

Additional Comments Regarding an Anesthesiology-based Postoperative Pain Service

To the Editor:—We were encouraged to see Ready's¹ recent article outlining the organization of an anesthesiology-based acute pain service. We would like to comment based on our 1-yr experience at Emory University with 1250 patients.

One problem, not mentioned by Ready, that will arise when starting an acute pain service concerns administration of epidural drugs by nurses. Many states either don't allow it or don't specifically address it in their nursing practice acts that may legally jeopardize the nurses. It should be emphasized that strict guidelines for administration of epidural drugs should be established and a physician skilled in resuscitation should be immediately available.

Some of the problems associated with administration of epidural drugs by nurses may be avoided by using continuous infusions. Continuous infusion also allows the use of lipid soluble opiates so that the incidence of side effects and respiratory depression may be decreased and peaks and troughs of drug concentration in CSF are avoided. Solutions for infusion may be prepared from concentrated, preservative-free opiate solutions that are more economical than Duramorph.[®]

Respiratory depression may occur with any technique of administration of potent opiates. Preventable causes must be ascertained so that techniques or policies can be changed when appropriate. We have seen respiratory depression related to epidural catheter migration, pharmacy errors, and abnormal opiate metabolism. Unlike Ready, we have seen two cases of respiratory depression in the postoperative period with patient-controlled analgesia (PCA), including one with airway obstruction, and an anephric patient with prolonged respiratory depression after receiving morphine.

We agree that decreased tidal volume often precedes decreased respiratory rate from epidural opiate overdose. Somnolence has preceded respiratory depression

in all cases that we have seen. Therefore, good nursing observation is superior to any respiratory monitor now available.

One area in which we disagree with Dr. Ready is his opinion that a history of inappropriate opiate use and drug-seeking behavior contraindicate PCA use. While it is true that such patients administer larger doses of opiates than their peers, due to tolerance, we administer these higher doses until they can take oral medicines. This avoids the problems of opiate withdrawal and establishes their baseline drug use. Then they are changed to oral methadone given in a consistent volume of vehicle on a time contingent basis. Slow, gradual withdrawal from methadone is then facilitated if it is medically indicated.

We feel that our involvement in postoperative pain treatment has increased patient comfort and prevented postoperative complications, while providing opportunities for residents to learn, as well as a rewarding mode of practice.

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REFERENCE

1. Ready LB, Oden R, Chadwick HS, Benedetti C, Rooke GA, Caplan R, Wild LM: Development of an anesthesiology-based postoperative pain management service. *ANESTHESIOLOGY* 68:100-106, 1988

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In Reply:—We appreciate the comments of Drs. Hammonds and Hord related to our recent publication. Our own experience with postoperative pain has now increased to over 1800 patients. Over 1200 have received multiple doses of epidural opiates, while most of the remainder have used patient-controlled analgesia (PCA). In addition, we have now administered single

injections of either epidural or subarachnoid morphine to 700 women following cesarean section.

We are aware that it is not possible in all areas for ward nurses to inject epidural opiates. It is our hope that responsible investigators in locations where nurses can function in this manner will describe protocols, document outcomes, and publish their results. Hopefully,