define anesthesia as an effect in a single phase alone have been unsuccessful."

As stated by Dr. Halsey, the alveolar partial pressure of 0.63 vol per cent, equivalent to our BAC of 27 mg/100 g, is very close to the 0.71 vol per cent reported by DiFazio *et al.*[2] Preliminary work in this laboratory suggests that the BAC of methoxyflurane will be in the region of 24.5 mg/100 g of brain. Assuming a brain–gas partition coefficient for methoxyflurane of 26.4,[1] this is equivalent to an alveolar concentration of 0.13 vol per cent. There are no reported direct measurements of alveolar concentration of methoxyflurane in rats with which to compare this figure. However, when the commonly accepted human MAC for methoxyflurane of 0.16 is compared with this, a ratio of 1.23 is obtained. A similarly calculated ratio for halothane would be 1.22. Although the similarity of these relationships may be coincidental, I do not feel they can be ignored at this stage.

Finally, and perhaps most important, although it may have been inferred in our paper that we intended to compare potency of agents from estimations of brain anesthetic concentrations, this was not in fact our purpose. As we stated, our intention is to use these initial values as the bases from which to construct indices relating concentrations at anesthesia to those at respiratory and cardiac arrest. These indices will correlate not only brain but also heart concentrations. As these indices are ratios, errors due to measurement of anesthetic agent in "incidental" portions of the brain will cancel themselves out. It is these indices that we intend to use for agent comparison. We reported such indices for halothane at the ASA Annual Meeting in October 1971 and hope to publish further data in the near future.

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Cardiovascular Effects of Methylmethacrylate

To the Editor:—Drs. Cohen and Smith (ANESTHESIOLOGY 35:547–549, 1971) and Newens and Volz (ANESTHESIOLOGY 36:298–300, 1972) have drawn attention to the dangers associated with the use of large quantities of acrylic cement in reconstructive joint surgery. An animal study[1] indicated that the liquid component of the monomer reduced blood pressure and increased cardiac output and heart rate. Our more recent animal work (unpublished) has showed that, of the several components of the liquid monomer, it is the monomeric methylmethacrylate alone which is responsible for the cardiovascular changes. The hazard of acute hypotension and its sequelae, therefore, will continue until a satisfactory cement substance not based on monomeric methylmethacrylate is introduced. Until such time, we would emphasize the need to identify patients especially at risk[1] and to use acrylic cements cautiously in these individuals.

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