

phine levels, obtained from acute epidural and intravenous models, have a specific relationship with levels of sedation in the chronic model is an error.² I know of no data that correlate CSF and blood morphine levels with the level of consciousness in these chronic cancer patients. Therefore, the pharmacodynamics of the chronic narcotic-accustomed cancer patient support my previous conclusions.^{3,4}

The third concern was regarding the new catheter position effecting the degree of relief by catheter tip position. A study of epidurograms will indicate that a three to five segment level of difference in catheter tip location makes no difference in the spread of dye in the space unless there is an area of epidural space obstruction.⁵ In this case, no obstruction was seen, and the post-permanent catheter epidurogram was normal, having the same area of distribution as the temporary catheter epidurogram.

Table 1 of our paper points out the cost and preservative content of the many generic morphine products currently on the market.¹ Using the non phenol-formaldehyde containing morphine preparations will result as cost savings to the patient without the potential risk of a preservative-induced epidural space injury. We hope that, in the future, there will be a larger number of inexpensive non-preservative-containing narcotics of

higher concentrations, available on the market for chronic epidural analgesia.

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Muscle Atrophy following Nerve Block Therapy

To the Editor:—Myotoxicity secondary to intramuscular injection of local anesthetics has been reported in laboratory animals and has been associated with complete regeneration of the damaged muscle fibers. This phenomenon has not been commonly described in human subjects. We present a 34-yr-old caucasian female who had chronic periscapular pain probably due to myofascial pain syndrome. Among other modalities used for pain management, the patient received a trigger point injection with 6 ml 0.25% bupivacaine and developed trapezius muscle atrophy as evidenced by significant depression in the superior aspect of the right periscapular area. Two months later, the "walnut-

sized" depression disappeared with almost complete regeneration of the atrophied muscle. This relatively benign and reversible complication appears to occur more frequently than reported and should be considered, particularly after some nerve blocks.

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Positioning the Endotracheal Tube in an Infant with Tracheoesophageal Fistula

To the Editor:—Transesophageal fistula (TEF) and esophageal atresia are relatively common congenital anomalies requiring surgical repair. Approximately

80-90% of TEFs consist of a blind upper esophageal pouch and a distal tracheal fistula to the lower part of the esophagus.¹