



Commentary

What Can Spine Surgeons Do to Improve Patient Care and Avoid Medical Negligence Suits?

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Received : 21 January 20

Accepted : 19 February 20

Published : 06 March 20

DOI

10.25259/SNI_28_2020

Quick Response Code:



ABSTRACT

Background: Why do patients sue following spine surgery? Here we reviewed some of the most frequent reasons for medical negligence suits against surgeons, adjunctive medical personnel, and or institutions/hospitals.

Methods: Summarizing the multiple reasons for suits against spine surgeons, their colleagues/consultants, and hospitals should help surgeons identify the problems leading to suits, and improve patient care.

Results: Several of the most common reasons for medical negligence suits include: lack of informed consent, ghost surgery, failure to diagnose and treat (e.g. including preoperative, perioperative, and post-surgical complications), performing unnecessarily risky, excessive and/or unnecessary surgery; failure to provide adequate postoperative care; absent or inadequate intraoperative neural physiological monitoring; and spoliation (e.g. fraudulent surgical, office, and/or hospital notes/records).

Conclusions: There are many reasons why patients sue their spine surgeons. Being aware of the factors that lead to suits, spine surgeons should learn to provide better preoperative, intraoperative, and postoperative care, and, thus, limit perioperative morbidity and mortality.

Keywords: Medicolegal suits, Spine surgery, Ghost surgery, Intraoperative neural monitoring, Informed consent, Failure to diagnose/treat, Spoliation

INTRODUCTION

There are multiple reasons why patients sue their spine surgeons, adjunctive personnel/consultants, and hospitals following spine surgery. The most common reasons include: lack of informed consent. failure to diagnose and treat (e.g. preoperative, intraoperative and postoperative complications), performing negligent and/or unnecessary surgery, failure to provide adequate intraoperative neural physiological monitoring, and spoliation (e.g. falsifying notes/hospital records). Here we reviewed the various factors prompting patients to sue their spine surgeons

Lack of Informed Consent

AMA Definition of Informed Consent Code of Medical Ethics Opinion 2.1.1

Patients have the right to receive information and ask questions about recommended treatments so that they can make well-considered decisions about care.

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Lack of Informed Consent

This is one of the most common failures that leads to medicolegal suits. Informed consent should include a complete discussion of risks, benefits, and alternatives to a proposed surgical procedure. Suits based on the lack of informed consent often center around the patient having felt rushed and/or brushed off during the office visit or visits, the failure to allow for sufficient time for preoperative education/questions (e.g. using models and illustrations, or other means), and in some instances, the total absence of any attempt whatsoever to have the patient intrinsically involved in operative decision-making. The recent pressure to increase/maximize Relative Value Unit (RVU) performance, characterized by schedule-limited 15-minute office visits, too often leads to insufficient time allotted to preoperative education both within and outside of academic institutions.

Timing of Informed Consent

Preferably all non-emergent written surgical consents should be signed days to weeks in advance and all patients should be informed of their right to a second surgical opinion. It is highly recommended that patients be invited to return for at least a second visit, particularly with a friend/relative, to review the pros, cons, risk and complications of surgical procedures. Informed consent should be viewed as a process not a proforma exercise in form signing. This process gives the patient and surgeon time to ask additional questions/voice further concerns, provides another pair of ears to listen to the answers, allows and encourages the surgeon to order and/or make sure to review additional relevant/up-dated diagnostic studies that likely contribute to more thorough conscious deliberate operative planning. Placing a copy of the surgeon's illustrations of a specific operation used to explain an operation in the office record or stating that models were used to explain an operation further enhance documentation of an adequate informed consent. Documenting evidence of the patient's understanding of the discussion provides valuable evidence that a true dialog occurred and that the patient was truly informed: "Mrs. Doe evidenced understanding by her body language, facial expression and repeated relevant questions that were all answered in lay terms."

Specificity of Informed Consent

Surgical informed consent is not a team sport. The patient gives consent to a specific surgeon, for a specific operation, and the consent is event specific – just because the patient consented to a certain surgeon last year, does not mean that they will consent to that surgeon now. The surgeon to whom informed consent is granted has no right to delegate to a third party without another informed consent about that proposed substitution. Any proposal to substitute surgeons must be

fully informed and consented regarding training, experience, and possible added risk. Any proposed substitute surgeon must establish their own physician-patient relationship in a reasonable period of time before the day of surgery. Unless the patient is seen and examined by that other surgeon sufficiently prior to the operation to allow the patient to choose that surgeon, or another surgeon entirely, the patient is being coerced.^[11] A casual comment to the patient in the pre-operative area minutes before surgery, "Hi, my name's Mary and I'm going to be helping with your surgery today." – Is not an informed consent to place pedicle screws near the spinal cord, cauda equina nerve roots, and the great vessels.

"Ghost Surgery": When the Primary Surgeon Does Not Perform the Surgery

Increasingly, spine surgeons are allowing operations to be performed by other surgeons (e.g. ghost surgeon-partners, other co-surgeons, residents, or mid-level providers (Physician Assistants, Nurse Practitioners)) without the patient's informed consent. The patient's surgeon, the one who clinically evaluated and diagnosed the patient's surgical problem and obtained informed consent, has a non-transferable specific duty to perform the surgery.

Harm from Ghost Surgery

Ghost Surgery does harm in every case! It corrupts the environment and every-one in it e.g. every resident. every nurse. every tech. It teaches that people can be treated like cattle in a slaughterhouse, that falsifying the medical record on a daily basis is OK, that cover up of problems in the operating room is OK and the norm of behavior that is expected if you are going to get along and keep your job and make lots of money when you finish residency.

Denial, Abandonment, and Spoliation

Denial, abandonment, and spoliation are three additional factors contributing to malpractice suits. Denial comes in the form of ignoring new post-operative neurologic deficits; another means for obfuscation of malpractice. Examples of this include postoperative hemorrhagic shock, or other new surgical complications where those involved attempt to blame preexisting conditions. Abandonment occurs when a new postoperative deficit occurs, and the operating physician not only fails to acknowledge the problem but provides little or no postoperative follow-up. Here, postoperative care is, left almost entirely to mid-level providers. In such cases, patients begin to sense "their surgeon" may not have performed the surgery (ghost surgery) or does not care about the complications that occurred.

Spoliation is the legal term of art for destruction of evidence. In Ohio, spoliation of medical evidence (alteration,

falsification, or destruction of medical records) is evidence that the physician/surgeon is acting with actual malice toward the patient, and is grounds for punitive damages in a medical negligence case. Punitive damages are not insurable – willful acts of malice are by law not insurable. The insurance company issues a “letter of reservation” informing the culpable physician that they will not (cannot) insure willful acts of malice. The physician at his or her own expense must hire a separate attorney to defend that portion of the case. The physician, now personally at risk to some degree for damages, often finds mental clarity to settle the case (see *Moskovitz v. Mount Sinai*).^[12] Alternative forms of spoliation include inadequately examining the patient, and using templated notes to falsify the record: checking off “neurologically intact”. This falsification results in a major failure to “communicate” the true state of affairs, and deprives the patient of their chance for correction of the problem and avoidance of permanent injury.

Failure to Diagnose and Treat

Update MR Studies

For patients coming in with old diagnostic studies (e.g. over 3 months old), newer MR studies should be obtained to help identify changes that have occurred, with or without new symptoms/signs, thus altering the operative decisions, or in some cases, averting surgery entirely (e.g. resolution of disc herniations/other). For those undergoing lumbar surgery, particularly for patients over 65 years of age, additional cervical and thoracic MR studies may be performed to screen for tandem stenosis, and/or evaluate/assess for cervical/thoracic pathology.

Update/Obtain CT and Myelo-CT Studies

Advantages of obtaining preoperative CT scans include; providing a direct image of stenosis and/or other calcified/ossified structures (e.g. ossification of the posterior longitudinal ligament (OPLL), heterotopic ossification, and/or osteolysis with use of Bone Morphogenetic Protein (BMP)), better documentation of fractures, reconfirmation of surgical levels and significance of pathology. Where there has been prior spinal instrumentation, Myelogram/CT scans may offer a clearer view of bony compressive pathology not readily identified on MR due to instrument-related metal artifact.

Rule Out Other Pathology; e.g. Shoulder, Hip Disease, Peripheral Vascular Disease

Some patients will harbor other pathology mimicking spinal disease. Patients with a rotator cuff injury may exhibit “cervical/neck” pain. Ten percent of patients with lumbar stenosis also have hip disease. Vascular claudication needs to be differentiated from neurogenic claudication.

Careful Patient Selection for Spine Surgery

Spine surgeons need to carefully select patients for spine surgery. Stringent preoperative clearance should be performed to determine whether patients are “safe” candidates for the recommended spinal procedures; (e.g. those with recent myocardial infarctions (e.g. < 6 months duration), coronary stents, and/or stroke strokes on Aspirin and Plavix).

Indications for Spine Surgery

Pain Alone: Poor Indication for Spine Surgery

Pain alone is an insufficient indication for spine surgery. Patients should exhibit objectively identifiable neurological deficits that correlate with radiographic findings (e.g. MR/CT). Patients with secondary gain or complex regional pain syndromes too often do very poorly.

Neurological Deficits: Should be Sufficient to Warrant Surgery

Boden’s seminal 1990 articles documented that both in the cervical and lumbar spine there are ubiquitous asymptomatic normal age-related degenerative changes.^[1] Boden cautioned, “...the finding of substantial abnormalities of the lumbar spine in about 28 per cent of asymptomatic subjects emphasizes the dangers of predicating a decision to operate on the basis of diagnostic tests - even when a state-of-the-art modality is used -without precise correlation with clinical signs and symptoms.”

Increasingly patients are not adequately neurologically examined, and their neurological examinations are not carefully correlated with radiographic studies to determine if spine surgery is necessary. Further, spinal surgeons need to independently interpret MR/CT studies and not rely on radiologists who may “over-interpret” findings, thus leading to unnecessary surgery. Unfortunately, presently too many surgical plans are generated in reverse; spine surgeons start with an MRI, often without identifying any neurological deficits, perform high risk spinal procedures.

Failure to Perform Postoperative Neurological Exam to Pick Up New Deficits

Missed new neurological deficits are variously attributed to failure to properly examine the patient postoperatively. Too often, both the spinal surgeon and anesthesiologist allow the patient to leave the operating room and go to the PACU without being examined, only to realize hours later that the patient has sustained a devastating neurological injury, or great vessel injury.

If that patient undergoes additional surgery, further subsequent MR/CT studies should be repeated after each

secondary/tertiary/additional surgery to update/document new/subsequent postoperative findings. There are too many cases in which subsequent diagnostic studies were either delayed or never ordered, thus losing the potential “window of opportunity” to remediate a patient’s problem and maximize neurological recovery.

Administering Postoperative Narcotics Without Examination or Informed Analysis

Pain is the body’s alarm system, and is still one of the most common reasons people seek medical attention. Recently, pain was re-characterized as a “vital-sign” and treated as an emergency, but often without any reasoned analysis of its etiology. This is especially true in the recovery room, where the first symptom of a developing epidural hematoma is severe/extreme wound pain. Without examination for leg weakness and without any reasoned informed analysis, the patient is often reflexively heavily sedated with Fentanyl, Dilaudid, and/or another opioid. The diagnosis of paraparesis is, therefore, frequently missed, the wound is not re-explored, and patients are left with permanent paralysis.

Failures Related to Intraoperative Neural Monitoring (IONM)

Spine surgeons too often do not monitor or inadequately monitor spine surgery. A typical example is where somatosensory evoked potentials (SEP’s) without motor evoked potentials (MEP’s) are used to monitor cervical/thoracic surgery, thus missing early warnings of impending anterior spinal cord damage and ending up with irreversible neurological deficits (e.g. quadriplegia/paraplegia).^[8] Further, although IONM may clearly document when the spinal cord or nerve were injured, these findings are frequently ignored, and the monitoring records are falsified, destroyed, or “lost”. Additionally, postoperative neurological deficits are ignored or not recognized until days later by which times deficits are permanent/irreversible. This “blind eye” approach gives plenty of room for shuffle-and-jive, and smoke-and-mirrors obfuscation, leaving the defense to proffer: it was an “Act of God, a known risk of spine surgery”. In short, IONM does not make a rough, rushed, or clumsy surgeon a gifted safe surgeon, nor a dishonest surgeon an honest surgeon.

Failures Related to Spoliation: Alteration, Falsification

This leads to destruction/falsifying evidence and/or operative notes; this problem is further exacerbated by “templated notes”. When an adverse event occurs, it should be accurately recorded in the chart/operative note, but it rarely is. In fact, where major deficits occur, and everyone in the operating room knows what happened, they are too often involved in the cover-up; this results in false operative notes, false records, and amnesia on the part of

adjunctive operative personnel. In these circumstances, defense attorneys are quick to coach witness: e.g. “If you remember...” to which the witness then responds, “I don’t remember”.

Failure to Use Arterial Line Monitoring

Routine arterial line placement for most spine operations should be strongly considered to avoid intraoperative hypotension (e.g. cord ischemia, blindness in the prone position, anemia, other), and better ensure patient safety, thereby avoiding the multiple complications attributed to hypotension

Crisis in Medical Malpractice

Epstein’s Cervical Spine Presidential Address 2001 It is Easier to Confuse a Jury than Convince a Judge The Crisis in Medical Malpractice

In Epstein’s 2001 Cervical Spine Research Society Presidential address, she noted that the most common cause of quadriplegia was a single level ACDF.^[2] One cannot, therefore, tell which cervical cases are going to result in major complications.^[6,8] Hence, in Epstein’s opinion, many of these procedures should be monitored. In the article published in 2002, entitled “It is easier to confuse a jury than convince a judge: the crisis in medical malpractice”, Epstein looked at 36 malpractice cases involving cervical spine surgery.^[2] There were 20 cases from California (\$250,000 cap on pain and suffering compensation – passed in 1975 without inflation adjustment; cumulative inflation since 1975 has been 378.1% (the inflation corrected equivalent amount is approximately \$1,200,000 – see <https://www.usinflationcalculator.com/>), and 16 from New York (no cap on pain and suffering compensation). The most common reasons for suits against spinal surgeon included: “failure to diagnose and treat (56%), (often due to failure to identify and treat known complications of surgery: bleeding, infection), lack of informed consent (64%), new neurologic deficits (64%), and pain and suffering (72%)”. Of interest, all 6 plaintiff verdicts (average, \$4.42 million payouts) and 4 of 9 settlements (average, \$1.6 million) involved newly quadriplegic patients.

2011: A Review of Medical Negligence Suits Involving the Cervical Spine

In this 2011 study, Epstein looked at 78 patients undergoing; 48 anterior operations (1 to 4 level anterior discectomy/fusions, 1-level corpectomy/fusion), 20 posterior operations (7 fusions, 13 laminectomies with/without fusions), 2 other operations/procedures, while 8 had no surgery.^[6] Postoperative complications included; quadriplegia in 41 patients (21 anterior, 20 posterior operations), less severe neurological deficits in 15 patients, and pain alone in 22 patients.

Malpractice suits were filed against 63 spine surgeons; 15 suits were against others (e.g. adjunctive personnel, hospitals

etc.). The four main reasons for filing malpractice actions involved negligent surgery, lack of informed consent, failure to diagnose/treat, and failure to brace (unique finding for this study). There were 30 defense verdicts (10 quadriplegic patients), 22 plaintiffs' verdicts (average payout \$4.0 million dollars), and 26 settlements (average \$2.4 million dollars).

Unnecessary Spine Surgery

2013: Epstein and Hood (2013); Value of Second Opinions in Avoiding Unnecessary Surgery

In 2013, Epstein and Hood prospectively evaluated 183 patients in second opinion, who had already been told by their first-opinion spine surgeons that they needed spine surgery.^[7] Notably, 111 (60.7%) of these patients who were told they needed surgery did not actually require any surgery. Another 61 (33.3%) patients were told to undergo the “wrong” operation (e.g. an overly extensive operation, or one using the wrong approach) in Epstein's opinion. Only the 11 (6%) remaining patients had been counseled to have the “right” operation according to Epstein.

2016; Epstein SPORT Trial Commentary: Risks of Overly Extensive Lumbar Fusions

In a 2016 commentary, Epstein reviewed the SPORT trial regarding the efficacy of surgical treatment for lumbar disc herniations, lumbar spinal stenosis, and degenerative spondylolisthesis.^[9] Here, the SPORT study showed the benefit of “surgical decompression, but could not substantiate the superiority of decompression alone vs. non-instrumented vs. instrumented fusion.” Nevertheless, too many patients are still referred for extensive instrumented fusions leading to increased perioperative morbidity/mortality. An example of this is how many spinal surgeons now rarely perform conventional disk surgery for lateral disk ruptures, rather choosing TLIF (transforaminal lumbar interbody fusions). For central stenosis with neurogenic claudication, rather than central decompression, it is becoming vogue to choose bilateral TLIF, or bilateral MIS TLIF (e.g. also called PLIF/MIS PLIF).

Risks of Unnecessary Minimally Invasive Surgery (MIS)

More minimally invasive spine (MIS) operations are being recommended often with too few indications.^[3-6] Further, there are often steep learning curves for the safety/efficacy for performing these various MI spinal procedures: e.g. for transforaminal lumbar interbody fusions (TLIF) the learning curve requisite case numbers range from 39 up to 44 cases.^[10]

CONCLUSION

The most common reasons for patients to sue their spine surgeons include: lack of informed consent, failure to diagnose

and treat, negligent and/or unnecessary surgery, spoliation, and failure to adequately monitor surgery. Avoiding these multiple failures in the future should improve patient care, limit complications, and reduce medicolegal suits.

Declaration of patient consent

Not required as there are no patients in this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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How to cite this article: Epstein N. What Can Spine Surgeons Do to Improve Patient Care and Avoid Medical Negligence Suits? *Surg Neurol Int* 2020;11:38.