

LUNDY, J. S.: *Sacral Block Anesthesia In Proctologic Operations*. Am. J. Surg. 79: 137-139 (Jan.) 1950.

"I have had an opportunity to compare a number of methods of anesthesia for proctologic operations and I know of no one method that offers so much satisfaction to the surgeon and the anesthesiologist, and usually to the patient, in terms of relaxation of the operative field and freedom from pain, as blocking the sacral nerves. . . . In the majority of a relatively large number of cases in which sacral block has been used a proctologic operation has been performed. . . . Dangers to be faced in the use of sacral block anesthesia are few but must be kept in mind. The solution may accidentally be injected. . . . In most cases this is the maximal amount of a 1 per cent solution of procaine hydrochloride that should be injected into the caudal canal. The injection of a 1 per cent solution of metycaine is a different matter. I know of one patient who died after 30 cc. of this solution had been injected into the spinal fluid. The anesthesiologist was not sufficiently experienced to know that he should have tested for spinal anesthesia at the first manifestation of distress, especially in regard to breathing, by the patient. If the anesthetic solution is accidentally injected into the spinal subarachnoid space, 100 cc. or more of the spinal subarachnoid space, 100 cc. or more of the spinal fluid should be withdrawn and replaced with isotonic sodium chloride solution. The tip of the dural sac may be as low as the level of the second sacral foramen; therefore, the caudal needle should not be inserted higher than

this level. One may traumatize the periosteal surface of the posterior part of the sacrum with the needle or needles employed; and if the point of the needle is passed repeatedly through the skin and into the periosteum of the sacrum, a sinus may form. I have observed one case in which such a sinus developed. If more than the average amount of solution is used and if the patient is somewhat sensitive to drugs, cardiovascular depression or even shock may occur. If the patient is an elderly or weak person, it is advisable to reduce the amount of solution from a third to a half. If time permits, it is sometimes possible to introduce 25 cc. of solution into the caudal canal and allow thirty minutes for the development of anesthesia and relaxation. No further injection may be necessary. In some cases an intracaudal injection of 25 to 30 cc. of the anesthetic solution and injection of 10 cc. of the solution in each second sacral foramen will produce adequate anesthesia and relaxation in twenty minutes. For the most part, however, the injection of 30 cc. of solution into the caudal canal, the injection of 10 cc. into the second sacral foramen on each side, the injection of 3 cc. into the third sacral foramen on each side and the injection of 2 cc. into the fourth sacral foramen on each side will produce good anesthesia in from ten to fifteen minutes. . . . The use of curare as an aid to pentothal sodium may possibly lead to an increased use of the combination and it may be that sacral block will go the way of spinal anesthesia if the possibility of using curare plus equal parts of nitrous oxide and oxygen continues to be used more generally than it has been." A. A.