

## Citation

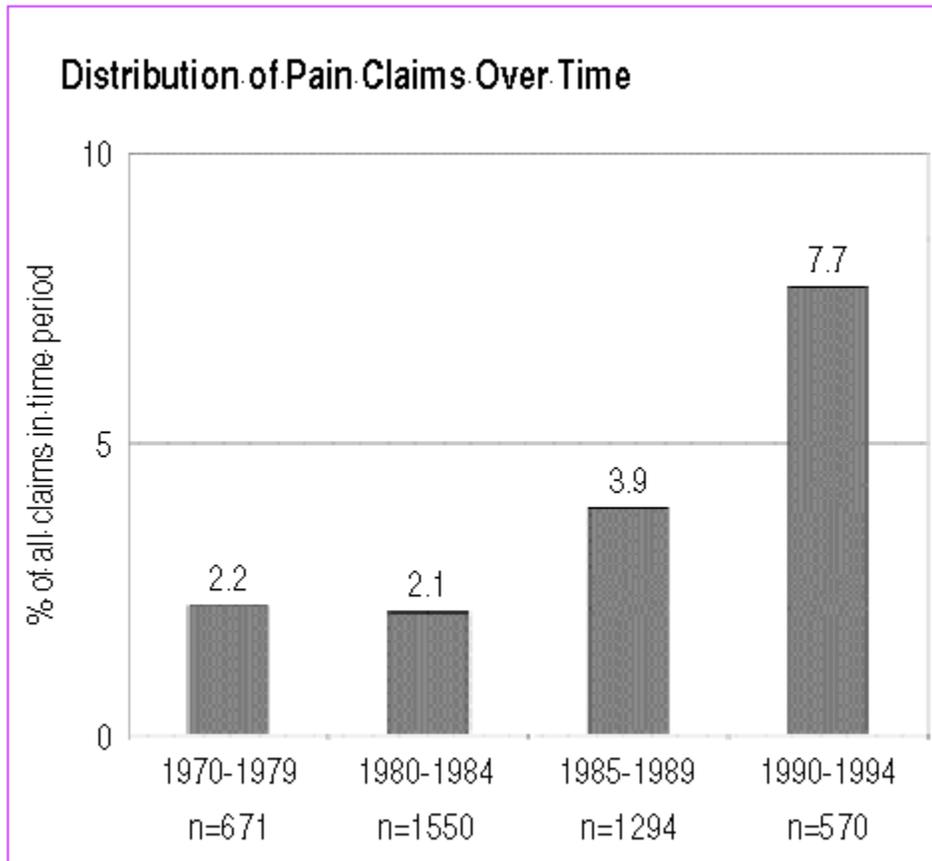
Kalauokalani, D: Malpractice Claims for Nonoperative Pain Management: A Growing Pain for Anesthesiologists?. *ASA Newsletter* 63(6):16-18, 1999.

## Full Text

Anesthesiologists play an important and expanding role in pain management, but little is known about the liability associated with this aspect of clinical care. To better understand the liability associated with pain management, we examined 4,183 closed claims in the ASA Closed Claims Project database<sup>1</sup> occurring from 1970-1995. Patient demographics, injuries and financial consequences of pain management claims were compared with other claims. This investigation focused specifically on nonoperative pain management, i.e. aspects of pain management that were not related to acute pain management for the surgical patient.

A total of 148 of 4,183 (3.5 percent) claims in the database were for pain management in the nonoperative setting. When plotted by the year in which an injury occurred, the proportion of claims attributed to pain management showed an increase over time [Figure 1]. Claims that involved some aspect of pain management in a nonoperative setting accounted for approximately 2 percent of all claims through the 1970s until the mid-1980s. From 1985-1989 the fraction doubled to 4 percent. For pain management claims entered thus far from 1990-94 the fraction redoubled to represent approximately 8 percent of all claims.

**Figure 1**

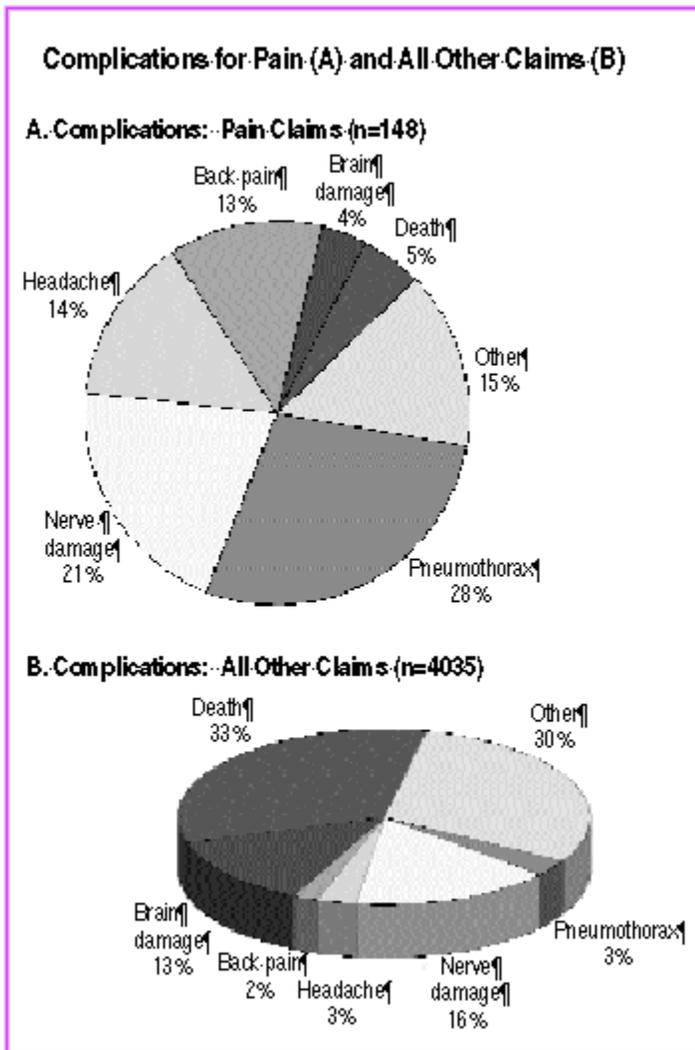


*Sum of n=4085 (of 4183) due to claims missing year of event data  
Chi-square test for trend  $p < 0.001$*

The distribution between males (39 percent) and females (61 percent) for pain management claims was similar to that of all other claims. All pain management claims involved adult patients, and pain management patients were older (mean 48 years) than other patients (mean 41 years). Nerve block procedures were performed in all pain management claims compared with about one quarter of all other claims.

In aggregate, pain claims were most often characterized by low severity or nondisabling injuries (80 percent) in comparison to all other claims (47 percent). Specific injuries most commonly cited in pain management claims were pneumothorax (28 percent of all pain claims), nerve damage (21 percent all pain claims), headache (16 percent of all pain claims) and back pain (13 percent of all pain claims). In contrast, relatively few pain management claims involved injuries most common to all other claims such as death (5 percent) and brain damage (4 percent) [Figure 2].

**Figure 2**  
**Complications for Pain (A) and All Other Claims (B)**



Analysis of the 42 pain management claims for injury related to a pneumothorax showed that the majority of such claims were associated with intercostal nerve blocks and trigger point injections [Table 1]. The occurrence of pneumothorax following intercostal blockade is reported to be "rare in experienced hands,"<sup>2</sup> however, this technique was associated with nearly half of the claims. In addition, the nine claims following trigger point injections, accounting for 21 percent of pain management claims for pneumothorax, are notable in that this is an "unusual complication" for this procedure.<sup>3</sup> Trigger point injections were administered in muscles of the neck, upper back or a combination of both. The limitation of these findings is the lack of information on how frequently each block is performed. Intercostal blocks and trigger point injections are generally done in pain management settings at substantially higher rates than other pain management block procedures thus accounting for the relatively high closed claims occurrence rates. Alternatively, the risk of pneumothorax may be under appreciated and not conveyed to the patient who is

subsequently surprised by, and ill prepared for, the consequences of such a complication, and interprets the result as apparent negligence.

**Table 1**  
**Distribution of Pain Management Procedures Associated With Pneumothorax**  
**(n=42)**

Procedure	Number of claims	% of claims
Intercostal nerve blocks	19	45
Trigger point injections	9	21
Stellate ganglion blocks	7	17
Suprascapular nerve block	2	4
Epidural injection	1	2
Paravertebral nerve block	1	2
Facet joint injection	1	2
Brachial Plexus Block		
Supraclavicular approach	1	2
Interscalene approach	1	2

The 31 nerve injuries associated with pain management claims most often involved injury to the spinal cord or spinal nerve roots (81 percent). Manifestations of spinal injuries included spinal meningitis, epidural abscess, paraplegia, bladder dysfunction and discrete lumbar nerve root dysfunction. Peripheral nerve injuries, including injury to the ulnar and sciatic nerves, represented only a small proportion (6 percent) of the pain management claims.

The frequency of payment was 50 percent for pain management claims and was not significantly different from all other claims (56 percent). The median payment for pain management claims (\$16,250) was significantly lower than the median payment for all other claims (\$100,000;  $p < 0.001$ ). However, most injuries in pain management claims were less severe than for all other claims. Thus, when comparing median payments adjusted for injury severity, the payments were less disparate in amount [Table 2].

**Table 2**  
Median Payments by Injury Severity

	Payment	
	Pain	All Other
<b>Total</b>	\$16,250**	\$100,000
<b>Severity of Injury</b>		
Nondisabling	\$12,000*	\$17,500
Permanent	\$275,398	\$425,000
Death	\$167,500	\$200,000
*p<0.05 vs. all other claims **p<0.001 vs. all other claims		

**Table 3**  
Quality of Care Issues

Peer Reviewer Judgment	Pain (n=148)	All Other (n=4035)	P-value
Follow-up Care <b>not</b> adequate	24%*	16%	p<0.05
Anesthetic Record Quality <b>not</b> adequate	74%*	50%	p<0.05
Informed Consent <b>not</b> documented	44%	44%	NS
Patient Care <b>less than</b> appropriate	35%	41%	NS

Overall ratings for standard of care did not differ between pain claims and other claims [Table 3]. On the other hand, reviewers rated follow-up care to be inadequate in 24 percent of pain management claims, compared to 16 percent of all other claims ( $p<0.05$ ). Quality of the anesthetic record was also rated as inadequate in 74 percent of pain management claims, compared with 50 percent of all other claims ( $p<0.05$ ). Documentation of informed consent did not significantly differ between the two groups of claims. However, the similarity in consent documentation frequency may not necessarily represent a similarity in impact on liability. Consent for anesthesia in the operative setting may be assumed to be part of that obtained for surgery, or unobtainable in the case of an unconscious ICU patient. On the other hand, it is hard to justify lack of informed consent in the pain management setting, particularly if care involves performing a block procedure, as was the case for all pain management claims included in this study.

In summary, claims associated with nonoperative pain management constitute a growing proportion of closed malpractice claims against anesthesiologists. Strategies for reducing liability may include better patient education regarding common risks and side effects, careful documentation of consent and effective protocols for follow-up care.

## References:

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2. Moore DC, Bridenbaugh LD. Pneumothorax: Its incidence following intercostal nerve block. *JAMA*. 1962; 182:1005.
3. Shafer N. Pneumothorax following "trigger point" injection. *JAMA*. 1970; 213:1193.

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