and appears perfectly normal. This sequence of events is quite dissimilar from that of a total spinal, where apnea occurs in 2 min with dilation of the pupil and an unrecordable blood pressure; and where on recovery it takes 30 min from the first faint chin tug to the time when the jaw can be left unsupported." Leivers's patient regained consciousness 115 min following the last dose of lidocaine.

I agree with Leivers's suggestion that performance of a prophylactic epidural blood patch be postponed until the epidural anesthetic has resolved, for the patient is then able to report back pain if too much blood is injected too quickly. It is possible that the blood injection hastened or worsened the apparent subdural anesthetic. However, it is not clear that the blood injection caused the reported complication.

BARBARA L. LEIGHTON, M.D.

Associate Professor of Anesthesiology Jefferson Medical College Thomas Jefferson University 132 South 10th Street, Suite 524 Philadelphia, Pennsylvania 19107-5244

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(Accepted for publication March 12, 1991.)

Anesthesiology 74:1167, 1991

In Reply:—I agree with Dr. Leighton that the possibility of subdural injection of local anesthetic in this case¹ had to be considered. The fact remains, however, that the sudden rapid increase in the level of a previously stable block occurred immediately following the blood injection. In addition, if the catheter had migrated into the subdural space, it is unlikely that the injection of 15 ml of blood would have been subsequently so benign. The respiration did not "slowly fail" but ceased abruptly. Massey Dawkins² gave only a general description of his "massive extradural," but it is possible that some of his 28 cases would now be considered to be examples of subdural injection. Sykes³ earlier had reported details of a case which coincide more with the typical subdural injection. In all instances the progress was more protracted than in my case.

Recently, another patient experienced a sudden increase in the level of a previously stable epidural block, when 10 ml of saline with 5 mg morphine was injected. This patient had also had an accidental dural puncture prior to the establishment of satisfactory analgesia *via* an epidural catheter. In similar circumstances, I suggest that the mecha-

nism postulated in my case report should be considered as a possible alternative explanation to subdural injection.

DAVID LEIVERS, M.D., F.F.A.R.C.S. Staff Anesthesiologist Naval Hospital San Diego, California 92134

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Value of Spinal Block in Central Pain

To the Editor:—The recent report by Crisologo et al. 1 concluded that the value of spinal block in making the diagnosis of central pain is questionable. This conclusion is not warranted, although the authors are correct to the extent that the interpretation of the effect of spinal blocks may be difficult. The use of spinal block to aid in the diagnosis of central of psychogenic pain is still useful in the absence of a positive response (relief of pain). However, a positive response including "cure" may still be entirely consistent with a central pain diagnosis. Whenever lidocaine (or any local anesthetic) is used, any conclusion made from a positive response must be made cautiously, since systemic absorption can cause pain relief in a wide variety of painful disorders.* In order

to definitely conclude that the effects of the injection are due to the local effects of the block, one would need to compare the results to the results obtained after systemic injection (with equivalent serum lidocaine concentrations) without noticeable nerve block. Such a test is impossible to perform in a patient who remains improved after spinal block; in this instance the test is really a moot point.

In addition, the cases cited that did have a positive response could very well have had a peripherally mediated, sympathetic maintained pain syndrome since these have been described after strokes.²

FRANKLIN J. DAY, M.D.

Pain Relief Center

112 La Casa Via, Suite 220

Walnut Creek, California 94598

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