lation to maximum decrease in arterial oxygen saturation for each period of nitrogen inhalation. The ventilatory responses of cyanotic subjects were significantly lower than normal, and there was a direct relationship between degree of chronic hypoxemia and reduction of ventilatory response to acute hypoxia. However, unlike the irreversible diminished ventilatory responses of natives born at high altitudes, the blunting of the hypoxic response caused by cyanotic congenital heart disease was reversed in the two instances where the hypoxemia was corrected by operation. (*Edelman, N. H., and others: The Blunted Ventilatory Response to Hypoxia in Cyanotic Congenital Heart Disease, New Eng. J. Med. 282: 405 (Feb.) 1970.*)

HYPOXEMIA A decrease in arterial blood oxygen tension (Pa_{O_2}) to 20 mm Hg or less has generally been held incompatible with survival, but there are exceptions. It was found that extreme hypoxemia with survival occurred at a rate of more than one of 1,700 hospital patients, and this condition is especially likely in the presence of circulatory collapse. Permanent physiologic impairment could not be identified when these patients were followed up for many months. Neither the degree of hypoxemia nor survival was well correlated with hydrogen ion or carbon dioxide levels. Evidence of severe neurologic impairment did not preclude survival, and the neurologic signs were reversible in most instances. Blood oxygen studies often reveal derangements not revealed by pH and carbon dioxide studies, and a low oxygen level should not be considered a sign of hopelessness. (*Gray, F. D., Jr., and Horner, G. J.: Survival Following Extreme Hypoxemia, J.A.M.A. 211: 1815 (March) 1970.*)

OXYGEN UPTAKE AFTER ASPHYXIA Previous studies of resuscitation in asphyxiated newborn infants suggested that oxygen requirement exceeded oxygen uptake but because of the depressed cardiocirculatory state, pulmonary blood flow was inadequate to oxygenate desaturated hemoglobin. The fetuses of 35 ewes were delivered by cesarean section at a gestational age of 140 days and the umbilical circulation maintained. The fetuses were asphyxiated by clamping the umbilical cord and resuscitated with intermittent positive-pressure breathing (IPPB). Oxygen consumption, heart rates, and blood pressures were recorded, and in eight of the animals, blood flows through the left lung were recorded while IPPB was applied to this lung only. The findings supported the hypothesis that oxygen consumption is abnormally low during resuscitation of the newborn from extreme asphyxia because of limited blood flow. Adult ewes were also asphyxiated, and in eight studies a very different pattern of behavior was observed, due to very rapid and complete recovery of the circulation. Observations of pulmonary vascular resistance suggested that complete vasomotor paralysis occurred during extreme asphyxia, so that resistance decreased to a near-minimum level for unexpanded lung. Expansion of the lung produced a large decrease in resistance which appeared to be due to the introduction of gas into the alveolar spaces, lessening the resistance to flow of the capillaries. (*Bolton, D. P. G., and others: The Oxygen Uptake and Pulmonary Blood Flow during Resuscitation from Asphyxia in Foetal and Adult Sheep, J. Physiol. 205: 417 (Nov.) 1969.*)

ERRATA

A misprint appeared in the article, "Surgery of the Aorta and Its Branches," in the August issue (ANESTHESIOLOGY 33: 229, 1970). On page 248, the last line should read ". . . animals were kept hypocarbic [not *hyper*carbic] for two hours."

In the article, "The Search for Better Anesthetic Agents: Clinical Investigation of Ethrane" (ANESTHESIOLOGY 32:555, 1970), the authors in reference 5 are listed incorrectly. S. Shimosato should be the first author and B. E. Etsten the last.