- Heiman-Patterson TD, Rosenberg H, Fletcher JE, Tahmoush AJ: Halothane-caffeine contracture testing in neuromuscular diseases. Muscle Nerve 11:453-457, 1988
- Britt BA, Kalow W: Malignant hyperthermia: A statistical review.
  Can Anaesth Soc J 17:293-315, 1970
- Gronert GA, Milde JH: Variations in onset of porcine malignant hyperthermia. Anesth Analg 60:499-503, 1981
- George AL, Wood CA: Succinylcholine-induced hyperkalemia complicating the neuroleptic malignant syndrome. Ann Intern Med 106:172, 1987
- Hughes JR: ECT during and after the neuroleptic malignant syndrome: Case report. J Clin Psychiatry 47:42-43, 1986

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## Appropriate Facilitation of Intravenous Regional Techniques in RSD

To the Editor:—Gargulio described the use of epidural sympathetic blockade to facilitate venous access in a patient with reflex sympathetic dystrophy. We have used the local application of nitropaste ointment for the same purpose. 2

A patient with lower extremity reflex sympathetic dystrophy diagnosed by prolonged pain relief from sympathetic blockade was scheduled for intravenous regional bretylium blockade. We used repeated epidural blocks, as described by Gargiulo, to perform regional bretylium blocks on this patient. On one occasion, we could not achieve epidural blockade, and we applied nitroglycerin ointment directly to the skin over the vein to be cannulated, removing the excess paste after several seconds. The vessel promptly dilated, became visible, and was successfully cannulated with a 22-gauge catheter.

Hecker et al.<sup>2</sup> first described nitroglycerin ointment as an aid to venipuncture in adult patients. In that study, 50 patients were randomly allocated to two groups and observed for the difference in those patients with nitroglycerin ointment and those without. The degree of difficulty in cannulation on a scale of 1 (very easy) to 5 (failure) was scored and, in patients with nitroglycerin paste, venous cannulation was almost twice as easy compared with those without. Apart from tingling of the skin of the treated patients, no side effects were noted. Vaksmann³ noted that nitroglycerin ointment was an aid to venous cannulation in children less than 1 yr of age, but not advantageous in children 1–10 yr of age. The age limitation was not explained.

In summary, topical nitroglycerin may be an effective, simple, lowrisk method to produce dilatation of veins in patients with RSD. KEVIN FOLEY, B.S. Medical Student

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## REFERENCES

- Gargiulo RF: A method of facilitating intravenous regional bretylium. ANESTHESIOLOGY 69:147, 1988
- Hecker JF, Louis GPH, Stanley H: Nitroglycerin ointment as an aid to venepuncture. Lancet 1:332-333, 1983
- Vaksmann G, Rey C, Vereviere GM, Smadja D, Dupuis C: Nitroglycerin ointment as an aid to venous cannulation in children: Clinical and laboratory observations. J Pediatr 3:89, 1987

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## **ANNOUNCEMENT**

The American Board of Anesthesiology (ABA) will administer its third written examination in **Critical Care Medicine** at an airport near Chicago, Illinois, on Friday, September 22, 1989. Diplomates of the ABA who apply and are judged to be qualified by virtue of their additional training or experience in Critical Care Medicine will be accepted for examination. An application may be requested by writing to the Secretary, American Board of Anesthesiology, 100 Constitution Plaza, Hartford, Connecticut 06103-1721. The deadline for receipt of completed applications in the Board office is June 10, 1989.