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In reply.—Although I recognize the expertise of Drs. Hitt and Mazze involving studies of methoxyflurane and inorganic fluoride, I cannot entirely accept their criticism of our study. To artificially create a tremendous excess of inorganic fluoride in relation to the concentration of cholinesterase in vitro would have no clinical relevance to the situation in vivo. Although we might then be able to measure inhibition of cholinesterase activity, this could not be interpreted as meaning the cholinesterase activity was similarly decreased in these patients. I would re-emphasize our conclusion that the levels of inorganic fluoride achieved in vivo are insufficient to depress serum cholinesterase activity to a clinically relevant extent.

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A Simple Technique to Prevent Overdistention of Flow-directed Catheters

To the Editor.—A rare complication associated with the use of flow-directed catheters for measurement of pulmonary-artery wedge pressure is that of pulmonary artery rupture. One factor contributing to this is overdistention of the balloon. The incidence of this complication may be decreased by carefully observing the pressure oscillation on a monitor and not inflating the balloon any further than necessary to obtain a wedge position. Occasionally, however, accidental overdistention of a balloon and the surrounding pulmonary artery may occur, especially in pediatric patients, where the blood vessels are small and the balloon volumes vary with the size of the catheter inserted.

We have been using a simple, reliable method to prevent accidental balloon hyperinflation (fig. 1). By making four holes with a 22-gauge needle in the barrel of the inflating syringe at the desired volume, one limits the distending volume that this syringe will introduce. Although one may fill the syringe with more than the volume needed to obtain a wedge position, the four holes in the barrel prevent more than the desired volume from being injected, since air flows out the holes until the plunger is beyond their level. Such a vented syringe is included with some flow-directed catheters. However, the advantage in

* Electro-catheter Corporation, Rahway, New Jersey 07065.

Fig. 1. Top, four holes are punched at the desired syringe volume. Center, excess air flows out holes. Bottom, only the desired volume is delivered to the balloon.

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REFERENCE


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