

References

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Commentary

Michael B. Howie, M.D., Department of Anesthesiology, The Ohio State University, Columbus, comments: The authors present a rare problem, but their solution can be applied in many similar situations. All patients who have chronic lung disease and need anesthesia for major abdominal surgery present this dilemma.

Chronic lung impairment is a major problem during anesthesia, surgery, and the postoperative period. It is potentially a significant cause of mortality, considering the number of patients anesthetized per year nationwide.

The authors successfully anesthetized this patient by tailoring their anesthetic technique to his abnormal physiology. They minimized the effect on respiratory capacity by limiting the segmental level of the epidural block at T₅, which probably left the patient able to cough postoperatively.

I understand the authors' reason for the "one-shot" technique of administering 24 mL of 2% mepivacaine: they wished to minimize the patient's wait and discomfort. However, that amount of local anesthetic administered at once could have produced an untoward cardiovascular and respiratory effect. Also, the segmental level

attained could have been higher and could have produced respiratory embarrassment that continued postoperatively, negating the advantage of the light anesthetic approach.

I believe that slower titration and attainment of the desired segmental level would have been more judicious. The stepwise blocking of segments could have been accomplished quite satisfactorily, with patient comfort, by introducing the epidural catheter, giving a test dose (most importantly), and then proceeding with incremental doses of 5 mL to the desired level.

An important advantage of the epidural catheter was that it allowed epidural administration of morphine postoperatively. A major reason for postoperative respiratory complications is inadequate ventilation because of pain. I would have relied more on the epidural route for administering analgesia than on the intravenous route.

Success, however, is the best judge. A major reason for the success with this patient was the authors' careful and caring approach to his management. The report is encouraging, enabling others to approach the same dilemma, should the occasion arise. As always, the choice of anesthesia should be individualized for each patient after a thorough preoperative evaluation, and the authors exemplified this approach.