Medical malpractice in the management of small bowel obstruction: A 33-year review of case law

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Background. *Annually, 15% of practicing general surgeons face a malpractice claim. Small bowel obstruction accounts for 12–16% of all surgical admissions. Our objective was to analyze malpractice related to small bowel obstruction.*

Methods. *Using the search terms "medical malpractice" and "small bowel obstruction," we searched through all jury verdicts and settlements for Westlaw. Information was collected on case demographics, alleged reasons for malpractice, and case outcomes.*

Results. *The search criteria yielded 359 initial case briefs; 156 met inclusion criteria. The most common reason for litigation was failure to diagnose and timely manage the small bowel obstruction (69%, n = 107). Overall, 54% (n = 84) of cases were decided in favor of the defendant (physician). Mortality was noted in 61% (n = 96) of cases. Eighty-six percent (42/49) of cases litigated as a result of failing to diagnose and manage the small bowel obstruction in a timely manner, resulting in patient mortality, had a verdict with an award payout for the plaintiff (patient). The median award payout was $1,136,220 (range, $29,575–$12,535,000).*

Conclusion. *A majority of malpractice cases were decided in favor of the defendants; however, cases with an award payout were costly. Timely intervention may prevent a substantial number of medical malpractice lawsuits in small bowel obstruction, arguing in favor of small bowel obstruction management protocols. (Surgery 2016;160:1017-27.)*

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THE INCIDENCE OF MALPRACTICE LITIGATION has increased considerably since the early 1980s, leading to a surge in malpractice premiums that are handed down directly to consumers.[1] Physicians in high-risk specialties are particularly at risk for malpractice claims. General surgery is included as a high-risk specialty; >15% of US-practicing general surgeons can expect to face a malpractice suit each year.[2] By the age of 65, nearly all practicing general surgeons will have faced at least 1 malpractice claim.[3]

Small bowel obstruction (SBO) is one of the most common conditions managed by general surgeons and accounts for >300,000 laparotomies annually.[4] The management of SBO has changed considerably in the past decade as laparoscopy has become more common and protocols have been developed to ensure timely surgical management when indicated. Our objective was to analyze malpractice litigation related to SBO treatment over time in order to delineate the risk factors, in terms of case characteristics, that have led to litigation. We anticipate that by reporting on common missteps and errors that led to prior lawsuits,

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future providers can understand the potential pitfalls minimizing their liability.

METHODS

Westlaw. After obtaining exemption from review, as deemed by the institutional review board, we searched all relevant jury verdicts and settlements for Westlaw (Thompson Reuters, New York, NY). Westlaw is an online legal research tool comprised of >40,000 databases of statutes, case law, and public records from both US federal and state courts. Cases in Westlaw are written opinions of appellate and lower court judges that do not follow a standard detail of information. As such, cases contain varying amounts of information. Primarily used as a legal research service for lawyers, Westlaw has proven its value in the analysis of medical malpractice cases.[5-21]

Search strategy. Using a Boolean search strategy with the query terms "medical malpractice" and "small bowel obstruction," we searched through all state and federal cases. Additional terms utilized in our search criteria included "intestinal obstruction" or "intestinal block" or "volvulus" or "intussusception" or "bowel obstruction" or "bezoar" or "sbo" or "bowel ischemia." Non-medical personnel, lawyers, and court judges who write up the case summaries for Westlaw may not be familiar with specific medical terms such as the differences between bowel ischemia and strangulation. As a result, bowel ischemia was included to ensure all cases were identified. Furthermore, each case was reviewed on an individual basis to make sure the presenting pathology for which the claim was filed was SBO and that the bowel ischemia was noted as sequelae of SBO. Duplicates and cases where management of SBO was not the primary reason for litigation were excluded. We reviewed each case for patient and case characteristics, procedural characteristics, unfavorable outcomes, alleged causes of malpractice, outcomes, and award sums.

The defendant in each case was defined as the individual, institution, or group of individuals against whom the claim or charge was brought in the court of law. In most malpractice cases, the defendant(s) listed in the case title was the treating physician, but additional hospital staff such as nurses, physician assistants, and residents if named in the case summary were identified and classified separately based on specialty or occupation. The plaintiff was defined as the aggrieved patient or family member who filed the malpractice suit.

Each case was further categorized based on the allegation for malpractice and the time period of care in which the alleged negligence occurred: preoperative, intraoperative, or postoperative. Discrepancies in interpretation of allegations were discussed between 2 reviewers, and a third was brought in on an a priori basis if needed to determine the cause. Award payouts reported were adjusted to 2015 US dollars using the United States Department of Labor-Consumer Price Index calculator.[22]

After categorizing cases based on the state they're litigated in, a US map diagram representing rates of malpractice cases reported in Westlaw related to SBO per 10,000,000 people per state was made (Fig 1). At present, there are no data that delineate the estimates of SBO cases in each state. Furthermore, given the relative homogeneity across the United States, we took state population into account as a method to define rates across states. Given the small numbers we are dealing with and the instability of cases during a 30 or more year time period, we chose not to divide the diagram into decades. Regardless, the diagram represents an estimate of rates of SBO malpractice cases per state reported in Westlaw as echoed by similar studies that have reported on emergent surgical conditions.[6,11,21] In addition, the correlation between the number of SBO malpractice cases reported in each state and the total active lawyers practicing per state was assessed. Lawyers per state capita was not used given that many cases were identified in cities with a high density of lawyers hence using such a measure would not allow us to account for such differences among states.

Data analysis. Continuous data points are presented as either means with standard deviation (SD) or as medians with an interquartile range (IQR), as appropriate. Categorical data are presented as frequencies and percentages. Univariate and multiple variable logistic regression analyses were performed to measure the relationship between payout/no payout case outcome and additional case measures such as severity index of injury, additional operation, and death. Among those cases with payout, 2-level categorical variables (eg, adult/minor) were compared using Wilcoxon ranksum tests. Correlation between 2 continuous variables was assessed with a Spearman rank correlation coefficient. Analysis was performed using JMP Pro version 10.0 (SAS Institute Inc, Cary, NC).

RESULTS

The search criteria yielded 359 initial results; 203 cases were excluded as not primarily related to