authors assessed the inspired halothane concentrations required to produce amnesia and unresponsiveness in an oxygen–halothane induction system. The required concentrations were 1.5% (2 MAC) and 3.3% (4.4 MAC), respectively, and it was suggested that the addition of 70% nitrous oxide to the system could reduce the inspired concentration for unresponsiveness to 1.5% (2 MAC). Following this argument, the MAC equivalent concentration of isoflurane would be 2.3%—a value similar in magnitude to that used by Lamberty and Wilson. This assumes that the MAC value of isoflurane in this age group is 1.15% [5], rather than the figure of 1.28% quoted by the authors.

The authors have demonstrated that isoflurane is suitable for use in the single breath induction technique, but they did not report the induction time. Mean induction times observed have varied from 112 s with 4% halothane in oxygen [6], 83 s with 4% halothane and 70% nitrous oxide in oxygen [7] to 38 s with 5% isoflurane in oxygen supplemented by fentanyl 5 µg kg⁻¹ [3]. A pilot study carried out in our department has recorded a mean induction time of 80 s with 2.5% isoflurane and 70% nitrous oxide in oxygen. This suggests that the addition of nitrous oxide to the gas mixture, and the use of isoflurane, are factors which shorten induction time, although direct comparison with the study of Loper and colleagues [3] is difficult because of the use of i.v. fentanyl in that study. Nonetheless, it would be valuable to learn what induction times were achieved by Lamberty and Wilson.

The authors state that patients were interviewed after operation and were asked for a description of recall of induction. It is not stated if this process was conducted in a blinded fashion. It would be difficult to conduct a study of this nature assessing induction characteristics in a suitably blinded manner, but with the use of a postoperative questionnaire, objectivity could be achieved quite easily and it would be surprising if this were not attempted.

The authors advocate the use of the single breath induction technique with isoflurane for day-case and accident and emergency anaesthesia on the grounds that avoidance of i.v. induction agents will result in rapid recovery. However, the introduction of propofol has reduced the potential benefit to be gained from avoidance of i.v. agents. Unless a clear advantage of inhalation over i.v. induction and maintenance using short acting agents can be demonstrated, the use of the technique would appear to be limited.

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REFERENCES