

minutes and then more slowly until the anesthesia disappears. At all times, however, the concentration here maintains a slightly lower level than that at the site of injection. Samples taken from the cisterna magna in patients in the Fowler position never showed concentration values greater than 0.18 mg. per cubic centimeter and frequently less than 0.02 mg. per cubic centimeter.

... "There is no significant difference between the concentration curves of patients in the Fowler and in the Trendelenburg position. This seems to indicate that the factors responsible for the spread of the anesthetic in the subarachnoid space are not noticeably affected by such changes in position as occurred in these experiments. It also indicates that within these limits concentrated solutions of procaine hydrochloride do not settle into dependent portions of the subarachnoid space as do colored solutions in inanimate models." 3 references.

J. C. M. C.

McIVER, M. A., AND WINTER, ELEANOR A.: *Deleterious Effects of Anoxia on the Liver of the Hyperthyroid Animal*. Arch. Surg. 46: 171-185 (Feb.) 1943.

"It has been recognized for some time that persons with thyrotoxicosis and animals in which a state of hyperthyroidism has been artificially produced are particularly sensitive to anoxia. . . . In a survey of the literature no studies were found dealing particularly with the effects of anoxia on the liver during hyperthyroidism. . . . The present paper records our experiments on the effect of anoxia on the liver during artificial hyperthyroidism. . . . The experiments were carried out on male albino rats. . . . Rats given injections of crystalline thyroxin for two to three weeks in doses of 0.1 mg. daily in general remained in good condition,

although they showed clinical signs of hyperthyroidism and when they were killed the hepatic glycogen level was found to be low. They showed no degenerative lesions of the liver. On exposure to atmospheres containing low concentrations of oxygen, in 14 of 17 hyperthyroid animals varying degrees of hepatic injury developed. There were 9 deaths among the total of 17 rats. In a group of control normal rats similarly exposed to low concentrations of oxygen hepatic lesions did not develop. There were no deaths in this group. It is suggested that in some instances the acute lesions found in the livers of patients dying of hyperthyroidism may be the result of anoxia." 15 references.

J. C. M. C.

BEECHER, H. K.: "*Shock*" and *Anesthesia in Transthoracic Gastric Surgery*. Surg., Gynec. & Obst. 76: 331-336 (Mar.) 1943.

"The point of view has persisted generally that only the robust are likely to withstand transpleural surgery. . . . Good material for examination in poor risk patients can be found in the group of patients who have carcinoma of the stomach. This lesion, approached by transabdominal wall route as well as by transpleural route for anatomical reasons, has now been operated on enough times through the latter entrance to permit study and comparison of the shock producing effects of the two approaches. The material considered here is divided as follows: 64 patients with resectable carcinoma of the stomach have been studied; 17 of these have undergone gastric resection through the pleura and 17 by the traditional route; both of these groups were under ether anesthesia, and for comparison 30 patients have had gastric resection under spinal or splanchnic block or local anesthesia through the latter route. From pres-