A Disposable Intravenous Pressure Infusion Device

To the Editor: — The pressure infusion device for rapid administration of intravenous fluids is a mandatory requirement for resuscitation of the severely hemorrhaging patient. This is particularly true if blood products, with their high viscosity, have to be infused via a warming device. The pressure infusion device therefore is standard equipment for the operating theatres, accident and emergency departments, and intensive care units.

Occasionally, demand for the apparatus exceeds the supply, for example, during the mass influx of casualties or when the equipment simply is not available. A simple technique is described that enables an improvised pressure infusion device to be made in less than 5 min using apparatus readily at hand.

The apparatus required consists of an empty infusion bag and its outer protective cover, plus the inflating bulb of a sphygmomanometer. The technique is limited to certain makes of intravenous fluids with tough outer protective covers, e.g., Travenol. The inflating bulb is attached to the outlet port of the used infusion bag. The blood products or crystalloid destined for infusion then are placed alongside the empty bag, and both are inserted into the outer cover. The empty infusion bag then can be reinfated with the bulb to facilitate rapid infusion.

Higher infusion pressures may be achieved by increasing the size of the empty bag in relation to the outer cover by first inflating the bag in hot water and then deflating it prior to insertion as described. The apparatus may be suspended by means of adhesive tape.

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Superficial Temporal Artery Cannulation Is Not Benign

To the Editor: — A recent letter recommends using the superficial temporal artery for intraoperative arterial pressure monitoring in adults. The basis for this recommendation is easy access, palpability, and no description of serious complications in the pediatric literature.

Due to reports of apparent cerebral embolization and infarction in infants following the placement of temporal artery catheters, pediatricians have, by and large, abandoned this technique. A number of these infants did not present with noticeable neurologic deficits until months following temporal artery cannulation. Thus, lack of immediate sequelae does not guarantee safety of the method.

Cerebral embolization via radial artery catheters has been demonstrated in adults using as little as 3 ml of irritant. A greater danger may exist in using temporal artery catheters, due to the close proximity of the temporal artery to the carotid bifurcation.

Temporal artery cannulation is not benign. It should be undertaken only with the full knowledge of possible sequelae and only as a last necessary resort.

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