

Citation

Jimenez N, Posner KL, Domino KB, Cheney FW: "Trends in Pediatric Anesthesia Malpractice Claims over Three Decades." *Anesthesiology* 103: A1309, 2005.

Abstract

Introduction

Advances in pediatric anesthesia practice such as sub-specialization, introduction of new drugs and better monitoring may have changed the liability profile of pediatric anesthesia practice. Pediatric malpractice claims from the 1970s and early 1980s showed a high proportion related to respiratory complications (inadequate ventilation) with 45% of complications thought to be preventable.¹ We analyzed 525 pediatric claims from the ASA Closed Claims database to identify patterns of injury and outcomes associated with pediatric anesthesia over three decades.

Methods

Standardized pediatric anesthesia claims (patients 16 yrs or younger) from the ASA Closed Claims Project database were analyzed. Claims involving neonatal complications of obstetric anesthesia or neonatal resuscitation were excluded, as were claims with unknown year of event. Logistic regression analysis was used to evaluate trends over time.

Results

Approximately half of claims involved patients 3 yrs or younger and approximately one quarter were ASA 3-5 (Table). The proportion of claims for death and permanent brain damage decreased over time ($p=0.03$, Table). The proportion of claims involving respiratory events also decreased over time ($p<0.001$, Table). The most common events leading to claims in the 1990s were cardiovascular (27%) and respiratory (25%), while equipment and medication problems accounted for nearly 1/3 of pediatric claims in the 1990s (Figure). [table1] **Discussion:** The decrease in claims for death and permanent brain damage and the reduction in respiratory events may be related to an increase in safety due to better monitoring, new drugs and sub-specialization. However, we cannot rule out if this trend is partly explained by an increase in claims for minor injuries due to changes in legal strategies or the relatively long statute of limitations for children.

Table

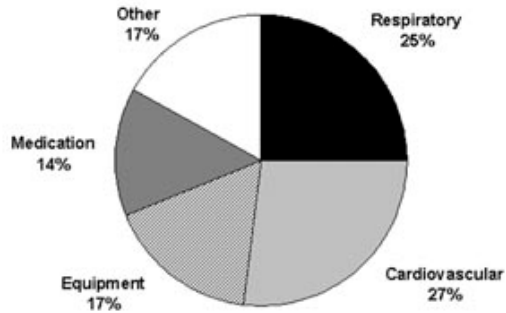
Patient Characteristics and Outcomes for Anesthesia-Related Cardiac Arrests

		1970s	1980-84	1985-89	1990-2000	Total
	# Cases	n=88	n=161	n=118	n=153	n=520
Age group	0-3 yrs	38 (43%)	72 (45%)	64 (54%)	81 (53%)	255 (49%)
ASA group	ASA 3-5	13 (16%)	35 (24%)	22 (20%)	39 (27%)	109 (23%)
Sex of patient	Female	25 (30%)	67 (42%)	50 (43%)	61 (41%)	203 (40%)
Severity injury	Death/Perm BD*	69 (78%)	124 (77%)	85 (72%)	94 (61%)	372 (72%)
Primary damaging event	Respiratory events†	44 (57%)	67 (48%)	48 (46%)	36 (25%)	195 (42%)
	CV events	18 (23%)	27 (19%)	25 (24%)	38 (27%)	108 (23%)
	Equipment problems	8 (10%)	16 (11%)	15 (14%)	24 (17%)	63 (14%)
	Medication related	5 (6%)	15 (11%)	9 (9%)	20 (14%)	49

Missing data excluded; * $p < 0.05$ over time periods (logistic regression); † $p < 0.001$

Figure

Most Common Damaging Events 1990-2000



Cases with no event or unknown events excluded

References

1. Anesthesiology 1993; 78:461-7.

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