equally, if they are large the dependant lung has the poorest ventilation. (*Steinmann, E. P.: Bronchospirometric Studies in the Lateral Position, Beitr. Klin. Tuberk. 128: 159 (July) 1964.*)

RESPIRATORY OXYGEN Oxygen consumption was 1.8 ml./liter of ventilation in patients with normal weight. In patients with a weight of 30 kg. on the thorax and abdominal wall, consumption was 3.4 ml., in patients with adiposity 2.9 ml., in Pickwickians 25.7 ml. and in emphysematous patients without respiratory insufficiency 17.8 ml. Respiratory insufficiency is not caused by adiposity but hypoventilation and hypercapnia develop in adipose patients with even slight degrees of bronchial stenosis because they have a higher need for oxygen. In bronchial stenosis, emphysema and the Pickwickian syndrome, the respiratory center is less sensitive to carbon dioxide. (*Scherrer, M.: Oxygen Consumption and Arterial Carbon Dioxide Tension in Normal Patients, Adiposity and Emphysema Before and During Voluntary Hyperventilation, Helv. Med. Acta 31: 111 (July) 1964.*)

NEWBORN VENTILATION Newborns and infants have a higher sensitivity of the respiratory center than adults and the slope of the sensitiivty curve is steeper. The greatest difference exists between newborns and children up to two years but even after six years values do not reach those of adults. Newborns and small children have a lower base reserve. Babies have an apnea point of 24 mm. P_{CO_2}, *p*H 7.57 and bicarbonate 19.2 mEq. There is a decrease in respiratory sensitivity during sleep depending on the depth of sleep. Babies can tolerate 2 per cent carbon dioxide inspiratory concentration for only 5 minutes without signs of carbon dioxide narcosis. (*Grusz, K. J.: Sensitivity of the Respiratory Center in Children up to 6 Years, Pfluger. Arch. Ges. Physiol. 280: 193 (June) 1964*).

THORACOTOMY Acid-base studies were performed during lung operations. With manual ventilation there is more fluctuation in *p*H and P_{CO_2} and respiratory acidosis may occur. Respiratory acidosis is a consequence of premedication and relaxants up to two hours after operation; thereafter, it is an indication of complications (atelectasis, bronchopneumonia). Using the nomogram of Engström-Herzog with the Engström respirator, alkalosis occurs during operation. Respiratory alkalosis on the first and second day may be a sign of hypoxia. Metabolic acidosis is found consequent to shock or hyperventilation. Metabolic alkalosis may be compensatory due to respiratory or metabolic acidosis during or after surgery. Metabolic alkalosis must be avoided because of the known dangers of hypoventilation after surgery. (*Quarz, W.: Gas Exchange and Metabolic Disturbances During and After Lung Operations, Praxis Pneumol. 14: 521 (Aug.) 1964.*)

SMOKING One cigarette has the same effect as work of 20–25 watts in smokers and 10–15 watts in nonsmokers on blood pressure, work of the left ventricle, and pulse frequency. In coronary insufficiency, half a cigarette can do the same as work, cold, or fright in causing an attack. (*Klensch, H.: Effect on Circulation and Strain to the Heart in Smoking Cigarettes, Arch. Kreislaufforsch 44: 1 (June–July) 1964.*)

SHOCK Continuous infusion of angiotensin II in normotensive cat preparations failed to produce a sustained increase of ventricular contractility. In contrast, norepinephrine consistently produced a large sustained improvement in ventricular performance. Responses of preparations in which mean aortic pressure was reduced to 35–45 mm. of mercury for one hour or less were comparable to those seen in the normotensive preparations. Norepinephrine response in the group subjected to hypotension up to 90 minutes was similar to that of the group in which hypotension was maintained for a longer period. (*Downing, S. E.: Effects of Angiotension II and Norepinephrine on Ventricular Performance During Oligemic Shock, Yale J. Biol. Med. 36: 407 (June) 1964.*)

ANTIEMETIC In a double-blind study, trimethobenzamide (Tigan) hydrochloride 200 mg. and placebo were administered intramuscularly in random order immediately after induction of anesthesia to 60 children ranging in age from 1½ to 12 years undergoing adeno-