An Improved Technique of Local Anesthesia for Anorectal Surgery*

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MOST ANORECTAL PROCEDURES, especially hemorrhoidectomy and lateral anal sphincterotomy, can be performed with the patient under local anesthesia. Kratzer[1] and Ramalho *et al.*[2] have shown that full relaxation of the anal canal can be accomplished with local anesthesia. Traditionally, injection of the anesthetic solution is started from the perianal skin toward the anorectal ring. Because of the extremely sensitive anoderm, most local anesthesia causes severe pain during injection, unless the patient is heavily sedated.

A new technique is described which can avoid this problem. The sensitive anoderm is partially or totally anesthetized by squeezing the anesthetic solution from the relatively insensitive area proximal to the dentate line. The next injection of the anesthetic solution of the anoderm thus causes minimal or no pain to the patient. The technique described is actually the reverse of steps used in conventional technique.

Technique

The patient lies in the left anterolateral position with the cheeks of the buttocks spread with tape.[3] The perianal area is cleansed with antiseptic solution and the area draped. Following digital examination, a well-lubricated small anoscope (such as Vernon-David anoscope) is inserted into the anal canal. In patients with anal fissure, a generous amount of 2% lidocaine jelly is used. Two to three ml of anesthetic solution

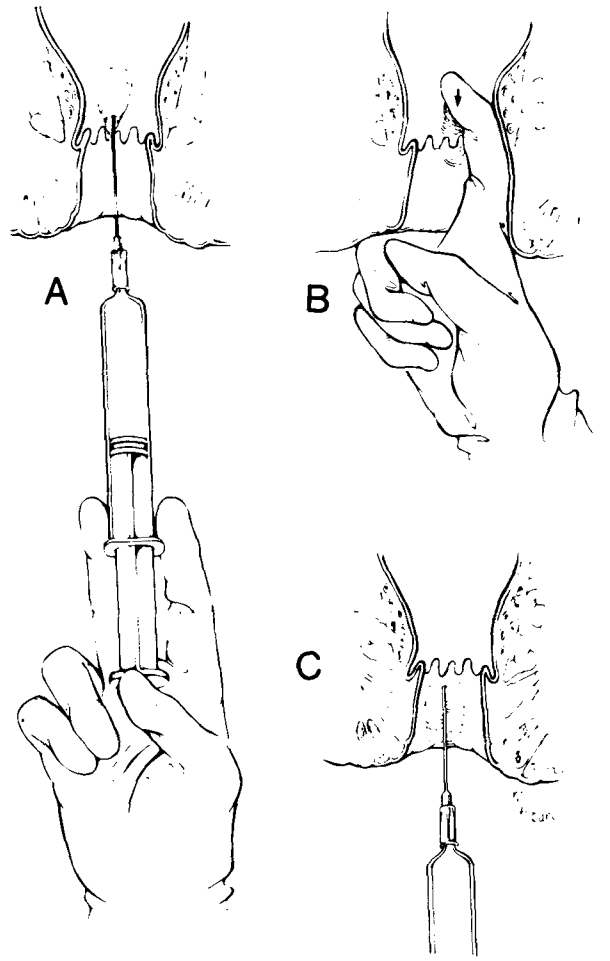

FIG. 1. A. Injection of the anesthetic solution 2 mm proximal to the dentate line. B. The anesthetic solution is squeezed into the anoderm. C. Injection of the anesthetic solution 2 mm distal to the dentate line.

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(0.25% bupivacaine or 0.5% lidocaine with 1:200,000 epinephrine, and 150 units of hyaluronidase) are injected submucosally, 2 mm proximal to the dentate line (Fig. 1A). This is performed with a 10-cc syringe and a 25-gauge, 6-cm (2.5 inch) needle. The injection is made in four quadrants. The well-lubricated index finger is then inserted into the anal canal and each wheal of the anesthetic solution is squeezed into the subdermal plane distal to the dentate line. This is best accomplished by bending the finger like a hockey stick over the anesthetic wheal and withdrawing it distally (Fig. 1B). Next, the anoderm, at 2 mm distal to the dentate line, is infiltrated (in the subcutaneous plane) with 2 ml of the anesthetic solution, in four quadrants (Fig. 1C). The anal verge area is then massaged to spread the anesthetic solution around the anus. It may be necessary to supplement the injection into the anoderm between the areas previously injected. In ordinary cases, 20 to 25 ml of the anesthetic solution is required. For a lateral anal sphincterotomy, it is not necessary to anesthetize completely around the anoderm.

References

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Announcement

SOCIETY FOR SURGERY OF THE ALIMENTARY TRACT POSTGRADUATE COURSE

A course entitled "Biliary Tract Disease" will be held at the Hyatt Regency Hotel, Chicago, Illinois, May 16, 1982. The course is worth eight hours of CME credit. The Course Director is Frank G. Moody, M.D. For more information, contact: Registration Supervisor, Charles B. Slack, Inc., 6900 Grove Road, Thorofare, New Jersey 08086. Telephone: (609) 848-1000.