomidate

To the Editor:—We have been impressed with the rapid awakening and clear postoperative sensorium in adult outpatients undergoing anesthetic induction with etomidate. Pain on injection in these alert, unpremedicated patients can be a problem. This incidence is reported to be as high as 50–60%. 1.2

We have found a simple technique which has so far reduced the incidence of pain on injection to zero. Just prior to induction, 25–100 mg of lidocaine is given through an injection port attached directly to the intravenous catheter. As soon as the injection is made, the intravenous drip is turned off for 30 s. Etomidate is then injected.

Using this technique, we have had no pain on injection through either spontaneous complaint or direct questioning in 30 consecutive patients.

BRIAN M. MELNICK, M.D.

Assistant Professor of Anesthesiology

PREYARATT PHITAYAKORN, M.D. Assistant Professor of Anesthesiology

RAY MCKENZIE, M.D., F.F.A.R.C.S. Professor of Anesthesiology

Department of Anesthesiology Magee-Womens Hospital and University of Pittsburgh School of Medicine

REFERENCES

- Clarke RSJ: Comparative merits of intravenous anesthetic agents for out-patient surgery. Int Anesthesiol Clin 20:51-69, 1982
- McCollum JSC and Dundee JW: Comparison of induction characteristics of four intravenous anaesthetic agents. Anaesthesia 41:995-1000, 1986

(Accepted for publication November 10, 1986.)

Anesthesiology 66:444-445, 1987

Trunk Skin Temperature After Sympathetic Nerve Block—Is the Heat Really On?

To the Editor:—In a recent study, Chamberlain et al. 1 concluded, based on measurements of trunk skin temperature by infrared thermography, that sympathetic block can extend up to ten segments above the sensory block with spinal anesthesia. A surprising finding, indeed.

The authors can be congratulated for their provoking and stimulating paper, because it reminds us that we are blind when it comes to evaluation of the extent of sym-

pathetic block with spinal or epidural anesthesia. Our assumption, based upon similar size of fibers carrying sympathetic and thermoreceptor traffic, that loss of temperature discrimination has the same level as loss of sympathetic outflow, may not be valid. Thus, the anesthesia community would receive with enthusiasm any monitor which reliably detects the level of sympathetic block, especially in the unconscious patient. Also, the