

## Citation

Lee LA, Fligner CL, Stephens L, Cheney FW, Domino KB: Role of Autopsy in the ASA Closed Claims Project. *Anesthesiology* 109: A372, 2008.

## Abstract

### Introduction

Autopsies may identify unexpected pathologic findings or pathology which supports clinical diagnoses. Recent surveys have demonstrated a significant decline in median autopsy rates to as low as 2.4%, depending on the size, academic status, and federal ownership of the hospital.<sup>1</sup> We examined the role of autopsy in determining the cause of death and in the defense of the anesthesiologist in the ASA Closed Claims Database.

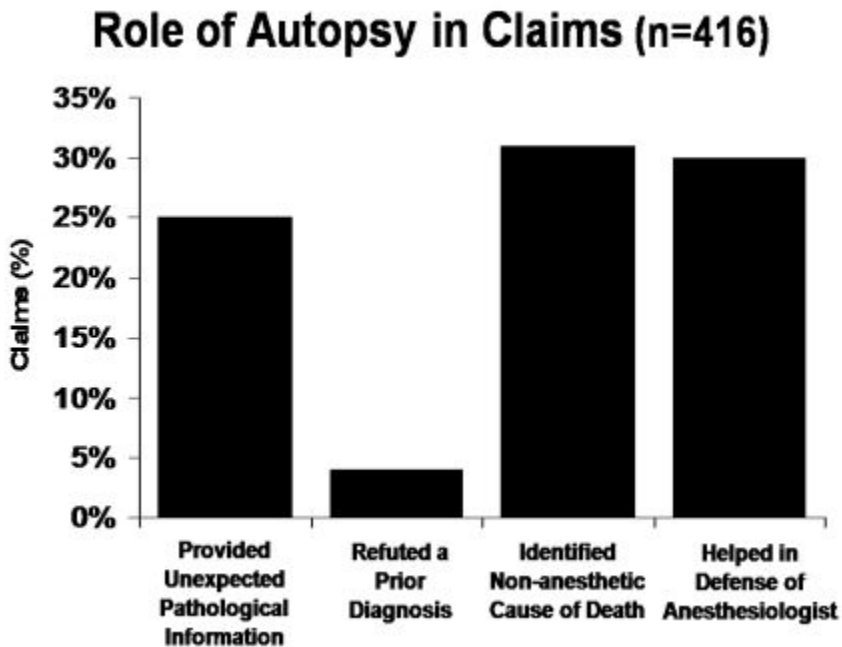
### Methods

After IRB approval, we identified 416 claims with autopsy out of 730 claims associated with death occurring between 1990 and 2001 from a database of 6894 claims. Demographics for claims with and without autopsy were compared. Information provided in the narrative about the autopsy was included in 209 claims and was analyzed by one anesthesiologist and one pathologist to evaluate the utility of autopsy in determining the cause of death, and by 2 anesthesiologists to assess its role in defense of the anesthesiologist. A third anesthesiologist served as a tie breaker for the final judgments. Inter-rater reliability was assessed by kappa and demographics were compared by chi square analysis.

### Results

Compared to claims with no autopsy, claims with autopsy had a significantly higher proportion of cases with age < 65 years and ASA Status 1-2 ( $p < 0.01$ ). There were no significant differences in gender between claims with and without autopsy. Autopsy results provided pathological diagnoses but not an unequivocal cause of death in 33% of the 416 claims, and provided an unequivocal cause of death in 11% (kappa=0.70). The remaining autopsy claims either provided insufficient information or did not mention autopsy information in the reviewer's narrative. Autopsy findings provided unexpected pathological information in 25% of autopsy claims (kappa=0.38), refuted a prior clinical diagnosis of cause of death in 4% (kappa=0.66), and confirmed a prior clinical diagnosis in 25% (kappa=0.61). Autopsy results identified a significant non-anesthetic contribution to death in 31% of autopsy claims (kappa=0.64), and helped in the defense of the anesthesiologist in 30% (kappa=0.72).

## Figure



## Conclusions

Autopsy was performed in approximately half of all claims associated with death, especially in healthy, younger persons. Autopsy results were useful in detecting unexpected pathology, and identifying significant non-anesthetic contributions to death. Pathological findings from autopsy were frequently useful in the medico-legal defense of anesthesiologists.

## References

1. Nemetz PN, Tanglos E, Sands LP, et al. Attitudes toward the autopsy – an 8-state survey. *Med Gen Med* 2006; 8: 80.

*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](#).*