Volume 62
Issue 4 *Dickinson Law Review - Volume 62, 1957-1958*

6-1-1958

Medical Malpractice Problems

Ross S. McConnell

NOTES

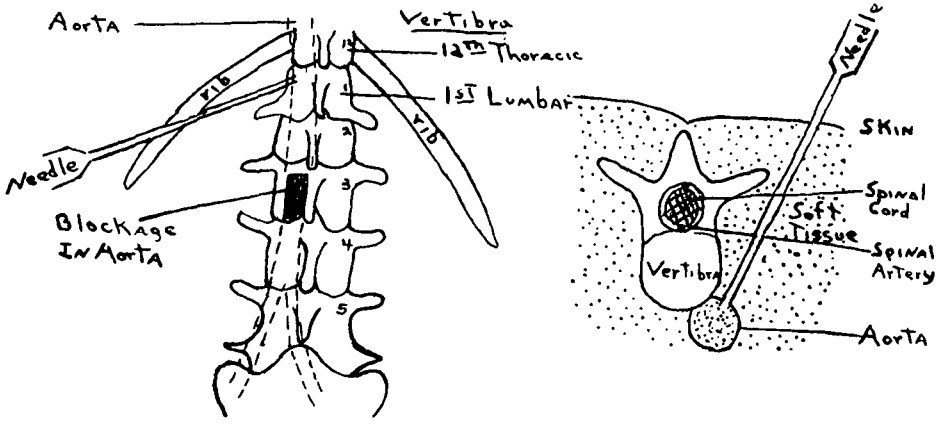
MEDICAL MALPRACTICE PROBLEMS

A recent California case, *Salgo v. Stanford University Board of Trustees*, __Cal. App. 2d__, 317 P.2d 170 (1957), illustrates numerous problems inherent in medical malpractice cases. The Salgo case will be used as a springboard for several general observations concerning res ipsa loquitur tests, medical evidence, the medical calculated risk (injury without fault), and the jury-adversary system in malpractice cases. These observations apply in varying degrees to all malpractice cases.

THE SALGO CASE

Martin Salgo is a 55-year-old white male with advanced "hardening of the arteries," an associated high blood pressure and a blockage of the main blood vessel (abdominal aorta) supplying the lower extremities. On January 6, 1954, Mr. Salgo entered Stanford University Hospital for an x-ray of his abdominal aorta to determine the location and extent of the blockage.

The x-ray study (aortogram) aids the physician in evaluating the proper therapy. While the patient is under anesthesia, a needle is inserted three or four inches to the left of the midline of the back underneath the twelfth rib. After the surgeon feels the needle penetrate the wall of the aorta, a metal rod (stylet) is removed from the center of the needle. If the needle is in the



ANATOMICAL RELATIONSHIPS

Posterior-Anterior **Cross-section**

aorta, bright red blood (arterial blood) will spurt from the needle with each contraction of the heart. A dye is then injected into the blood stream and x-rays are taken to follow the course of the blood and to outline the blockage in the aorta.[1]

The surgical procedural aspect of aortography is given in detail since the case turns on facts concerning the position of the needle.

The morning after the x-ray studies, Mr. Salgo developed a paralysis of both lower extremities (paraplegia); he subsequently brought a malpractice suit against the attending physician and the hospital. The trial judge charged as a matter of law that the doctrine of res ipsa loquitur applied. The jury returned a verdict in favor of the plaintiff and awarded damages of $250,000. The appellate court held that res ipsa loquitur did not apply as a matter of law and that the lower court's instruction was prejudicial error. The court stated that a prerequisite to application of the res ipsa loquitur test was in conflict and that the jury, not the trial judge, would have to resolve the conflicting testimony and determine the applicability of res ipsa loquitur. The conflicting testimony referred to by the appellate court concerned the position of the needle.[2]

THE CALCULATED RISK

Before dealing specifically with the testimony as to the position of the needle, information as to the relationship of aortography and paraplegia will be enlightening.

Seven cases of paraplegia following aortography are reported in the literature.[3] The exact mechanism causing the paralysis is speculative; however, an accepted theory is that the iodine in the dye causes a spasm of the artery supplying blood to the spinal cord. The subsequent damage to the spinal cord results in nerve and muscle paralysis to the lower extremities.[4]

---

[1] Leriche, Beaconsfield, and Boeby, *Aortography, It's Interpretation and Value,* SURG., GYN. AND OB. (Jan., 83-84, 1952).

[2] 317 P.2d 170, 172-177 (1957). "Here there was a conflict in the testimony, defendant's experts testifying in effect that the urokon [dye injected into the aorta] could have affected the spinal cord even if properly injected in the aorta and that such a situation might have occurred here; plaintiff's expert testifying in effect that the x-ray showed the needle to have been inserted in the wrong place. The jury were not told that the doctrine could apply only in the event they found that the needle had been inserted in the wrong place. On the contrary, the court instructed the jury that *as a matter of law,* from the 'happening of all the events involved in this case, however, as *established by the evidence*' (emphasis added) the inference of negligence arose. The jury were given no opportunity to determine the facts upon which the doctrine would or would not arise. This was prejudicial error." 317 P.2d at 177.

[3] Conger, Reardon, and Arey, *Translumbar Aortography Followed by Fatal Renal Failure and Severe Hemorrhagic Diathesis,* 74 AM. MED. ASSOC. ARCH. OF SURG. 287, 288 (1957).

[4] Conger, supra note 3, at 292.

Paraplegia is regarded as one of the calculated risks of aortography.[5] Because of the anatomical relationship of the aorta and the spinal cord it is possible that paraplegia could occur as a result of the needle being negligently inserted, but as will subsequently be shown, Mr. Salgo's paraplegia was not related to the insertion or location of the needle.

A calculated risk is a complication which occurs because of the intrinsic danger of the procedure rather than fault on the part of the physician. Another striking example of a calculated risk is anaphylactic shock following administration of penicillin. Without any fault on the part of the physician, a certain number of patients will develop a severe allergic shock, sometimes resulting in death, when given penicillin.[6] No one would deny, at least at a ladies' aid meeting, that general anesthesia and surgery have certain inherent risks. Because of the danger, the diagnostic and therapeutic value of all medical procedures must be weighed against the calculated risk of the procedure.[7]

Without being too imaginative, it is readily understandable that calculated risks can be a fertile field for law suits. Combine a spunky, loveable six-year-old child, a "minor" elective tonsillectomy, a poor patient-doctor relationship, and an unexpected death; the result can be a social, medical and legal tragedy. The Salgo case will be developed along this line.

THE CONSPIRACY OF SILENCE

A plaintiff's difficulty in obtaining medical testimony in malpractice suits has been noted on numerous occasions.[8] Mr. Belli in a recent article has even warned the medical profession to make expert testimony available or dire legal procedures will be used.[9] The increasing application of res ipsa loquitur in malpractice cases bears out Mr. Belli's contention.[10]

The court in *Salgo v. Stanford University Hospital* stated the problem:

> "The application of the doctrine of 'res ipsa loquitur' in malpractice cases is a development of comparatively recent years. . . . But gradually the courts awoke to the so-callel 'conspiracy of silence.' No matter how lacking in skill or how negligent the medical man might be, it was almost impossible to get other medical men to testify adversely to him in litigation based on alleged

[5] McAfee and Williams, *A Review of the Complications of Translumbar Aortography*, 75 AM. JOURNAL OF ROENTGENOL. 956 (1956); Boyarsky, *Paraplegia Following Translumbar Aortography*, 159 JOURNAL OF AM. MED. ASSOC. 599-602 (1954).

[6] GOODMAN AND GILMAN, THE PHARMACOLOGICAL BASIS OF THERAPUTICS 1348 (2d ed. 1955).

[7] Comment, *Res Ipsa Loquitur and the Calculated Risk*, 30 CALIF. L. REV. 80 (1956).

[8] Belli, *Is Medicine Above the Law?* 34 MED. ECONOMICS 120, 123 (1957); Morris, *"Res Ipsa Loquitur"—Liability Without Fault*, 163 J. OF AM. MED. ASSOC. 1055, 1064-1065 (1957).

[9] Belli, supra note 9, at 356.

[10] Morris, supra note 9, at 1065.

> negligence. Not only would the guilty person thereby escape from civil liability for the wrong he had done, but his professional colleagues would take no steps to insure the same result would not again occur at his hands. This fact, plus the fact that usually the patient is by reason of anesthesia or lack of medical knowledge in no position to know what occurred that resulted in harm to him, forced the courts to attempt to equalize the situation . . ." [11]

In the Salgo case the plaintiff's "expert" had never participated in an aortogram study and had never seen x-rays of such a study, other than those involved in this case. The defendants had at least six medical experts who were familiar with aortography. Prima facia, the conspiracy of silence is operating against Mr. Salgo. However, physicians are not advocates and as previously mentioned, paraplegia is a calculated risk of this procedure; so the only "expert" who could testify favorably for the plaintiff in the Salgo case would be a physician who has no experience or knowledge of aortograms.

Res Ipsa and the Salgo Case

The prerequisite elements usually stated for the application of res ipsa loquitur are:

1. The accident must be of a kind which ordinarily does not occur in the absence of someone's negligence.
2. It must be caused by an agency or instrumentality within the exclusive control of the defendant.
3. It must not have been due to any voluntary action or contribution on the part of the plaintiff.[12]

In the Salgo case the court discusses only the first element of the general res ipsa test, "the results ordinarily do not occur without negligence." [13] The court readily realized that the relationship of paralysis in aortograms to negligence was outside the experience of the "juror." [14] A second test mentioned by the court was that res ipsa would apply if the "results were ones which . . . medical men know ordinarily do not occur without negligence." The court found no evidence to satisfy the second test.[15]

After deciding that the general res ipsa loquitur test was not applicable, the court discusses a modified res ipsa test.[16] The modified test has three elements:

---

[11] 317 P.2d at 175.
[12] 9 Wigmore, Evidence, § 2509 (3d ed. 1940).
[13] 317 P.2d at 176.
[14] 317 P.2d at 176.
[15] 317 P.2d at 177.
[16] "There was no testimony that in aortography, without negligence, a needle could be inserted in a spinal artery. In fact, the testimony was just to the contrary, that there should be no great

1. The patient is under anesthesia.
2. A different part of the body injured than should have been involved in the procedure.
3. No evidence that such a result might ordinarily occur without negligence.

With the general test, res ipsa applies upon the showing of an injury that ordinarily occurs because of a negligent act. With the modified test, res ipsa applies upon the showing of an unexpected injury occurring while under general anesthesia, provided that no evidence is introduced that such injury does ordinarily occur without negligence. In effect, instead of the plaintiff's having to show the applicability of res ipsa loquitur, the defendant must show its non-applicability or the doctrine will arise.

The court's application of the modified test was erroneous. Assuming that the first two elements of the modified test were satisfied, was evidence introduced that such an injury could occur without negligence?

The defendant's testimony that the aorta can be needled without difficulty was construed by the appellate court to imply that if the needle was found in the spinal artery, it was negligently inserted. From this implication, the court reasoned that the defendant was negligent or at least could not introduce evidence to satisfy the third element of the modified test, i.e., "that such a result might ordinarily occur without negligence."

> "There was no medical testimony upon which 'res ipsa loquitur' could be based unless it be Dr. Edmead's testimony that the needle may have been inserted in the wrong place. There was no testimony that in aortography, without negligence, a needle could be inserted in a spinal artery. In fact, the testimony was just to the contrary, that there should be no great difficulty in inserting the needle into the aorta. Dr. Edmead's testimony, if believed, would bring the case within the rule of Dierman v. Providence Hospital, 31 Cal. 2nd, 290, 292, 188 P.2nd 12 . . . that where a patient is under anesthesia and a different part of his body is injured than that which should have been involved in the procedure, and there is no evidence that such a result ordinarily might occur without negligence, the doctrine applies . . .[17]

The defendant's testimony should not have been so construed. The court overlooked the uncontradicted evidence that the defendant in placing the

difficulty in inserting the needle into the aorta. Dr. Ednead's testimony, if believed, would bring the case within the rule of Dierman v. Providence Hospital, 31 Cal. 2nd, 290, 292, 188 P.2nd 12 . . . that where a patient is under anaesthesia and a different part of his body is injured than that which should have been involved in the procedure, and there is no evidence that such a result ordinarily might occur without negligence, the doctrine applies . . ." 317 P.2d at 177.

[17] 317 P.2d at 177.

needle used all the standard precautions.[18] In other words, even if the needle was in the wrong artery, which will be shown to be impossible, the defendant used standard procedure to assure that the needle was properly placed. Is this not some evidence that the needle could be misplaced without negligence?

The position of the needle is made the controlling fact as to the applicability of res ipsa loquitur. The defendant's experts were in accord that the cause of the paralysis was due to a lack of blood supply to the spinal cord, causing the muscles which were controlled by the nerves to be paralyzed.[19] The experts differed as to the possible mechanism blocking the blood supply.

The plaintiff's expert opined that the needle was near or in an artery supplying the spinal cord and thereby the spinal artery and subsequently the spinal cord was injured.

The opinion of the plaintiff's expert, based on the x-ray films,[20] is inconsistent with the uncontradicted physical evidence, since the same films showed dye in the aorta.[21] No spinal arteries branch off the aorta [22] and so anatomically if the needle was not in the aorta, the dye could not be in the aorta.

Further, the neurological examination showed that the level of the injury to the spinal cord was several inches above the needle.[23] In other words, the particular spinal artery occluded was not the one in which the needle allegedly was located.

The most unfortunate aspect of the Salgo case from a legal standpoint is that four years after Mr. Salgo's paraplegia, and after a trial and an appeal, a new trial is ordered based on an impossible medical fact applied to an uncertain [24] res ipsa test. What will happen on the next appeal is anyone's guess.

COMMENT ON RES IPSA TESTS

The difficulty of applying res ipsa loquitur is illustrated by the Salgo case. Theoretically res ipsa loquitur is a logical doctrine. Why shouldn't the de-

[18] Transcript of Record, pp. 201-214, 322, Salgo v. Stanford U. Hosp., 317 P.2d 170 (1957).
[19] Transcript of Record of the Salgo Case, pp. 271, 272, 273, 906-908, 1352, 1154, 1357-1359, 1425.
[20] 317 P.2d at 177.
[21] Transcript of Record of the Salgo Case, p. 559.
[22] GRAY, ANATOMY, 608 (25th ed. 1948).
[23] Defendants' Exhibit B, Transcript of Record p. 1107, is a comment on the hospital chart by the neurologist stating that the paralysis was at the level of the tenth and eleventh thoracic vertebra. The needle was at the level of the first lumbar vertebra, Transcript of Record p. 1121.
[24] The rule of Dierman v. Providence Hospital, 31 Cal. 2d 290, 188 P.2d 12, is not the modified res ipsa test. In the Dierman case an explosion of a "noncombustible" gas during an operation caused damage to the plaintiff. The verdict was for the *defendant* even though the doctrine of res ipsa was properly applied. The appellant court remanded the case for a new trial because the defendant, as a matter of law, had not met the burden of persuasion. The court in the Salgo Case confused the legal effect of res ipsa with the prerequisite elements necessary for res ipsa to arise.

fendant have the burden of persuasion or at least of coming forward if a particular injury is ordinarily caused by a negligent act? The difficulty arises in finding a set of facts where the elements of the res ipsa test are satisfied.

The court cites the Bauer case[25] as an obvious fact situation where res ipsa loquitur applies. A superficial analysis reveals that the usual prerequisite res ipsa elements are not satisfied. In the Bauer case a vitamin injection in the arm was followed by the paralysis of the muscles of the forearm and hand. Certainly the layman knows that paralysis does not ordinarily occur from a hypodermic injection. The test is not that an unexpected injury occurred but rather than such injury ordinarily occurs as a result of negligence.

In applying the test in the Bauer case a few questions that need to be answered are:

1. What is the negligent act or acts which ordinarily cause a paralysis? Was the fault in the quality or quantity of the vitamin material, the sterile technique, or the location of the needle?
2. What is the relationship of the paralysis to the negligent act? Did the needle, hemorrhage, or infection cause the paralysis?
3. What are the possibilities of the paralysis occurring even with proper administration of the drug, say from an unusual allergic response?

The point is that an unfortunate and unusual response has occurred. The paralysis does not "speak for itself" so that a juror could apply the res ipsa loquitur test. The layman understands only that a time relationship existed between the vitamin injection and the paralysis. The layman's experience is with good results, not with complications. Indeed, even in a case cited as obviously a res ipsa loquitur case, the jury would have to speculate in applying the test.

Medical Testimony

The application by the court of res ipsa loquitur to medical malpractice cases is understandable in the light of the plaintiff's lack of medical knowledge and his difficulty in obtaining expert medical testimony. Equally understandable is the view that some malpractice cases are determined not on their merits but by the sympathy of the jury influenced and encouraged by such a doctrine as res ipsa loquitur.

In the Salgo case, the defendants' experts had extensive experience in the field of aortography. They were physicians of national and world stature.

[25] 133 Cal. App. 2d 439, 284 P.2d 133 (1955).

The plaintiff's only expert had never even witnessed an aortography. It would not be too unreasonable, at least for discussion purposes, to assume that the weight of the medical testimony favored the defendants. Yet the verdict was for the plaintiff. The foregoing observation points out another vital medical evidentiary problem.

Any attorney practicing in the field of personal injury should be able to "discredit" or at least muddle the most authoritative impartial medical testimony in the eyes of the jury. A medical diagnosis is similar to a legal diagnosis. The majority and dissenting authorities must be evaluated; past academic and clinical experience must be applied to the fact situation. The final result is a differential diagnosis of one of numerous possibilities. An adversary, by pointing out the alternative diagnosis, by quoting dissenting authorities, and by utilizing the psychological and procedural advantage of the status of inquisitor can, as far as the jury is concerned, destroy the value of expert testimony.

In some jurisdictions foreign law was once pleaded and determined by the jury as a question of fact. The impractibility of such a procedure was readily recognized and the court now determines foreign law.[26] Judicial experience and training are basic for an intelligible determination of foreign law, just as medical experience and training are basic for an intelligible determination of most imprudent medical diagnoses or treatments (i.e., malpractice). The reasons for taking the question of foreign law away from the jury apply with equal force to medical issues. Assuming that medical issues should be taken from the injury, to whom should they be given? The answer to this question is beyond the scope of the present paper. Perhaps the creation of a specialized court similar to the federal Tax Court would be more satisfactory. A judge with a medicolegal background could determine questions of medicine and law. The jury could determine damages and other questions of fact. Personal injury cases, other than malpractice, could also come under the jurisdiction of this court. In some jurisdictions various other systems are being tried.[27]

---

[26] 9 WIGMORE, EVIDENCE § 2558 (3d ed. 1940).

[27] New York has a plan in which physicians of all specialties act as the court's impartial experts. The New York plan aids in breaking the nonsound barrier but is of little assistance in resolving the second evidentiary problem, i.e., technical facts being decided by laymen. Zeisel, *The New York Expert Testimony Project: Some Reflections on Legal Experiments,* 8 STAN. L. REV. 730 (1956).

In Alameda County in California a committee composed of insurance representatives, lawyers, physicians and laymen review malpractice claims. If the committee decides the claim is without merit, the physician is provided with a vigorous defense. Sodusk, *An Analysis of the Professional Liability Program in Alameda—Contra Costa Counties*—1946-1954, 27 BULLETIN OF THE SANTA CLARA COUNTY MEDICAL SOCIETY 7 (1955).

The "Blue Ribbon Jury" and the "Administrative Agency Approach" are other methods that have been used in the field of personal injury to solve the problem of finding facts which are technical.

WHY MORE MALPRACTICE CASES,

The last observation for which the Salgo case will be used as a "springboard" concerns the cause of the increase in the number of malpractice suits.[28] The highest degree of medical care is being practiced in a university hospital. The specialist does and should practice superior medicine as compared to the generalist. Yet the specialist is sued more frequently.[29] Fault or the increased care required by law of the specialist probably does not account for the increase in malpractice suits or that specialists are sued more frequently.

Dr. Regan writes that one of the reasons for the increase in malpractice cases is the tremendous technological advance of medicine.[30] Only a few years ago patients went to the hospital for terminal care; today hospital admissions are primarily for curative therapy. The crux of Dr. Regan's reasoning is that today patients tend to expect miracles which are not available on earth. Because so many remarkable treatments are available, patients are more dissatisfied with poor results.

Another important factor, other than fault, in the increasing number of malpractice suits is the deterioration of the patient-doctor relationship. Dr. Jones, who has delivered everyone in the community, can do no wrong. When poor results occur, Dr. Jones' patients feel that he has done his best to help them and would not think of bringing suit against him. Dr. Thorndike runs his office more like an operating room. Efficiency is the keynote. Nurses and aides perform many routine chores, and they are present in the consultation room as well. Patients are sometimes amazed how efficiently a substantial sum of money can pass in such a short period of time. To many, Dr. Thorndike has more than his share of the economic pie and is a highly skilled technician rather than a psysician. The psychological effect of medical progress and the deterioration of the patient-doctor relationship on malpractice suits should not be underestimated.

CONCLUSION

The Salgo case illustrates that malpractice cases can be as complicated and technical as rate cases and that res ipsa loquitur tests tend to add further complications and confusion. Even in the Bauer case,[31] which is cited as an obvious res ipsa loquitur case, the usual criteria of the test were not satisfied.

---

[28] Morris, supra note 11, at 1055.

[29] (Editorial Staff), *Court Decisions—Medical Professional Liability,* 164 J. OF AM. MED. ASSOC. 1349, 1354 (1957).

[30] Regan, *Why Doctors Face So Many Law Suits,* 19 LOOK 62 (1955).

[31] Bauer v. Otis, 133 Cal. App. 2d 439, 284 P.2d 133 (1955).

The Salgo case suggests that res ipsa loquitur is applied in malpractice cases to overcome the "conspiracy of silence." Other legal tools can be more efficaciously used. Broad discovery rules make evidence readily accessible to the plaintiff. Mr. Belli writes ". . . depositions of every one of the doctors were taken, as provided by the California procedure. . . These depositions were bound. Then I added the complete set of the medical records from the hospital (subpoenaed *duces tecum* under the California procedure—and photostated). These records and testimony made a volume over six inches high. Nothing further could be said at the trial." [32]

California has a statutory procedure which avoids the necessity of plaintiff's having an expert. By court interpretation of a California statute the defendant physician may be called by the plaintiff and questioned as to any relevant matter, and his answers may serve the plaintiff as expert testimony.[33]

"A party of record of any civil action . . . may be examined by the adverse party as if under cross examination. The party calling such adverse witness shall not be bound by his testimony, and the testimony given by such witness may be rebutted. . . ." [34]

Of course, using an adverse party as an expert is unsatisfactory but the procedure is a means for the plaintiff to get to the jury without an expert or res ipsa loquitur.

Physicians could assist the courts and themselves in arriving at a more meritorious result by using more complete consent forms. A proper attestation clause and a listing of the complications of a given procedure which ordinarily occur without negligence could serve as an admission or at least a guide in the application of res ipsa loquitur.

The defendants in the Salgo case could also clarify the medical facts by use of a human replica. By demonstrating the relationship between the aorta and spinal artery, the defendants could visually demonstrate that the contention of the plantiff's expert was untenable.

A physician is in a position of public trust and he has a duty to testify on behalf of any party in a malpractice suit. The situation is analogous to the duty of the attorney to represent all clients. The local medical and bar associations should work out, as some have worked out,[35] a plan to make expert testimony available.

---

[32] 3 BELLI, MODERN TRIALS, 1996 (1st ed. 1954).

[33] Lawless v. Calaway, 24 Cal. 2d 81, 147 P.2d 604, 609 (1944); Costa v. Board of Regents of University of Cal., 116 Cal. App.2d 445, 465, 254, P.2d 85, 97 (1953).

[34] CAL. CODE CIV. PROC., § 2055 (West, 1955).

[35] (Editorial Staff), *The California Malpractice Controversy*, 9 STAN. L. REV. 731, 745 (1957).

A closer co-operation and understanding between the two professions is mandatory if malpractice cases are going to be tried on the merits. "To denounce the legal profession as brutal opportunists whose sole purpose is to aid in the hold-up and run with the loot" [36] is, to say the least, not to appreciate the adversary system. To have malpractice be determined by confusing doctrines and irrelevant facts is, to say the least, not to appreciate the practice of medicine. A closer co-operation between the two professions is essential for progress in the field of medical malpractice and in many other fields of the law.[37]

Ross S. McConnell.[38]

[36] Hill, G., *Surgeon Denounces Tactics of Lawyers,* The N. Y. Times, March 11, 1958, p. 1.
[37] i.e., personal injury, legal sanity, and in the field of crime and punishment. See Rhyne, *Medical-Legal Cooperation,* 164 J. of Am. Med. Assoc. 1931 (1957).
[38] M.D., 1952, University of Pennsylvania; LL.B., 1958, Dickinson School of Law.