

work, particularly by students, may be condemned because lack of the warning signal of pain may encourage injudicious and hasty cutting that may prove injurious to the pulp, either through exposure or from the generation of heat through pressure or too rapidly revolving burs or stones. A student who will cut too deeply into a tooth under an anesthetic is almost as likely to make the same mistake without it. . . . As to injuries resulting from overheating due to the friction of revolving engine instruments, there need be no occasion for such trouble if approved methods of cavity preparation are followed. . . .

"The anesthetic of widest general use in dentistry is undoubtedly novocaine. It is used to the exclusion of all other anesthetics in our operative work, except as some one of the topical type may be used occasionally on an experimental basis."

J. C. M. C.

PAPPER, E. M.: *Anesthesia for the Burned Patient*. Surgery 17: 116-121 (Jan.) 1945.

"In the postoperative period several observations of interest were made by way of comparison of the various anesthetics employed. There was no apparent difference in the success of viability of the graft with regard to the anesthetic employed. There was no significant change in the hematologic picture of the four patients anesthetized with spinal and regional techniques. There was a moderate depression of both red blood count and hemoglobin in the patients anesthetized with pentothal sodium, requiring an average per patient of one whole blood transfusion consisting of 500 cc. in the immediate postoperative period. The patients anesthetized with ether exhibited a more significant anemia postoperatively, requiring on the average three blood transfusions of 500 cc. each

in a similar period of time. It should be mentioned that transfusion was given to all patients until the red blood count had reached a minimum of 3,500,000 per c.mm. with a proportionate concentration of hemoglobin. It is evident, therefore, that in patients in whom general narcosis was considered necessary for skin grafting procedures in the treatment of burns, the pentothal sodium nitrous oxide sequence exerted a less harmful effect upon the final picture in the peripheral blood than did ether.

"Some light is cast upon the present controversy concerning the concurrent use of sulfonamide drugs and barbiturate anesthesia. All patients observed were given one or more drugs of the sulfonamide group preoperatively and immediately postoperatively. No demonstrable ill effects were noted in the patients anesthetized with pentothal sodium and no synergism between the two was seen. In fact, as pointed out in the course subsequent to operation in the patients anesthetized with pentothal was, on the whole, more benign than that of the etherized patients, despite the use of sulfonamide preparations. The present practice at this hospital is to utilize sulfonamide drugs, regardless of the type of anesthesia to be employed, prior to operation upon the burned patient.

"There were no deaths in this series of burned patients subjected to skin grafting procedures. . . .

"For pain relief the administration of morphine is probably the least harmful and the most satisfactory method of analgesia. Where necessary, small doses of pentothal anesthesia or ether anesthesia may be considered acceptable. . . . The employment of spinal anesthesia, particularly if the areas involved are above the tenth thoracic segment, is of considerable danger in the acutely burned patient because of the attendant circula-

tory depression produced by this type of anesthesia in the patient whose circulation is already impaired, either actually or potentially."

A. W. F.

Thoracoabdominal Wounds. Bull. U. S. Army Med. Dept. No. 85: 12 (Feb.) 1945.

"The management of abdominal and thoracic wounds has long been a challenge to surgical skill and judgment.

"If an abdominal approach is used when perforation of the diaphragm may be present, it is essential to have an intratracheal tube in place. The sudden collapse of a lung from a sucking diaphragmatic perforation has been observed to cause death on the operating table."

A. W. F.

ROVENSTINE, E. A.: *The Pre-anesthetic Preparation of the Surgical Patient.* J. Michigan M. Soc. 44: 45-51 (Jan.) 1945.

"It is no new practice to give drugs shortly before anesthesia is induced. . . . The modern concept, however, except as related to surgical preparation, has gained little significance. This tardy recognition has been the result of the empirical use of pre-anesthetic drugs and the convenience of routinizing practices. The time-honored 'quarter and one hundred fiftieth' has become so firmly entrenched that it is almost traditional in many clinics. . . . Once a routine is established the incentive for improvement is suppressed.

"Pre-anesthetic medication has for its primary purpose an increased margin of safety for the patient. His comfort and rapid convalescence are other important aims. . . . It is established that patients who have received sedative drugs will require correspondingly less anesthetic agent depending

upon the degree of narcosis already present. . . .

"The thesis of Guedel is familiar wherein he correlates the reflex irritability or what might be termed resistance to anesthesia directly with oxygen demand or metabolic activity and indirectly with the state of mental activity. . . . In practice this tenet serves as a useful guide in the proper pre-anesthetic medication. To illustrate, patients with elevated metabolic rates, such as those with hyperthyroidism or infections, can be given properly a much larger amount of sedative drugs than is needed or is safe when there is a normal metabolic rate. Likewise for the old and young, a decreased amount of sedatives is imperative and can be approximated from Guedel's recommendations. . . . Other considerations are the anesthetic agents and techniques that will be employed later, the nature of the surgery to be completed, the postoperative requirements and, of greatest importance, the nature of existing disturbed functions that may influence either the response to pre-anesthetic or anesthetic drugs. . . .

"The opiates have a well-deserved place at the top of the list of drugs for use immediately before surgical anesthesia is induced. The morphine salts are representative and most widely employed. The profound analgesic effect of morphine is advanced to justify its use to control pre-anesthetic pain. It is readily agreed that such use is indicated but it should be remembered that there are other methods to control pain and secure comfort. Among these are nerve blocking, nursing care, freedom from worry and fear and other analgesic drugs. . . .

"The objective and subjective depression with morphine does not parallel the analgesic action. When given subcutaneously, more than an hour will elapse before subjective narcosis