

## Citation

Davies JM, Ross BK, Posner KL, Domino KB: Trends in Obstetric Anesthesia Malpractice Claims over the Last Three Decades. *Anesthesiology* 101: A-1231, 2004.

## Abstract

### Introduction

The use of general anesthesia (GA) in obstetrics has decreased substantially and the use of regional anesthesia (RA) has correspondingly increased.<sup>1</sup> We analyzed 792 claims from the ASA Closed Claims database to see if changing medical liability reflected this change in practice.

### Methods

Obstetric (OB) anesthesia claims (cesarean section (CS) and vaginal delivery (VD)) from the Closed Claims Project contain standardized summary data on closed anesthesia malpractice claims from throughout the U.S.<sup>2,3</sup> OB claims were grouped into decades for analysis of trends. Statistical comparisons were made between the 1970s, 1980s and the 1990s using the Z test.

### Results

The proportion of CS claims associated with GA decreased in the 1980s and 1990s compared to the 1970s ( $p < 0.05$ ) and the proportion associated with RA increased ( $p < 0.05$ , Fig.). Lumbar epidurals were more common in CS claims in the 1980s and 1990s compared to the 1970s ( $p < 0.05$ ), while subarachnoid block (SAB) remained static (Table). Overall, the proportion of vaginal delivery (VD) claims associated with RA increased over the decades ( $p < 0.05$ , Table).

**Table**

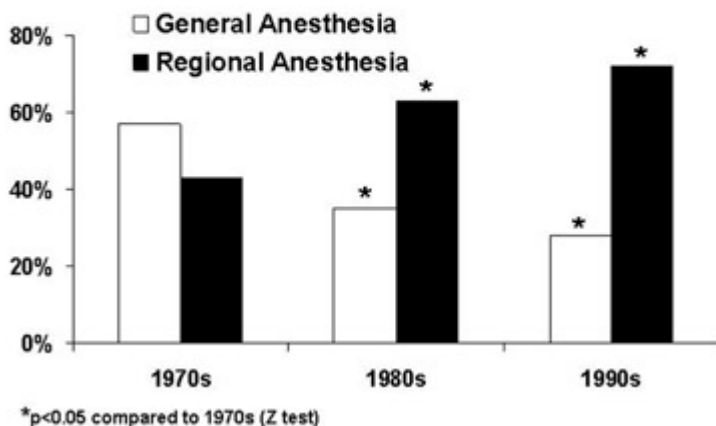
Primary Anesthetic Technique in OB claims

	1970s		1980s		1990s	
	VD n=34	CS n=60	VD n=88	CS n=280	VD n=122	CS n=168
Caudal	5 (15%)	0	9 (10%)	3 (1%)	0*	1 (1%)
Lumbar epidural	14 (41%)	10 (17%)	65 (74%)**	104 (37%)**	118 (97%)*	69 (41%)*
SAB	5 (15%)	16 (27%)	3 (3%)	71 (25%)	2 (2%)	44 (26%)
Total RA	24 (71%)	26 (43%)	78 (89%)	181 (65%)**	121 (99%)**	121 (72%)**
GA	10 (29%)	34 (57%)	10 (11%)	99 (35%)**	1 (1%)*	47 (28%)**

Claims with missing RA type not shown; \*\*p<0.05 compared to 1970s; \*p<0.05 compared to 1970s & 1980s

**Figure**

**Anesthetic Technique in Cesarean Section Claims**



This was reflected by the large increase in the proportion of VD claims associated with lumbar epidurals ( $p<0.05$ ), with a decrease in those associated with caudal and SAB (Table). In the 1990s versus the 1970s, claims for maternal death decreased (12% v. 30%,  $p<0.05$ ), while those for maternal nerve injury and back pain increased (20% v. 11% and 10% v. 3%, respectively,  $p<0.05$ ). Newborn brain injury decreased in the 1990s (14%) compared to the 1980s (22%,  $p<0.05$ ). Discussion: The decrease in GA claims and the

increase in RA claims in the ASA Closed Claims database supports the findings of the Anesthesia Workforce Surveys of 1981 and 1992 which showed a significant decrease in the numbers of CS performed under GA and a corresponding increase in those performed under RA.<sup>1</sup> This may reflect changes in practice and may account for the reduction in the proportion of claims for maternal death and newborn brain injury and the increased proportion of maternal nerve injury and back pain. However, changing medicolegal strategies and other factors may also have contributed to the reduction in severe outcomes in OB claims over the decades.

## References

1. Anesthesiology 87:135-143, 1997
2. JAMA 261:1599-1603, 1989
3. Anesthesiology 74:242-249, 1991

*A copy of the full text can be obtained from the American Society of Anesthesiologists, 520 N. Northwest Highway, Park Ridge, Illinois 60068-2573. Reprinted with permission of [Lippincott Williams & Wilkins](http://www.lippincott-williams-wilkins.com).*

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