

Higher Awards in Cervical Disc Herniation Claims from Motor Vehicle Accidents Driven by Surgical Treatment, Not Legal System

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INTRODUCTION: Cervical spine injuries from motor vehicle accidents (MVA) are associated with extensive litigation costing the United States billions of dollars annually. This complexity is partly due to the challenge of proving causation and assigning awards in injury claims such as cervical disc herniations. However, few studies have evaluated how the type of legal system, such as California’s “at-fault” tort system and New York’s “no-fault” system, impacts litigation award amounts. Prior research suggests that “no-fault” systems, which limit compensation to serious injuries, may reduce the prevalence and economic burden of claims. Conversely, the necessity of proving serious injury in “no-fault” systems creates the potential for overtreatment as a tool for greater compensation. This study investigates the influence of legal system type and invasiveness of treatment on award amounts in MVA-related cervical disc herniation claims.

METHODS: We examined Jury Verdicts & Settlements documents from 2005-2011 in New York and California on the Thomson Reuters Westlaw database for MVA claims that included cervical disc herniation injuries. We included 98 of 383 cases from New York and 56 of 252 cases from California that met our criteria as an original case with detailed injury and treatment notes, and a non-zero award amount. We separated the cases by state and by the invasiveness of treatment (categorized as surgical or non-surgical). The mean and median awards of claims with surgical or non-surgical treatments were compared within states and between states. The Mann-Whitney U Test was used to test significance between groups ($p < 0.05$).

RESULTS: 18 cases with surgical treatment and 80 cases with non-surgical treatment were included from New York, and 28 cases with surgical treatment and 28 cases with non-surgical treatment were included from California. Cases including surgical treatment resulted in significantly higher awards than cases including non-surgical treatment in both New York (surgical: $n=18$, $M=\$959,257.19$, $Mdn=\$637,500$; non-surgical: $n=80$, $M=\$195,184.10$, $Mdn=\$74,250$, $U=141$, $p < 0.001$) and California (surgical: $n=28$, $M=\$603,760.52$, $Mdn=\$495,000$; non-surgical: $n=28$, $M=\$294,095$, $Mdn=\$149,277.50$, $U=199$, $p=0.002$) (Table 1). Award amounts did not differ significantly between New York and California for cases including surgical treatment ($U=173.5$, $p=0.079$) or non-surgical treatment ($U=1,371$, $p=0.079$) (Table 2).

DISCUSSION AND CONCLUSION: The type of treatment for cervical disc herniations from MVA may be more impactful on litigation award amount than the type of legal system in which the case is resolved. While “no-fault” systems have been shown to reduce costs in some areas of litigation, this structure of legal system may offer comparable financial incentives as tort systems for surgical treatment of cervical disc herniations. Further research is needed to identify other legal and medical factors that impact both the patient’s compensation and society’s financial strain in MVA cervical spine injury litigation.

	Surgical Treatment Mean Award	Non-surgical Treatment Mean Award	Mann-Whitney U Statistical Comparison
New York	\$959,257.19 (n=18)	\$195,184.10 (n=80)	U=141 p<0.001
California	\$603,760.52 (n=28)	\$294,095.00 (n=28)	U=199 p=0.002

Table 1. Surgical treatment in cervical disc herniation claims from motor vehicle accidents resulted in significantly higher litigation awards than non-surgical treatment in New York ($U=141$, $p < 0.001$) and California ($U=199$, $p=0.002$). Included cases were sourced from the Thomson Reuters Westlaw database and were analyzed by state and treatment type. The Mann-Whitney U test was used to test for significance ($p < 0.05$).

	New York Mean Award	California Mean Award	Mann-Whitney U Statistical Comparison
Surgical Treatment	\$959,257.19 (n=18)	\$603,760.52 (n=28)	U=173.5 p=0.079
Non-surgical Treatment	\$195,184.10 (n=80)	\$294,095.00 (n=28)	U=1,371 p=0.079

Table 2. In motor vehicle accident claims, there is no significant difference in award amounts between New York and California in cervical disc herniations resulting in surgical treatment ($U=173.5$, $p=0.079$) or non-surgical treatment ($U=1,371$, $p=0.079$). Included cases were sourced from the Thomson Reuters Westlaw database and were analyzed by state and treatment type. The Mann-Whitney U test was used to test for significance ($p < 0.05$).