drate (70 to 80 mg. per kilogram of body weight) rectally prior to the induction of anesthesia makes for a smoother induction and probably diminishes the total amount of ether necessary to maintain anesthesia. Because of the danger of circulatory collapse it is advisable not to use tribromethanol in amylene hydrate if the operation is to be carried out with the patient in a sitting position." 7 references.

J. C. M.C.

ROVENSTINE, E. A., AND WERTHEIM, H. M.: *Therapeutic Nerve Block.* J. A. M. A. 117: 1599–1603 (Nov. 8) 1941.

"Although therapeutic nerve blocking is an outgrowth of regional analgesia, utilizing the same anatomic and physiologic principles, and therefore has an identical historical development, it can be said to have come into actual existence and gained recognition as a therapeutic measure during the last score of years. . . . It should be stated that the choice of the solution for injection constitutes, next to accurate diagnosis, the most important consideration in therapeutic nerve blocking. Procaine or similar analgesic drugs in saline solutions may be injected in the proper amounts and concentrations and repeated at frequent intervals without serious or disturbing sequelae. Drugs such as procaine in various oils may be used freely but with more caution since the complication of sloughing tissues, although uncommon, always is to be feared. Neurolytic injections of alcohol have been extolled often and not rarely condemned. Their use is justified when other less formidable therapeutic remedies have failed and injections of analgesic solutions are without permanent relief. . . .

"Alcohol injections for the relief of trigeminal neuralgia have been the subject of many favorable reports which give results for thousands of treatments. If the diagnosis is without error and the solutions are properly placed, pain is always relieved. There are no contraindications to such treatment, and the only objection is that permanent relief is not always obtained. . . . Neuralgia of the greater occipital nerve has a pain distribution localized to the distribution of the posterior primary division of the second cervical nerve. Relief is readily obtained by perineural injections of this nerve with procaine-alcohol, as it winds around the lateral mass of the second cervical vertebra. Intractable pain from tuberculosis or other diseases of the larynx may be relieved by injections of the superior laryngeal branch of the vagus. . . . Cervical plexus neuralgia is usually limited to a single segmental nerve. With accurate localization and careful differential diagnosis, therapeutic nerve block may be done with favorable prognosis. Brachial plexus neuralgia, often confused with cervical plexus neuralgia, may result from spasm of the scalenus anticus, osteoarthritis of the cervical or upper thoracic vertebra and numerous other conditions. These disturbances are not favorable for nerve blocking therapy unless it can be shown that an individual nerve segment is involved and surgical therapy is not advised. Painful shoulder is a common complaint and most often is due to periarthritic involvement or subdeltoid bursitis. Relief of pain may be obtained frequently by perineural injections of procaine or oil-anesthetic solutions in the lesser scapular notch to interrupt sensory impulses passing through the suprascapular nerve. Such treatment is definitely more valuable in acute conditions. . . .

"Blocking the thoracic and lumbar segmental nerves by the paravertebral route has several therapeutic indications. . . . The lumber and sacral segmental nerves may be judiciously blocked for many painful conditions.

. . . Coccygodynia is an example for which the third, fourth and fifth sacral nerves that unite to form the coccygeal nerve are blocked. . . . No group of patients with pain as a predominant symptom are more difficult to treat than those with carcinoma. . . . If the nerve supply to the growth is determined and is accessible, as frequently obtains in malignant growths of the face and neck, nerve blocks are definitely indicated. The upper thoracic nerves can be blocked to relieve pain from carcinoma of the lung and pleura. When the new growth involves the abdominal viscera the pain pathways may not be interrupted easily. . . .

"The most interesting and probably more promising of fruitful results from therapeutic nerve blocking are the techniques for interrupting sympthetic pathways with analgesic or neurolytic solutions. . . . Interruption of the sympathetic pathways at the stellate ganglion is used to cure hyperhidrosis of the upper extremity. It is useful to relieve sympathalgia of the face and causalgia. It has been employed successfully to treat post-traumatic spreading neuralgias, the pain of amputation stumps and vasomotor disturbances. The treatment of angina pectoris after medical remedies have failed to relieve pain is now conceded to include alcohol injections of the upper thoracic sympathetic ganglions. The same procedure has been effective in controlling or alleviating the distressing pain from an aneurysm of the arch or the descending aorta. Interruption of lumbar sympathetic pathways is indicated for conditions in the lower extremities similar to those enumerated for the upper extremities. This therapeutic nerve block has been employed also to treat thrombophlebitis of the lower extremity. The results from these injections have been dramatic and largely successful. Not only is the pain relieved immediately but the whole process subsides promptly. This remedy represents so much of an improvement over previous therapeutic efforts that it should be used whenever the condition develops." 10 references.

J. C. M. C.

GRIFFIN, E. L., AND BENSON, R. C.: *Gynecologic Surgery Under Local Anesthesia.* Am. J. Obst. & Gynec. 42: 862–869 (Nov.) 1941.

"Local anesthesia has been used for many years in this country in gynecologic surgery. There are those who have strongly advocated its use and have employed it with satisfactory results. . . . Local anesthesia has been found to produce fewer pulmonary complications, reduce dehydration and acidosis as well as gastrointestinal disturbances. Spinal anesthesia has its advocates and in some hands it can apparently be used with great safety. However, those who have studied large series of cases from many clinics are of the opinion that operations performed under spinal anesthesia carry a definite hazard. . . . We, at the New York Hospital clinic, have likewise been impressed with the advantages of local anesthesia. We began by using it only in cases having definite medical complications. These results were so satisfactory that its use was extended to include many uncomplicated cases and elderly women. . . . The number of vaginal operations was 177, and the abdominal 23, a total of 200 cases. The control material consisted of 177 major vaginal and 100 major abdominal operations performed under general anesthesia. These were consecutive cases, but were limited so that the percentage of operations performed each year was the same for both types of anesthesia. This was necessary because the number of operations performed under local anesthesia steadily increased each year. . . .

"Whether a vaginal or abdominal operation is to be performed, the fol-