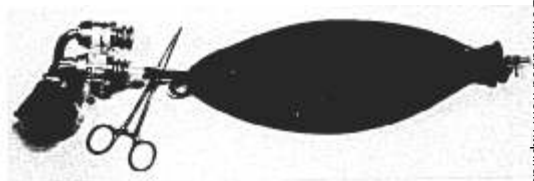


FIG. 1.



minutes after birth, minute volume ranged from 280 ml in an infant weighing 1,980 gm to 1,580 ml in an infant weighing 4,590 gm, and averaged 860 ml in 13 infants whose birth weights varied between 3,300 and 3,700 gm. A relationship between minute volume and body weight of the newborn has been observed by others utilizing a plethysmograph^{5,6} or a contour face mask and double-box with spirometer⁷ at 2½ hours to 16 days of life. Repeat measurements at 20 and 30 minutes after birth in 12 of our infants showed insignificant increases over the 10-minute values. In the absence of data for comparing our findings with other studies, no definitive statement can be made regarding the usefulness of our technique at this time. However, the method is simple and seems to offer a promising solution to a needed investigation of the effect of maternal analgesia and/or anesthesia on respiratory function of the neonate.

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Surgery

SELF-INFLATING TRACHEOSTOMY CUFF A silastic silicone rubber cuff that is self-inflating in that the tracheal-occluding shape is maintained without added air pressure has been designed. Air may be added or withdrawn using a pilot tube. The cuff is fastened to the tube with epoxy resin. One size of cuff fits several sizes of tracheostomy tubes. The tracheostomy tube is inserted with the cuff in the collapsed position. In patients with very large tracheas, a small amount of positive pressure may be added to cause tracheal occlusion, but this is usually not necessary. The cuffs are nonirritating and do not need periodic deflation and inflation. Tube and cuff can be left in place safely for the duration of a prolonged illness. (Auchincloss, J. H., and others: *A New Self-inflating Tracheostomy Cuff of Silicone Rubber for Use in Patients Requiring Mechanical Aid to Ventilation*, *Amer. Rev. Resp. Dis.* 97: 706 (April) 1968.)