sulfonamide compounds is used. If evidence of hepatic damage is manifest before chloroform must be administered, it would appear from the experiments of Machella and Higgins that sulfanilamide may be given with safety and even with assurance that it will exert some protective action on the already damaged liver. Although our present experiments indicate that sulfanilamide has a protective action against damage to the liver from inhalation of chloroform, we wish to state emphatically that it should not be construed from this that we are endorsing chloroform as the anesthetic agent of choice for wounded men. We wish merely to present evidence of a possible means of protecting the liver against the damage from chloroform when, in certain emergencies, it is considered that this anesthetic agent must be used." 3 references.

J. C. M. C.

VESSELL, V. E.: *Anaesthesia: from the Patient's Point of View.* M. Press. 210: 237–239 (Oct. 13) 1943.

"The first essential to success is a thorough examination of the patient. . . . As basal narcotics the most popular are pentothal sodium, avertin and paraldehyde. Pentothal is the most valuable of all of the anaesthetic agents, but it cannot be too strongly emphasised that, owing to its very potent and rapid action together with its marked respiratory depressant effects, its use should be confined to those who are familiar with the principles, theory and practice of anaesthesia. . . . All operations upon the limbs, with the exception of the larger amputations, can be efficiently anaesthetised with omnopon-scopolamine, followed by pentothal, or pentothal, nitrous oxide and oxygen. . . . For operations upon the thyroid gland there is nothing to equal avertin . . . preceded by a maximum dose of omnopon gr. 1/3 with scopolamine 1/150 and followed by nitrous oxide-oxygen. . . . With regard to inguinal herniorrhaphy, when the removal of the sack only is necessary, pentothal-nitrous oxide-oxygen will fulfil all requirements, but when a definite repair is to be undertaken complete relaxation is essential. This can be effected by avertin-nitrous oxide-oxygen, with the addition of a small amount of either trichlorethylene or ether. . . . Provided the patient's condition is not too toxic, spinal anaesthesia is definitely indicated in cases of strangulated herniae and not uncommonly reduction follows the injection. . . . For tonsillar enucleation when due heed is paid to haemostasis, compassionate anaesthesia is best effected by avertin-nitrous oxide-oxygen-trilene administered through the medium of an endotracheal tube passed nasally. . . . Operations in the anal region demand deep narcosis, and a caudal block with light percaine followed by nitrous oxide-oxygen fulfils all requirements. . . .

"For high abdominal operations, for prolonged surgical procedures, for those operations which result in severe shock, or when the patient is suffering from some pulmonary lesion, the writer is definitely in favour of pentothal-light percaine spinal-nitrous oxide-oxygen. . . . For short, low abdominal operations, such as appendicectomy, avertin-nitrous oxide-oxygen with a minimal quantity of trilene or ether is quite satisfactory, but a difficult retrocaecal appendix in a robust subject does better with a spinal anaesthetic."

J. C. M.

MCNEARNEY, JOE: *Continuous Spinal Anesthesia.* J. Missouri M. A. 40: 348–349 (Nov.) 1943.

"Continuous spinal anesthesia is a controllable anesthesia. There is no

undue drop in blood pressure and no great respiratory difficulty. The length of time it can be made to last is sufficient for any surgical procedure without endangering the patient as one large dose of local anesthesia subdurally often does."

J. C. M. C.

EISENHART, C.; SIMPSON, R. A., AND GILLESPIE, N. A.: *Ether versus Cyclopropane (A Statistical Comparison of Circulatory Complications after Abdominal Operations).* Brit. J. Anaesth. **18**: 141–159 (July) 1943.

"By means of the punched card system an investigation was conducted into the incidence of circulatory complications during the period in the hospital following an operation performed with cyclopropane or ether. The cyclopropane series consisted of 257 cases of upper abdominal, and 1268 cases of lower abdominal interventions. In the case of ether, the corresponding figures were 435 and 531. The relation between pre-operative cardiovascular disease, physical state, the agent in use, and post-operative circulatory complications has been considered both for upper and lower abdominal operations. These figures have been subjected to statistical analysis. The relationship between the plane of anaesthesia and post-operative circulatory complications has been investigated in a similar manner. . . .

"In a healthy patient subjected to anaesthesia for an upper abdominal operation, the tendency to circulatory complications is greater after cyclopropane than after ether, and is more marked among patients suffering from disease of the circulatory system. The incidence of post-operative circulatory complications is higher after upper than after lower abdominal operations. The data suggest that, after operations below the umbilicus, post-operative circulatory complications may be more liable to follow cyclopropane than ether anaesthesia, but the evidence is of insufficient strength to warrant this conclusion. With ether, the deeper the plane of anaesthesia, the greater the incidence of circulatory complications in the post-operative period. In the case of cyclopropane this statement is true of lower abdominal operations. It is probably also true of upper abdominal operations unless 'controlled respiration' is in use. The circulatory complications in the post-operative period, although of considerable importance, constitute only one of many factors which should be weighed when choosing the agent for use in any particular case. The facts enumerated above should be applied in practice with the judgment which only extensive clinical experience can give." 12 references.

J. C. M.

TAINTER, M. L.; TAINTER, E. G.; LAWRENCE, W. S.; NEURU, E. N.; LACKEY, R. W.; LUDUEÑA, F. P.; KIRTLAND, H. B., JR., AND GONZALEZ, R. I.: *Influence of Various Drugs on the Threshold for Electrical Convulsions.* J. Pharmacol. & Exper. Therap. **79**: 42–54 (Sept.) 1943.

"An electrical device . . . was used for measuring the convulsive threshold of unanesthetised rabbits, using a high resistance stimulator and 60 cycle alternating current. . . . Barbital compounds, dilantin, 3-methyl 5-5 phenyl ethyl hydantoin, and propazone raised the convulsive thresholds generally proportional to the dose. The barbitals showed surprisingly little difference in potency for equivalent doses. Propazone appeared to be the weakest of this group. Marked degrees of depression of excitability were produced by the hypnotic or anesthetic group of