analysed were remarkably rich in linoleic acid (see table), a finding which was explained by the fact that these patients, mostly on their own initiative, were taking four to six spoonfuls of sunflower seed oil a day; about 65% of the fatty acids of sunflower seed oil is linoleic acid. The trials by Mertin *et al.*² were carried out between October and December 1973.

Mean Linoleate Content (as % w/w of Total Fatty Acids $\pm$ S.E.M.) Fats in Plasma of Normal Subjects and Patients with M.S.

	Normal	M.S.1.	M.S.2.
Phospholipid	17.6 $\pm$ 1.64 (n = 11)	13.7 $\pm$ 1.6 (n = 7)	26.9 $\pm$ 1.1 (n = 12)
Triglyceride	11.0 $\pm$ 0.8 (n = 14)	7.86 $\pm$ 0.71 (n = 6)	26.8 $\pm$ 3.1 (n = 12)

M.S.1 refers to patients who claimed they were not taking sunflower seed oil. The M.S.2 group represents those patients who had been taking sunflower seed oil for at least one month (data from 1973).

Medication with sunflower seed oil can clearly be expected to increase the plasma linoleate. The macrophage electrophoretic mobility test is unlikely to give a high degree of inhibition by linoleic acid if the macrophages have been taken from blood which is rich in linoleic acid itself. Perhaps the only way to resolve the issue would be to relate electrophoretic mobility to plasma linoleate content.—We are, etc.,

M. A. CRAWFORD
A. G. HASSAM

Department of Biochemistry,
Nuffield Institute of Comparative Medicine,
Zoological Society of London,
London N.W.1

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Duration of Action of Practolol

SIR,—A current problem in cardiac surgery is to decide how long before surgery beta-blocking drugs should be stopped. As little information is available on the duration of action of practolol we have tried to assess this, using an exercise-induced tachycardia test, in a group of 19 patients who had completed a two-year period of study of the value of practolol after acute myocardial infarction. All patients had had definite acute infarction and were randomized into either a practolol (400 mg a day) or a placebo group. Exercise tests were performed on a stationary bicycle before and 60 hours, seven days, and 10 days after the tablets were stopped. The load was increased by 25 watts every minute starting from 50 watts and reaching 150 watts by the fifth minute.

There was no significant difference in the resting heart rates of the 11 patients who had received practolol and the eight who had received placebo (see fig.). There was a significant difference between the practolol and placebo patients while on the tablets and at 60 hours after cessation but no difference by the seventh day.

These results are very similar to those reported by Carruthers *et al.*¹ who showed

Maximum heart rate (mean $\pm$ S.E.) after 5 minutes' exercise on 11 patients who had taken practolol and eight who had taken placebo.

that though the plasma half life of practolol was about 10-11 hours the pharmacological half life was of the order of 40-50 hours. It would seem reasonable therefore to stop practolol for at least three days before cardiac surgery to allow full recovery from its effects.—We are, etc.,

DAVID HUNT
COLIN MCRAE
JAYNE RAMSHAW
GRAEME SLOMAN

Cardiac Department,
Royal Melbourne Hospital,
Victoria, Australia

¹ Carruthers, S. G., *et al.*, *British Medical Journal*, 1973, 2, 177.

Drug Combinations for Anaesthesia

SIR,—In a recent issue of the *B.M.J.* (9 November 1974) there were two reports concerning the use of methohexitone and diazepam in combination to produce anaesthesia. One was a coroner's report (p. 352) of a fatality occurring in a previously healthy patient in a dental chair. The other was a letter (p. 345) in which Dr. M. W. P. Hudson defended the use of this combination, which he used routinely to produce conditions suitable for intubation. He did stress that the patient should be horizontal at the time of injection and must remain so for at least one hour afterwards to avoid hypotension.

Any combination of drugs which produces conditions suitable for intubation is unsuitable for use in dental practice except by operators prepared to pass an endotracheal tube. During the inquest a dental surgeon with considerable experience of dental anaesthesia stated in court that "they [dental surgeons] were not trained in it [intubation]," and that "it was not a technique for dental surgery."

Dr. Hudson may be correct in his assertion that methohexitone and diazepam are a most valuable combination of drugs, but on the evidence he has presented we believe it can only be described as hazardous where the relevant apparatus and expertise are not immediately available.—We are, etc.,

D. W. BETHUNE
J. M. COLLIS
R. D. LATIMER
A. K. Y. WALKER

Department of Anaesthesia,
Papworth Hospital,
near Cambridge,

SIR,—There has been considerable recent controversy over the combination of methohexitone and diazepam as a possible cause of death in several of the recent dental anaesthetic fatalities. It is interesting to note that Dr. M. W. P. Hudson (9 November, p. 345) has been using this technique prior to intubation, the diazepam replacing suxamethonium as the relaxant drug prior to the placement of the tube. Naturally there must be considerable respiratory depression caused by the combination of these two drugs, with the possibility of stagnant anoxia, and it seems quite obvious that the reason Dr. Hudson, in over two years' safe usage of this technique, has had no problems is that the patient is immediately adequately oxygenated when inhalational agents are added.

I have personally used methohexitone and diazepam together (without intubation) for a considerable time. With a light sleep dose of the former, the slow additional injection of diazepam (maximum dose 10 mg), the immediate application of a 75/25% nitrous oxide/oxygen mixture, and correct attention to the airway I have seen no problem that has given me a moment's worry. The nitrous oxide, of course, provides the analgesia that the methohexitone, a hypnotic, does not.

As long ago as 1965, after some 6000 cases, I was one of the first dental critics of the intermittent methohexitone technique (which is in any case far from ideal for the majority of procedures) and it was pointed out at that stage that the smoothest and safest anaesthetic, despite the odd case of post-anaesthetic nausea, was methohexitone followed by a nitrous oxide/oxygen mixture. Additional increments of the drug were injected as necessary for operations of a maximum of 20 minutes' duration. Considerable respiratory depression can take place with methohexitone alone; but with the undoubted synergistic effect produced by the methohexitone combination it is imperative that oxygen be administered throughout all such anaesthetics (coupled, as stressed, with constant attention to the patency of the airway through correct mouthpacking technique and adequate suction).

The problem simply was that in each case which proved fatal inadequate oxygen had been reaching the brain due to either asphyxial or stagnant anoxia. Certainly from the facts one can assume that the Society for the Advancement of Anaesthesia in Dentistry, though naturally advocating that an oxygen machine should be present in working order in or near the surgery, do not advocate its use at all times during anaesthesia. By using a simple Goldman nose-piece secured by a McKesson harness the patency of the airway can at all times be appreciated owing to the equal inspiratory and expiratory sounds easily heard through the nosepiece valve. Any interruption of this sound (for example, a continuous gas flow) immediately signifies that normal breathing is not taking place and that there is some obstruction. This can then be speedily dealt with by changing or at least altering the position as necessary of mouthpacks, good suction, and/or forward movement of the mandible.

Dr. J. G. Bourne in the late 1960s emphasized the importance of the supine position to help prevent fainting before, during, or after an anaesthetic, this being a major breakthrough in general anaesthetic