

calculated from the extent of transducer elevation, this is unnecessary, as all that is required is a clear indication of the time of closure of the aortic valve; the absolute pressure at which this occurs is irrelevant to the pump-synchronizing process. Zero suppression by transducer elevation may be utilized in other situations where the time at which an event occurs is of primary interest. For example, in determining systolic time intervals, one might measure the time from the QRS of the electrocardiogram to some pressure signal reflecting opening of the aortic valve. Use of the high-gain venous channel with zero suppression will greatly facilitate visualization of the pressure end point.

It has been found convenient, in situations where absolute pressures as well as small increments of pressure are of interest, to have available a measur-

ing stick calibrated in steps of 10 torr (13.6 cm), so that the transducer can be raised a distance such that the extent of zero suppression is a convenient round number. Similarly, if it is desirable to alternate rapidly between zero suppression and regular recording, one can simply place a second transducer holder at the appropriate distance above zero reference level.

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Anomalous Pulmonary Arterial Catheterization

To the Editor:—I read with interest Dr. Falltrick's report of a pulmonary-artery catheterization through a persistent left superior vena cava.¹ I had recently inserted a pulmonary-artery catheter during resuscitation of a 70-year-old woman who was moribund following a massive mesenteric infarction. The roentgenogram of the chest (fig. 1), taken after insertion, showed a picture similar to the one described by Dr. Falltrick. My patient had previously had roentgenographic examinations of the chest and abdomen, including aortography, in our hospital over the preceding 11 years, but the anomalous left superior vena cava was not noticed prior to this roentgenogram.

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REFERENCE

1. Falltrick RT: Pulmonary arterial catheterization through a persistent left superior vena cava. *ANESTHESIOLOGY* 50:155-156, 1979

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FIG. 1. Roentgenogram of the chest, showing the pulmonary-artery catheter passing through the anomalous left superior vena cava.