## Why Obstetric Anesthesiologists Get Sued

THE Closed Claims Project staff have analyzed available obstetric anesthesia malpractice claims from 1990 to 2003 (n = 426) and compared these claims to pre-1990 obstetric claims (n = 190).<sup>1</sup> In both time periods, obstetric claims constituted 12-13% of all perioperative claims. The cesarean delivery rate in the United States has increased since 1990; however, when compared to pre-1990 claims, a smaller fraction of recent claims involve cesarean delivery (58% *vs.* 67%). Compared to pre-1990 claims, maternal and neonatal death/brain damage decreased and maternal nerve injury increased in frequency. The proportion of claims with substandard care decreased (22% *vs.* 39%), payment was made less frequently (42% *vs.* 58%), and the median payment decreased (\$222,000 vs. \$455,000).

This new report should spur us to examine and change our practices to minimize both patient harm and our liability when we are not at fault. In reviewing any closed claims analysis, one must always remember that not all anesthetic malpractice cases are available for review and that injuries not leading to litigation are not included. Nonetheless, important lessons can be learned from this analysis.

• The good news is that there were no cases involving local anesthetic injection through intravenously placed epidural catheters.

• The bad news is that there were 10 cases of high spinal anesthesia due to intrathecally placed epidural catheters that were not detected by aspiration or the use of a lidocaine-epinephrine test dose. Failure to detect these catheters can cause serious patient harm. In addition, there were two high spinal and three high epidural blocks.

• Anesthesia providers are not always adequately prepared to treat hypotension or an airway emergency when placing labor epidurals. In four cases, patients had to be transported to the operating room for resuscitation due to insufficient supplies in the labor room. This is inexcusable!

• Nerve damage was the maternal injury leading to the largest number of lawsuits (n = 89). It is likely that many of the nerve injuries leading to lawsuits against anesthesiologists were actually obstetric nerve injuries.<sup>2</sup> Vaginal delivery was associated with many more lawsuits than

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cesarean delivery, 80% of the injuries were temporary or nondisabling, and 19% involved femoral or sciatic nerve injury. Proper in-hospital evaluation of these injuries might have aided the defense against unwarranted litigation. If a postpartum patient has a substantial nerve injury, it is important to have an otherwise uninvolved physician perform and document a thorough neurologic exam. Injuries with dermatomal distributions are more likely to be anesthesia-related, and injuries in the distributions of peripheral nerves are more likely to be obstetric nerve palsies. Recovery from these nerve injuries can take months.<sup>2</sup> Whatever the cause of the injury, appropriate referrals should be made for physical rehabilitation and supportive devices if needed.

• There were 16 cases of spinal cord injury that were clearly related to the regional block, including 4 epidural abscesses and 2 spinal cord injections. Switching to an alcohol-based preparation solution may decrease the frequency of epidural abscess.<sup>3</sup> To avoid intraneural injection, it is important to never inject in the presence of a paresthesia and to avoid needle insertion at upper lumbar interspaces.

• Amniotic fluid embolism is the second leading direct cause of maternal death in the United States, contributing 17% of the direct maternal deaths in a recent population-based survey.<sup>4</sup> Although amniotic fluid embolism is rare, most mothers still die. Anesthesiologists as well as obstetricians are frequently sued in these cases, though there were only 4 such cases in the current closed claim analysis.<sup>1</sup> We should join our obstetric colleagues in looking for ways to decrease mortality after amniotic fluid embolism.

• Inability to reverse the effects of severe maternal disease (massive hemorrhage, embolism, preeclampsia, hypertensive intracranial hemorrhage, and chorioamnionitis) led to 39% (27 of 69) of the maternal death/ permanent brain damage lawsuits. Although it is likely that the maternal death, and the litigation, could not have been avoided, one must be prepared to treat these diseases.

• Anesthesia delay was alleged in 11 cases of neonatal death/brain damage.<sup>1</sup> The time of the delay averaged  $40 \pm 22 \text{ min}$  (range, 10–70 min). Clearly, the 30-min rule did not prevent litigation in several of these cases.<sup>5</sup> Factors associated with anesthesia delay included inappropriately prolonged attempts to establish regional anesthesia (n = 3) and the anesthesiologist not being in the hospital (n = 6). Anesthesiologists who take obstetric calls from home may want to reassess the safeguards they have instituted to prevent anesthesia delay of emergency cesarean delivery.

• Communication counts. More than one third of the anesthesia-related cases of newborn death/brain damage

involved poor communication between the obstetrician and the anesthesiologist (n = 7). While the obstetrician may have communicated poorly, the anesthesiologist got sued for the subsequent delay. Poor communication among obstetricians, anesthesia providers, labor floor nurses, pediatricians, and hospital blood banks is unfortunately common and can lead to patient harm.

• Neatness and completeness count. Illegible, inaccurate, and incomplete records and poor English skills led to payouts in cases in which there was no possibility of an anesthesia contribution to the injury (n = 5).

• All of the cases of difficult intubation (n = 7) occurred before 1999. It appears that modern emergency airway equipment and the use of the difficult airway algorithm have improved obstetric anesthesia care.

Closed claim analyses supplement but do not replace population-based surveys of the causes of maternal mortality.<sup>4,6-8</sup> Incidence information can only be obtained from population-based surveys. However, only closed claim analyses can help us understand the conditions under which fatal and nonfatal injuries lead to litigation. Both closed claim analyses and population-based surveys are needed to optimize the care of the obstetric patient. Barbara L. Leighton, M.D., Department of Anesthesiology, Washington University School of Medicine, Saint Louis, Missouri. bleigh@ alumni.princeton.edu

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