

using regression formulas, as Thys and Hillel state, comparative information about ventricular volumes, ejection fraction, and cardiac output during anesthesia is available from only one⁸ of four prior M-mode studies reported in the anesthesia literature.^{2,8-10} Therefore, direct comparisons of M-mode derived volumes with our two-dimensional volumes are difficult.

In our study, significant differences between halothane and isoflurane in ejection fraction, stroke volume index, and mean blood pressure were observed only following a fluid bolus. This difference between halothane and isoflurane could have related to a difference in contractility or afterload. Since neither contractility nor afterload could be directly measured, we believe (and so stated) that more studies are necessary before concluding that clinically important differences exist in contractility between equianesthetic concentrations of halothane and isoflurane in infants and small children.

The non-invasive measurements of contractility provided by M-mode techniques, when combined with the more global non-invasive assessments of myocardial performance provided by two-dimensional echocardiography and Doppler echocardiography, may be complementary. If so, then the techniques could be combined to enhance information about the cardiovascular effects of anesthetics. All the echocardiographic methods have limitations that should be understood by readers when interpreting studies using these measurement techniques.

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Sir Robert Macintosh—Not MacIntosh

To the Editor:—
Doc Epstein's eloquent ink¹
Lauds outstanding Raymond Fink
With praise, and with prose
That reminds us of those
Like Sir Rob and Ralph Waters
Who in laryngeal quarters
Were joined by Doc Ray
To make an airway.
But Sir Robert might spy
With perceptive i (eye)
An upper case I
Where a lower should lie.

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