After intravenous anaesthesia.


CORRESPONDENCE

REACTION TO PROPANIDID

Sir,—A 39-year-old woman was anaesthetized on 2nd June, 1971, for cauterization of a cervical erosion. She was in good health, and there was no personal or family history of any allergy or sensitivity. She had had one previous general anaesthetic four years ago, when propanidid was not used.

Propanidid, given by an intermittent technique in a 5 per cent solution, was the only drug administered; an initial dose of 350 mg was followed by small increments, the total dose amounting to 600 mg. Recovery of consciousness followed the normal pattern, and she was awake and conversing about 5 minutes after the procedure was begun.

However, 5 minutes after recovery of consciousness, she developed a blotchy, scarlet, confluent rash, especially evident on the upper chest, neck, and shoulders. She then began to feel unwell, and the scarlet rash gradually changed to a mottled bluish-white appearance; she appeared slightly cyanosed, and her systolic blood pressure was 80 mm Hg. It was by this time 15 minutes since she had recovered consciousness.

The administration of hydrocortisone 100 mg and 0.9 per cent sodium chloride 500 ml intravenously then resulted in swift improvement in her blood pressure and return of colour to normal over the next 15-20 minutes. Large, raised urticarial patches began to appear at this time on the trunk and limbs—about 40 minutes after the initial dose of propanidid. The general improvement was maintained, however, and these urticarial patches disappeared over the course of 1½ hours. At no time was there evidence of any bronchospasm.

It is noted that the woman recovered consciousness in a completely normal fashion, and that signs of sensitivity were not apparent until well after the anaesthetic effect of the drug had ceased. If propanidid is used for short operations such as the out-patient procedure described here, it would seem judicious to warn the recovery room nursing staff of the possible hazard involved, so that delay in obtaining assistance should not occur.

This is the first occasion on which sensitivity to the drug has been encountered by the writer after some 6,000 administrations.

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MEASUREMENT OF CRITICAL FLICKER FREQUENCY AFTER INTRAVENOUS ANAESTHESIA

Sir,—As a means of measuring the recovery phase after intravenously administered thiopentone and methohexitone, estimation of the critical flicker fusion threshold, (or the flicker fusion threshold, f.f.t.) was used by Dr M. D. Vickers and myself in 1961. The work was completed the next year and presented as an essay which was awarded the Registrar's Prize in the Section of Anaesthetics of the Royal Society of Medicine, 1963.

I send this as information for the benefit of Drs Grove-White and Kelman, in whose paper on the measurement of f.f.t. after subhypnotic doses of intravenous anaesthetics I noted the following in the Discussion section: "The present study is, to our knowledge, unique in that the drugs were administered intravenously, rather than orally. It is therefore, difficult to make a detailed comparison between our results and those of previous workers."

I am due to present a paper entitled, "The measurement of recovery from anaesthesia: a comparison of methohexitone and propanidid", at the Epontol Symposium organized by Bayer at Scheveningen, June 10-12, 1971. This is in effect a continuation of the work begun 10 years ago: a Dawe Stroboslash 1200E was used for measuring the f.f.t. in two volunteers, who at intervals over a period of 12 months received a graded series of equipotent doses of intravenous methohexitone and propanidid. A baseline f.f.t. measurement was taken before each test injection. During the recovery phase, repeated f.f.t. readings were taken until the pre-anaesthetic figure was reached. At this point, recovery was deemed complete. It was thus possible to measure the time and compare the pattern of recovery after anaesthetic doses of these two agents.

I disagree with Dr Grove-White's observation that, because depression of the f.f.t. is a very sensitive index of the action of drugs like methohexitone, it is therefore of little value in the assessment of recovery from, for example, dental anaesthesia.

I am so convinced of the importance of this measurement as an indication of the integration of the central nervous system, because of its very objectivity and simplicity, that I am embarking on another series of investigations into the recovery phase following intravenous diazepam. These three agents are gaining popularity, particularly in dental clinics for conservative work, and our concern must be for the possible medico-legal aspects of insufficient surveillance during the recovery period following long procedures under general anaesthesia. An accurate assessment of full recovery is vital in the interests of the safety of these patients.

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REFERENCES
