or/and intravenous agents. In no case was intravenous procaine given to any patient who had undergone local or spinal analgesia.'

J. C. M. C.


"After more than fifty years of use nitrous oxide oxygen anesthesia is still the most popular general anesthesia for dental surgery. Its superiority over other general anesthetics is well established... Because of the weakness of nitrous oxide as an anesthetic agent, particularly in an 'anesthetic resistant' type of patient... a supplementary agent or synergist should be employed in many cases... Supplementary agents may include: Premedication... or Synergists."

J. C. M. C.


"Myanesin relaxes skeletal muscles by depressing the reflex excitability of the spinal cord. It prevents convulsions and death from a lethal dose of strychnine in mice, in doses which do not paralyze the animals. In anaesthetic practice, myanesin permits of a light anaesthesia with adequate muscular relaxation. It counteracts pre-anecotic excitement and potentiates barbiturate narcosis. Myanesin possesses a high degree of safety. On account of its haemolytic properties, haemoglobinuria may be produced, but the incidence of this is extremely rare (less than 20 reported cases). The haemoglobinuria thus produced would appear to be symptomless. Other preparations in widespread use are also liable to give rise to haemolysis. If the concentration of myanesin is not more than 2 percent, haemolysis does not occur."

J. C. M. C.


"Paravertebral deposition of alcohol has long been used to stop nerve pain caused by malignant growth which is deemed not feasible for removal. Paraplegia occasionally results if the injected material is delivered through the intervertebral foramen into the epidural or subdural space. Lundy has observed twice that during paravertebral anesthesia the needle entered the arachnoid through the intervertebral foramen. In such a case, the escape of the cerebrospinal fluid from the needle gives enough warning to indicate withdrawal. There are other paths by way of which the injected material may be forced into the spinal canal but without the warning of a show of cerebrospinal fluid; that is, if the point of the needle is laid right upon the sheath of the nerve at the entrance of the intervertebral foramen, the anesthetic fluid may pass into the peridural space along the nerve to catch the neighboring spinal roots. Or the point of the needle may chance to be inserted into the nerve through which alcohol is injected into the caudaequina sac. ..."

"Y. C. S. H. ... a male, aged 33, was admitted on October 5, 1945, because of nerve pain in the anterior and medial aspects of the right thigh and knee for eleven months. A huge and hard mass was found in the right lower abdomen. It was not suitable for excision. Biopsy proved it to be an osteogenic sarcoma, probably from the ilium. Lumbar paravertebral injection of alcohol was used to stop pain. The technique followed that of Labat. ... On November 17, 1945, the right D_{12},
L₁, L₂ and L₃ were injected. At each side 1 cc. of 95 per cent alcohol was deposited. Pain was immediately stopped after this procedure. Complete anesthesia from below the inguinal region to above the knee joint was obtained on the injected side. Motor function of both lower extremities remained the same as before. One week later pain appeared at a lower level, the anterior surface of the right leg. For relief, L₄ and L₅ of that side were injected. Shooting pain passing down to the patellar region was immediately noticed by the time the needle was inserted for the fourth nerve. After the injection, pain disappeared but paralysis of both lower limbs was produced. Neurological examination showed complete anesthesia (loss of pain, touch, temperature and vibration sensations) from below the umbilicus on the right side, as well as the absence of all superficial and deep reflexes. On the left side hypesthesia was found from below D. No voluntary movement could be performed. There was only twitching of the muscles when the patient attempted to move his leg. The anal sphincters were relaxed. The urinary bladder was atonic. There was no recovery. He died twelve weeks later (February 3, 1946). Autopsy was not obtained.

"In this case, we were unable to determine through which of the above mentioned routes alcohol passed into the spinal canal, as an autopsy was not performed. It is possible to say, however, that the needle did not enter the arachnoid, as there was no cerebrospinal fluid returned. It is very possible that the paralysis is a result of peridural injection along the sheath of the nerve."

J. C. M. C.


"In a series of 100 deliveries using spinal anesthesia with nupercaine, 1:200 plus 10 per cent dextrose for late first stage and second stage labor, . . . an estimation of the results may be grouped as follows: 1. Excellent, 83 per cent. In this group the anesthesia and obstetric course were completely satisfactory. 2. Good, 11 per cent. Of these, two cases had marked rise in blood pressure with headache during delivery. The remaining nine patients had some minor complaints, some requiring nitrous oxide for short periods. 3. Poor, 6 per cent. One had inadequate relaxation for version and breech extraction. Two cases were uncooperative and psychiatrically poorly chosen. In two patients the spinal anesthesia was given too early, and labor was temporarily stopped. One spinal was definitely inadequate. As the technic has been altered from time to time to meet our needs during the early cases, it is felt that the number of excellent results would be much higher with a later group of cases. . . . Spinal anesthesia with its simple technic, would seem to have all the advantages of continuous caudal anesthesia without many of its disadvantages. Three things are of major importance for its safe and successful use: a patient psychically suited to regional procedure; a carefully standardized technic to obtain consistently good results, and a well-trained obstetrician, so that the increased number of complicated instrumental deliveries will be safely managed."

J. C. M. C.