

The Pediatric Suction Trap for Measurement of Blood Loss

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Many methods of measuring blood loss during surgery, including measurement of suctioned blood, the gravimetric method, and visual estimation of blood on sponges, are in use today. At Mott Children's Hospital in Ann Arbor, Michigan, we have developed a simple method for measuring small quantities of blood suctioned from the operative field, which we have found quite helpful in operations on infants and children.

A trap graduated in milliliters from 0 to 100 is interposed between the main suction tubing and that coming from the operative field. It is mounted on an intravenous pole or the anesthesia machine where the anesthesiologist can see it easily. This allows for an accurate determination of blood loss via suction, an especially critical factor in infants and small children. Figure 1 illustrates the device, which consists of a Plexitron Buretrol 100-mm in-line burette from Travenol Laboratories,* to which the lines † from the table and suction source are connected at the ports at the top, with a clamp closing the tubing at the lower end. When the trap is full, it is easily emptied by removing the lower clamp. With this device

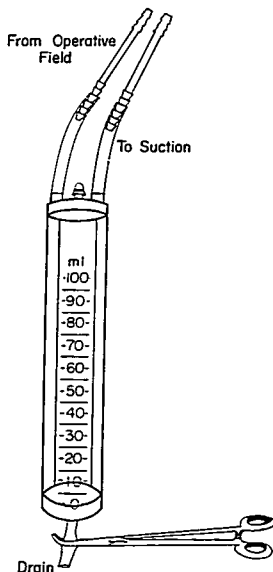


FIG. 1. Pediatric suction trap.

it is much easier to measure blood loss in infants and children, and the accuracy of the total estimate of such loss is thus increased.

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* Plexitron Buretrol, #R67M, Travenol, Morton Grove, Illinois.

† Tygon tubing, $\frac{3}{16}$ " i.d., $\frac{5}{16}$ " o.d., Norton Plastics Division, Akron, Ohio.

Calibration of Gas Flowmeters with the Bubble Burette

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The accuracy of modern gas flowmeters, achieved by careful manufacture and initial calibration, is commonly better than 1 per cent

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of full scale. Barring obvious damage from corrosion of the float or dirt in the tube, they remain accurate. Often, however, anesthetists find cause to doubt the indicated flow, warranted or not. In teaching situations questions arise as to the amount of oxygen actually delivered to a high-efficiency thermal vaporizer