It was not noticed by the anesthesiologist during the routine preanesthetic check of the machine. Routine service by the manufacturer was accomplished 1 month prior to the equipment failure.

We have discussed the problem with the manufacturer's Manager of Product Safety. We recommended the possibility of incorporating color contrast in the materials used and suggested that the float stop be replaced periodically during routine servicing to prevent a mishap in the future. In addition, we recommend to our colleagues that if this malfunction is detected, the machine should be taken out of service and repaired.

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(Accepted for publication March 2, 1984.)

Anesthesiology
61:222, 1984

In reply:—We thank Drs. Dobler and Hinkle for bringing their experience to us as soon as it had happened. We speculate that breakage may be the result of individuals, during servicing, bending the float stop to straighten it; thus, causing a fracture at the stem's base. The service kits include a replacement float stop, the intent being that the float stop should be replaced with each servicing. The servicing instruction sheets have been modified to emphasize that this float stop should be changed every time, not only when it appears to be required. The part number for ordering the float stop is 216-1874-100.

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(Accepted for publication March 2, 1984.)

Anesthesiology
61:222–223, 1984

The Paradox of Paradoxic Air Embolism—PEEP, Valsalva, and Patent Foramen Ovale. Should the Sitting Position be Abandoned?

To the Editor:—The recent letter by Fischler *et al.*,[1] demonstrating the identification of a patent foramen ovale (PFO) using an echo contrast technique during normal respiration or with the Valsalva maneuver or coughing, deserves further comments. These authors recommend performing contrast echocardiography to screen patients for a PFO who then would not be placed in the sitting position for surgery. This important information by Fischler and co-workers coincides with other findings that have been generated but recently. Hagen *et al.*[2] just have published a postmortem study of the incidence and size of PFO during the first 10 decades of life in 965 normal hearts. They found an overall PFO incidence of 27.3%, with a mean diameter of 4.9 mm.

Reversal of the normal transatrial pressure gradient enhancing the movement of air from right to left heart across a PFO has been described in the sitting position,[3] with positive end-expiratory pressure (PEEP)[4] and during the Valsalva maneuver.[5,6]

Cucchiara,[7] recently reported the use of transesophageal echocardiography (TEE) for detecting and tracking air in the right heart chamber and when it passes from the right atrium to left atrium via a PFO. Conventional Doppler verification was equivocal in two cases and, of course, unable to identify the air crossing into the left side of heart.

In January 1984 we had the opportunity to anesthetize a patient in the sitting position for a deep-seated posterior fossa tumor. This procedure was uneventful, with no changes in vital signs, Doppler, blood gases, or positive yield for air on intermittent aspiration of a five-hole catheter whose tip was located near the SVC-RA junction.