

genation. For operations requiring deep muscular relaxation, the primary dose was followed by 40 units five minutes before the anticipated time of the peritoneal incision. When relaxation was insufficient, an additional 20 units were infused and occasionally another dose was required for closure of the peritoneum.

In all cases studied the following technic of administration of the inhalation agent was found optimal. The induction was accomplished with three liters per minute flow of ethylene or nitrous oxide and one liter per minute of oxygen. After approximately three minutes the anesthetic agent was reduced to one liter per minute and this 50-50 concentration, assuring adequate oxygenation, was continued throughout the surgical procedure. 1 reference.

J. B. G.

ROVENSTINE, E. A., AND PAPPER, E. M.: *Glossopharyngeal Nerve Block*. *Am. J. of Surg.* 75: 713-715 (May) 1948.

This discussion includes a technic for completing glossopharyngeal nerve block safely and effectively.

The patient is placed in the supine position and the head turned toward the opposite side to about 45° with the sagittal plane of the body. The tip of the mastoid bone is then identified and marked with a skin pencil. The angle of the mandible is also located and marked. A line is drawn connecting these points and is then bisected. A skin wheal is raised at the midpoint of the line joining the mastoid tip and the angle of the mandible. Contact with the styloid process is effected by inserting a 5 cm. five caliber needle through the wheal in a direction vertical to the skin. After the styloid process is encountered at a depth varying from 2 to 4 cm. medial to the skin surface, the needle is reinserted in a man-

ner which permits the point to pass 0.5 cm. deeper and posterior to the bony styloid. The needle point then lies immediately adjacent to the glossopharyngeal nerve and injection is completed very slowly after careful aspiration. A total of 4 to 8 cc. of a 1.5 per cent procaine solution on each side will provide adequate anesthesia of the posterior third of the tongue for approximately seventy-five minutes.

Case reports are presented which illustrate the use of glossopharyngeal block in anesthetizing the base of the tongue for operative intervention and in providing an accurate diagnostic measure in the selection of patients for surgical section of the ninth cranial nerve. 1 reference.

J. B. G.

WATERS, RALPH M.: *Drugs and Methods for the "Occasional" Anesthetist*. *Post-Grad. M. J.* 3: 77-84 (Feb.) 1948.

"... I hope to defend the proposition that the four agents, nitrous oxide, ether, chloroform, and procaine, with relatively simple apparatus, in the hands of any conscientious and competent physician, can provide safe, pleasant, and adequate anesthesia for the majority of the operations in modern surgical practice.

"... It is my desire to emphasize the importance of a thorough medical training for the administrator of anesthetics and simplicity in method of administration, unless or until the status of true specialism is achieved.

"Since all anesthetic agents may and frequently do cause serious depression of the respiratory and other functions, the problems of modern anesthesia grow ever more complicated. To determine the cause and the proper treatment of a condition arising after the simultaneous administration of an opiate and a barbiturate, followed by a