

24. Webb, W. R., Lanius, J. W., Aslami, A., and Reynolds, R. C.: The effects of hyperbaric oxygen tension on pulmonary surfactant in guinea pigs and rats, *J.A.M.A.* 195: 279, 1966.
25. Fujiwara, T., Adams, F. H., and Seto, K.: Lipids and surface tension of extracts of normal and oxygen treated guinea pig lungs, *J. Pediat.* 65: 45, 1964.
26. Said, S., Avery, M. E., Davis, R. K., Banerjee, C. M., and ElGohary, M.: Pulmonary surface activity in induced pulmonary edema, *J. Clin. Invest.* 44: 458, 1965.
27. Cedergren, B. L., Gyllensten, L., and Wersäll, J.: Pulmonary damage caused by oxygen poisoning in an electron microscopic study in mice, *Acta Paediat.* 48: 477, 1959.
28. Kistler, G. S., Caldwell, P. R. B., and Weibel, E. R.: Development of fine structural damage to alveolar and capillary lining cells in oxygen poisoned rat lungs, *J. Cell Biol.* 32: 605, 1967.
29. Karsner, H. T.: Pathologic effects of atmospheres rich in oxygen, *J. Exp. Med.* 23: 149, 1916.
30. Paine, J. R., Lynn, D., and Keys, A.: Observations on effects of prolonged administration of high oxygen concentrations to dogs, *J. Thorac. Surg.* 11: 151, 1941.
31. Sharp, J. T., Griffith, G. T., Bunnell, I. L., and Greene, D. G.: Ventilatory mechanics in pulmonary edema in man, *J. Clin. Invest.* 37: 111, 1958.
32. Cook, C. D., Mead, J., Schreiner, G. L., Frank, N. R., and Craig, J. M.: Pulmonary mechanics during induced pulmonary edema in anesthetized dogs, *J. Appl. Physiol.* 44: 177, 1959.
33. Robinson, F. R., Harper, D. T., Thomas, A. S., and Kaplan, H. P.: Proliferative pulmonary lesions in monkeys exposed to high concentrations of oxygen, *Aerospace Med.* 38: 481, 1967.

Drugs

PENTAZOCINE COMPARISON Analgesic potency of oral and intramuscular pentazocine was evaluated in a double-blind crossover of graded single doses in patients with chronic pain due to cancer. Oral pentazocine was one third to one fourth as potent as intramuscular pentazocine. Single oral doses of 240 mg caused psychotomimetic reactions four out of 23 times. These reactions were transient; otherwise, adverse effects were not significantly different for equianalgesic doses of oral and intramuscular pentazocine. The oral form of the drug may be useful in treating moderately severe or severe pain which is not being treated with potent narcotics. (*Beaver, W. T., and others: A Clinical Comparison of the Effects of Oral and Intramuscular Administration of Analgesics: Pentazocine and Phenazocine, Clin. Pharmacol. and Ther.* 9: 582 (Sept.) 1968.)

HALOTHANE AND HEPATIC FAILURE Of the first 150 cases reported to the Fulminant Hepatic Failure Surveillance Study, 80 patients presumably had had viral hepatitis, and 62 of these patients had died. Of 41 patients who had had recent surgery, 36 died. Thirty-five of these patients exhibited massive hepatic necrosis less than three weeks after halothane anesthesia. Of these, 77 per cent had multiple exposures to halothane. Although the danger of hepatic failure from halothane is small, this complication was present in about 25 per cent of the patients presented in the study. This observation supports the authors' conclusion that when the use of halothane is desired, multiple exposures should be avoided. In addition, the authors point out that "unexplained" fever after exposure to halothane is an important warning sign, which should be thoroughly investigated prior to further exposure to this anesthetic. (*Trey, C., and others: Fulminant Hepatic Failure, Presumable Contribution of Halothane, N. Eng. J. Med.* 279: 798 (Oct.) 1968.)