

closing volumes, PEEP, or current theories of respiratory care. The statement that there is a "lack of equipment immediately available for intermittent positive pressure breathing" (vintage 1954-1963) is not corrected or updated. Similarly, readers are referred to a symposium issue of the *British Journal of Anaesthesia* published a year earlier for a more detailed consideration of the problem of halothane hepatitis. Finally, no mention is made of such pharmacologic advances as the opiate antagonist naloxone, fentanyl, droperidol, diazepam, bupivacaine, etc. In summary, what is highly valued in one medium, is less so in another.

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The Anesthesiologist, Mother and Newborn. By S. M. SHNIDER and F. MOYA. Baltimore, Williams and Wilkins, 1974. Pages: 295. Price: \$16.50.

This outstanding publication is based on the 1972 Post Graduate Seminar of Anesthesiology of the Universities of Miami and Florida, at which 20 authorities in the field of perinatology discussed the recent advances in maternal and fetal physiology, obstetric anesthesia, and management of the distressed newborn. There are eight chapters on basic principles, six on controversial aspects of obstetric anesthesia, ten on the fetus and newborn. Hon discusses the diagnosis and management of fetal distress and the use of fetal monitoring equipment. Chapters by Gregory, Shnider, and James review the management of the depressed newborn. James' excellent review of the current status of respiratory distress syndrome leads into the final section, entitled "Mechanical Ventilation of the Newborn Infant," containing six chapters on the management of the newborn with respiratory distress. Shnider and Moya have done a superb job of editing the material, and the result is an interesting, useful survey of modern anesthesiologic management of the parturient, fetus and newborn.

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Anesthetic Management of Endocrine Disease. By T. OYAMA. New York, Springer-Verlag, 1973. Pages: 220. Price: \$21.80.

Endocrines and Enzymes in Anesthesiology. By C. M. BALLINGER AND V. L. BRECHNER. Springfield, Ill. Charles C Thomas, 1973. Pages: 240. Price: \$23.80.

Anesthesiologists have a dual interest in the endocrine glands: to what extent do changes in endocrine function alter the response to anesthetics, and, *vice*

versa, to what extent do anesthetics affect the function of endocrine glands? The former have proven more susceptible to quantitation than the latter. Recently, for example, the changes in anesthetic potency, or MAC, associated with thyroid dysfunction have been measured. The older literature contains information on how changes in output of female sex hormones may affect general anesthesia, at least in experimental animals. Still lacking are data on the extent to which disorders of the adrenal cortex or medulla, and other endocrine glands, may alter the response to anesthetics, but these presumably could be measured as readily as the effects of hyper- or hypothyroidism.

When it comes to evaluating how anesthetics affect the function of endocrine glands, we have much in the way of data, but strikingly little insight into the functional significance of changes. Investigators in this field continue to rely to a great extent on blood levels of various hormones as affected by anesthetics. This may be necessary because of the state of the art, but what do blood levels really tell us? When circulating levels of hormones become elevated during anesthesia or surgery, is it due to increased release (and normal tissue utilization), to decreased utilization (and normal release), or to increased release plus decreased utilization? Sometimes we know part of the answer; for example, elevated plasma cortisol levels during anesthesia reflect increased release of hormone from the adrenal cortex, and we even know this is occasioned by increased release of ACTH from the pituitary, but we still know little about rate of cortisol utilization and nothing about whether elevation of plasma cortisol elicits the same metabolic and physiologic responses during anesthesia as in the absence of anesthesia. Are the elevated plasma cortisol levels beneficial or harmful? We do not really know. Our ignorance is even greater when we try to interpret changes in plasma levels of insulin, thyroxine, or other hormones. We know little of either the etiology of recorded changes or of their significance.

Problems inherent in the interpretation of blood levels and other common indices of endocrine function during anesthesia must not serve as the basis for pharmacologic nihilism, for throwing up one's hands and falling back on pragmatic reporting of sterile laboratory data. A great deal of material is available and ripe for imaginative review and perceptive analysis of where we stand and where our future investigations should take us. One welcomes, therefore, the appearance of two texts which, their titles suggest, will provide the insight and perspective so needed in this field. Dr. Oyama is particularly qualified for such a task. He has worked longer and has published more on endocrine responses to anesthesia and surgery than anyone else. His monograph, "Anesthetic Management of Endocrine Disease," in 152 pages of text and 61 pages of references, supplies an encyclopedic presentation of most of the world literature on endocrine responses to anesthesia. A chapter is devoted to each of the endocrine glands, starting with an outline of normal function and concluding with extensive clinical