Medical Testimony—Problems in Presentation

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[As the personal-injury lawyer prepares for trial, he almost invariably encounters the need for utilizing expert medical testimony to establish elements of damage and physiological causality. This phase of his preparation is at least as crucial as any other phase, and often enough is undoubtedly the most crucial, insofar as it can, if such testimony is handled ineptly, bear the sole blame for an unfavorable verdict. The most thorough investigative techniques, legal analysis, scientific familiarity, and courtroom expertise will all come to naught for the lawyer if his evidence is unconvincing to the court or jury. In presenting medical expert testimony, the lawyer is faced with unique problems, some of paramount importance, the others, if not paramount, nevertheless important.] Ed.

THE PHILOSOPHICAL PROBLEM

Much has been written and a great deal more spoken about the problems facing the trial lawyer as he approaches the medical phases in the trial of a personal-injury action. In all this wealth of material one finds varied analyses of methods of selecting the proper pattern of proof, and the choice of a psychological approach to the trier of fact, as well as a fuller understanding of the evidentiary techniques involved.

Yet, very little attention has been paid, at least publicly, either by trial lawyers or legal scholars, to what is perhaps the most important of all of the facets of the presentation of medical evidence in such a trial — problems personal to the medical witness, that is, the state of mind, psychological posture, conception of litigation, and understanding with which the medical witness approaches his participation in the trial.

The average trial lawyer is so deeply involved in the litigation he is handling and in his preparation for trial, that often he does not fully take into consideration the position in which the medical witness finds himself at this point. For lack of such proper understanding and of taking the necessary steps to lay a foundation of complete understanding between himself and the doctor, he may too late find himself and his client in a position in which the presentation of the medical evidence involves substantial and insurmountable difficulties.
The problem resolves itself into a basic and impelling need for the injury trial lawyer to understand and reconcile the difference between what one may call the medical evidentiary philosophy and the legal evidentiary philosophy, which affect the thinking processes of the medical witness and the negligence lawyer in their search for a conclusion.

Medical Attitude Based on Professional Training

It is essential that the lawyer give consideration to the fact that the process of analyzing, inferring, and concluding encountered in the medical witness is the result of years of molding and development. From the very first day that he commences his studies at a medical school, through all the years of class and laboratory work, through the research period, hospital internship, and any post-graduate work, the doctor is trained to think and work by standards of proof that are vastly different from those involved in the field of trial evidence. Whether the doctor is attempting to make a differential diagnosis to determine the need or result of surgery, the selection of the proper drug for a particular purpose, or a mode or method of treatment, he is conditioned by the very nature of his education and the needs of his work to seek absolute certainty. A mind so conditioned cannot be satisfied with reasonable probabilities, inconsistent inferences, some of which fairly tend to support an opinion, or a preponderance of facts that leads to a reasonable conclusion.

In the practice of medicine, dealing as it does with human health and life, the direct and ultimate objective, which is deeply inculcated in the very being of the doctor, is the need for a determination of the particular problem by a conclusion as certain as is humanly possible, as close to the absolute in proof as human endeavor can make it. This is evident from the vast amount of research that must go into the study and evaluation of the variety of new drugs being used to combat diseases and conditions of ill-being that for centuries were considered incurable, before a conclusion of fitness for a specific purpose is reached. The same is true of new techniques in surgery and treatment and is undeniably to be commended. The medical man, then, by conditioning and direction, tends to think along lines of absolute certainty when searching for the existence of a fact or relationship.

Legal Attitude Toward Proof

That segment of the legal profession involved in the trial of personal-injury cases, on the other hand, has been conditioned by education and by training to a completely different philosophical approach to the problem of proof. The very basis of the determination of the quest for truth in injuries litigation takes as a fundamental assumption the exist-
ence of inconsistent inferences of fact, leaving to the trier of the fact the selection of the particular group of inferences or conclusions of fact, which, within the framework of the standards of proof set down by law, leads to a conclusion of "what is the truth." There is within this concept of the attainment of a belief as to the truth in a personal-injury case no basic requirement of absolute certainty, nor even of proof beyond a reasonable doubt.

The trial lawyer, in the handling of injury litigation, is basically concerned, within the framework of existing law, with two ultimate quantums of proof. In essence, they are requirements of meeting the test of proof necessary for the making out of a prima facie case, and the sustaining of the burden, imposed upon him by local law, of proof of all the issues in the case. Although the quantum of proof may vary in different jurisdictions with relation to these two types of burden of proof, there seems to be a basic standard that may be established as a premise.

Prima Facie Proof

The defendant's motion at the end of plaintiff's case, and again at the end of his own case (known as a motion for a directed verdict, non-suit, or otherwise) submits to the court the question of whether plaintiff's evidence taken as true, together with all legitimate conclusions and inferences, fairly tends to sustain the plaintiff's cause of action. The motion made at the end of the presentation of the entire case submits the same question to the court, with the added right inuring to the plaintiff of having the court consider all favorable inferences, deductions and conclusions that may be drawn not only from the evidence adduced by him, but also from defendant's evidence. Thus, in both of these situations, the existence of inconsistent inferences and conclusions of fact is assumed, with a right in the trial court to consider all favorable inferences, deductions and conclusions that may be derived therefrom make out a case for submission to the jury. The legal approach here is not directed toward absolute certainty, but toward a determination of conformity with a formula of proof within the limited requirement of the law.

Burden of Proof

It is fundamental to practically all jurisdictions that the burden of overall proof imposed upon a plaintiff is that of supporting his side of the

issues by a preponderance of the evidence. This burden of proof is variously interpreted or defined by different courts of review, but it essentially leads to the common premise that plaintiff's evidence must be sufficient in amount to create on the part of the court and jury the reaction that it is more convincing and acceptable as truth than the evidence appearing in contradiction of it. All of these concepts proceed on the premise that the law wisely does not require ocular proof leading to absolute certainty or to belief beyond all doubt, because such a degree of proof is unattainable in civil cases as long as inconsistent inferences may, by different minds, be derived from the same set of circumstances.

Present Major Area of Difficulty — Results of Trauma

The basic difference in what may be called the working philosophies of the trial lawyer and the medical witness becomes involved in the great majority of cases that are now reaching the trial courts. This is particularly true with relation to the question of the legal definition of medical causation. With the tremendous advances in medical learning and study and the great accent on publication of study results, great strides have been made in opening new vistas to the probable relationship of trauma and what used to be known as the obscure diseases (such as cancer, multiple sclerosis, muscular dystrophy, infantile paralysis), the stress diseases (formerly conceived to be strictly organic conditions involving the heart, the stomach, the intestines, and the glands of the body), and a host of other physical and mental ills falling within the same general classification. As to all of these conditions of ill-being there now seems to be sufficient medical knowledge available to raise inferences of causal connection, within the legal definitions of causation in the various jurisdictions, which satisfy the rules of factual inference well enough to make out a question of fact for submission to the jury. These factual circumstances, however, must, under the existing system of proof, be placed in evidence by the medical witness.

Taking into consideration this diversity of philosophy on the question of causation, it becomes apparent that there must be a resolution of differences before the medical witness testifies at the trial. If such a resolution is not achieved, the resulting misconception by the medical witness of his function in court will likely result in disaster if he testifies, and otherwise may result in a marked hesitancy to participate actively in the proceedings.

4. 20 AM. JUR. Evidence § 131 (1939); 31 C.J.S. Evidence § 103 (1942).
This is basically so because of the fact that the average medical witness is reluctant to express an opinion, whatever may be the legal formula in which it is couched, until all of the medical learning is complete and he may speak with certainty. This is true despite the fact that the state of the learning is such that he is actually able to speak with a reasonable degree of certainty, or couch his opinion in terms of reasonable probability, which, in essence, is all that the law requires in any event. This is clearly the case in all of those situations involving the determination of the causal relation of trauma and the obscure or stress diseases. Very often, although believing as an individual, on the basis of the factual sequence of events present in a case, that there is a legal causal connection, the medical witness is inclined to take a contrary position as a member of the medical profession, upon the express premise that, until and unless the profession is able by medical research and study to determine the specific causative factor of a condition to the exclusion of all other factors, he is, for a lack of such knowledge, unable to express an opinion on the subject.

Function of the Medical Witness

A degree of uncertainty arises as to the proper method for the solution of the philosophy problem, depending, to some extent, upon the particular formula in use in a jurisdiction as the vehicle by which the question as to causation is put to the medical witness. In some states it is held that a medical witness may testify only to whether or not there "could or might" be a causal connection based on a reasonable degree of medical certainty. These jurisdictions predicate the limitation of the form of the question upon the concept that, since the triers of fact are to determine the ultimate question of causal connection, the medical witness can only give an advisory opinion, and that if he is permitted to testify to an opinion of direct connection, using the word "was" or "is," such testimony would invade the province of the jury. In other words, the witness usurps the function of determining the ultimate question.

On the other hand, there are jurisdictions in which the formula for eliciting an opinion as to causal connection must be predicated upon the question of whether there "was or is" a causal connection between the trauma involved and the condition of ill-being. These jurisdictions

8. For collected cases, see Annot., 135 A.L.R. 512 (1941); Bearman v. Prudential Ins. Co., 186 F.2d 662 (10th Cir. 1951); Cohenour v. Smart, 205 Okla. 668, 240 P.2d 91 (1951); Grace v. Fassott, 67 App. Div. 443, 73 N.Y. Supp. 906 (1902). Ohio seems to follow this doctrine; although there are no direct expressions in the cases to that effect, the decisions do condemn the "could" rule as speculative, and require proof of probability as the basis for the evidence; in addition thereto, the questions used in the cases, when stated, contain the "was
proceed upon the theory that the use of the "might or could" method leads to testimony by way of opinion that is speculative and conjectural and not of sufficient weight to support the conclusion resulting from the opinion rendered, and that, therefore, the more positive form of interrogation must be invoked.

A third group of jurisdictions (which seems the most logical) proceeds upon the theory that in any event the opinion of the medical witness in such cases is merely advisory to the court or jury, and that the ultimate finding of fact is based upon the warranted inferences and conclusions to be derived from the evidence in the case apart from the opinion of the medical witness. Under this concept it is held that the question of causation may be propounded to the medical witness in either form, that is to say, by the use of either the "was or is" method or the "might or could" method, and the answer elicited is included among the elements that the triers of fact may consider on the question of the weight of evidence.9

It seems clear that the general trend is toward holding that such an opinion is not a conclusive factor in the case, but one of the elements to be considered as bearing upon the ultimate determination of medical fact.

In the light of the problem posed by these factors (which have contributed greatly to creating an honest difference of opinion among medical men as to the issue of causation), many courts have taken the position that the question of medical causation can be well determined, even in the absence of supporting medical opinion, on what is called the sequence-of-events theory. These jurisdictions, perhaps appreciating the basic difference between the philosophy of the medical profession and the philosophy of the law, have reached the conclusion, where a set of events and circumstances appears from the evidence to lead from a trauma of a previously healthy person to a condition of ill-being that logically seems to relate to the initial trauma, that such a sequence of events is sufficient to raise a reasonable conclusion of causation satisfactory to the law.10

or is" expressions. Brandt v. Mansfield Rapid Transit, Inc., 153 Ohio St. 429, 92 N.E.2d 1 (1950); Pfister v. Industrial Comm'n, 139 Ohio St. 399, 40 N.E.2d 671 (1942); Drakulich v. Industrial Comm'n, 137 Ohio St. 82, 27 N.E.2d 932 (1940); Drew v. Industrial Comm'n, 136 Ohio St. 499, 26 N.E.2d 793 (1940).

9. Travelers Ins. Co. v. Person, 58 F.2d 210 (8th Cir. 1932); Clifford-Jacobs Forging Co. v. Industrial Comm'n, 19 Ill.2d 236, 166 N.E.2d 582 (1960); Star v. Oriole Cafeterias, 182 Md. 218 (1943).

The Witness' Desire For Self-Justification

Whatever may be the state of the law in a particular jurisdiction on the form of the examination of a medical witness as to the question of causation, if no real attempt has been made to reconcile the basic differences of philosophy in conferences between the lawyer and the doctor, the medical witness will approach the trial of the case with an innate desire to justify his position. It will normally be his intention to explain to the court and to the jury the scientific state of fact with relation to the particular problem of causation, pointing to an ultimate conclusion that, in the absence of absolute, precise and certain knowledge of the exact causation of the condition of ill-being, the medical profession is unable to form an opinion about the causal relationship between the alleged cause and damage. Since this conclusion is basic in the thinking of the medical witness, he feels bound to take issue with the principle of reasonable probability in the nature of a conclusion reached by the courts on something like the sequence-of-events theory. The strange and inconsistent part of such an attitude is that many times the medical witness, as an individual and a human-being, motivated by normal thinking processes, will have a private opinion as to causation, which is actually predicated upon reasonable probability, but because of a sense of obligation to the entire medical profession, he feels impelled to limit his public opinion to the current composite learning and conclusions of the medical profession.

When, with such a frame of mind, the medical witness enters the court room faced with the problem of answering specific questions, depending on the jurisdiction, as to whether or not there "might or could" be a causal connection, "was or is" a causal connection, or whether a particular condition was the "natural and probable" result of a causative factor, he begins to feel that he has been placed in a position in which someone is attempting to induce him to testify in a manner contrary to his thinking and beliefs, and that he is being kept from expressing, in his own way, the truth as he sees it, with the result that he begins to become hesitant and resentful, even to the extent of unconsciously assuming an attitude of partiality. The net results of such a situation are difficulties of presentation, misunderstanding, and unwarranted prejudice to the client's case.

Remedial Consultations

The solution, of course, is extensive and detailed preliminary consultations between doctor and lawyer, for the purpose of clarifying differences in the thinking, and demonstrating the fairness and integrity of the legal processes and formulae, in view of the purposes served and objec-
tives pursued by the law. The medical witness should clearly understand that when he is asked to give an opinion of causation concerning a subject where medical knowledge is not yet a certainty, he is not being asked to do anything unethical, to betray his philosophy, or to involve his professional integrity. He is simply being asked to voice his private belief on the question of reasonable probability, within the framework of what the law permits and requires. It must be made clear to him that (in the great majority of jurisdictions) he is not being asked to decide an ultimate issue of fact, for that is the function and province of the court or the jury, and his opinion is merely advisory.

Preparation For Cross-Examination

The clarification of the difference in concepts between the two professions is perhaps even more important in preparing the medical witness for cross-examination on the question of causation, than it is in preparing him for direct examination. He must be ready to defend his expert opinion, and not be trapped into diluting its effect by allowing to go unchallenged a slanted comparison of his views with contradictory statements made by other medical men, standing on their professional uncertainty. In all of the problems involved with medical causation, the capable cross-examiner will inevitably attempt to develop a medical fact situation under the sequence-of-events theory for the purpose of engendering in the court and jury a belief in the natural probability of causation contrary to the expressed opinion of the medical witness. When the medical witness is no longer being interrogated by someone friendly to his side of the case, but rather the questions posed are a formalized attack on his thinking, the difference in philosophies of the doctor and the lawyer becomes sharply and clearly delineated. The attack is often a defendant's weapon, but, to the extent that medical thinking manifests the inclination to take a positive position against causation in the absence of absolutely certain knowledge as to the existence or causes of physical conditions, it is the attorney for the plaintiff who finds himself in the position of having to project this difference between the "private" and "public" beliefs of the medical witness. Many medical subjects provide suitable bases for demonstration, but in the field of causation relating to cancer one can find the most clearcut illustrations.

For example, in a case tried a few years ago in Chicago, there was involved the following unusual set of facts: It appeared that the plaintiff, a woman of middle age, who was a voice teacher, had had an abdominal operation some five or six months before the accident out of which the cause of action arose. In this operation, a portion of the intestine was removed under diagnosis of a non-malignant type of tumor; this diagnosis was confirmed by laboratory slide-analysis and other medical tests. She
seemed to make an uneventful recovery. At the time of the occurrence, she was crossing a thoroughfare in the pedestrian cross-walk, when a truck, traveling in reverse, struck her in such a way that a strong blow was received at the site of the abdominal surgery, and injuries to the head were sustained, diagnosed as a concussion of the brain. The recovery from the head injury was normal, but within a few months the abdominal region developed what was diagnosed as cancer. At the time of the trial, the issue presented was whether there could be a causal connection, either by way of precipitation or aggravation, between this condition of ill-being and the trauma sustained when she had been struck by the truck.

On the basis of the previous and current medical information, the attending surgeon and pathologist at the hospital gave as their opinion, within the framework of the Illinois rule on testimony as to causation, that, based upon a reasonable degree of medical certainty, there could be such a causal connection. The defense produced a very eminent medical witness, a pathologist who was the head of the laboratory department of one of the largest hospitals in the city and had written, lectured and taught extensively in the field of his work. His position was what is now referred to as the "usual approach" — that since the state of medical knowledge was such that the profession did not as yet know specifically what caused cancer, no doctor could give an opinion as to the medical relationship between trauma and cancer, either by way of precipitation or aggravation; and, for that reason, it was his confirmed opinion that there could not be any such causal connection.

The problem with which the trial attorney for the plaintiff was confronted is clear; here was a medical witness of prestige and stature, speaking authoritatively on a subject with which he was familiar and whose opinion obviously could carry great weight with the jury. This particular jury was made up of ten women and two men. How to establish the sequence-of-events theory so as to show the jury that there could be or was medical causation within the rules of the law in contrast to the notion of certainty by which this witness was motivated was the problem that faced the trial lawyer. He began by interrogating the witness to some degree about his background of medical research in cancer with relation not only to abdominal tumors but tumors in other parts of the body. Eventually the interrogation and discussion was narrowed to the problem of cancer of the breast (with ten women on the jury). It was developed by a series of questions that, in the laboratory work over which the witness presided,

11. Fellows-Kimborough v. Chicago City R. Co., 272 Ill. 71, 111 N.E. 499 (1916), followed "might or could" rule, but now modified by late decision so that either formula can be used since considered only advisory. Clifford v. Industrial Comm'n, 19 Ill. 2d 236, 166 N.E.2d 582 (1960).
some ten thousand tissue slides a year were examined to determine the absence or presence of cancer. Of these slides, about four thousand per year involved analysis of tissues of the breasts of women. Then followed questions as to whether, when these particular slides were received by the witness there was attached to them the history given by the patient as to the origin of the condition from which she was suffering. The answer was that such histories usually accompanied the slides. The doctor was then asked what percentage of the histories accompanying the four thousand slides of breast tissue that he analyzed each year contained a history of trauma to the breast. The answer was that normally about sixty percent or sixty-five percent of the breast tissue slides analyzed were accompanied by a history of trauma.

In order to reach the doctor’s final feeling about the sequence of events theory involved, the lawyer then asked “Now, doctor, in reaching your conclusion as to whether or not there was any causal connection between the trauma contained in those sixty or sixty-five percent of the four thousand histories accompanying the slides, and the condition of malignancy you found in the tissues on those slides, what disposition did you make of the static and continued history of trauma, that is, how did you eliminate that factor?” The doctor turned and looked at the jury, perhaps knowing what was going on in the minds of the ten women listening intently. His reply was that “on the basis of available medical knowledge I think that every one of the persons giving such a history was mistaken.”

To one watching the reaction of that jury, made up of women who had never gone to medical school, but who all their lives had been talking to other women — mothers, grandmothers, daughters and sisters — about problems peculiar to women, it became obvious that as ordinary normal human beings they could now see in the facts that had been developed a reasonable probability of causal connection which the medical witness had refused to accept.

Perhaps an even more specific example of the strangeness of the position taken by a medical witness on the basis of his uncertainty premise can be seen in the application of a general theory that is commonly accepted, which has been discussed at various medico-legal seminars, and used in court. In performing any operation involving a malignancy, the accepted procedure of removing the area of the tumor is to make the separation incision as far as possible from the site of the tumor and as close as possible to healthy tissue. To one being apprised of this accepted method a natural question would be why it is done in this manner.

At a NACCA Bar Association seminar held some years ago, a discussion had been arranged between an eminent surgeon in the field of tumor research and a trial lawyer, for the purpose of presenting the problems involved in proof of causal connection. In the course of the discussion the doctor took the "usual" position firmly and positively, announcing that he would have to state ultimately that there was not or could not be a causal relation between trauma and cancer. In the cross-discussion that followed, the trial attorney questioned the surgeon about the method described above for the removal of a tumor from the human body. The response was that it should be done in an encircling movement from an incision as far removed from the tumor site as possible without sacrificing total removal. The question was then put to the surgeon whether he would be concerned with a surgical procedure that cut through the tumor and removed it in sections. The instantaneous reply was that it should never be done that way, because such a procedure would tend to disseminate the malignancy. The pointed question then put to the surgeon was what the difference could be between the effect of a scalpel and some other instrumentality exerting traumatic force. In the general discussion that followed, the surgeon very clearly explained the medical position that, although thinking as individuals could lead the medical profession to the acceptance of the sequence-of-events theory, their objective as an entity was such that they would have to proceed on the basis of this quest for absolute certainty.

These examples point up what may be accomplished by trial technique, but more important, they illustrate the right of the lawyer and layman to question the medical profession's stand outside the scope of the profession's objectives. It seems proper, and certainly more just, for the medical witness to voice his private feeling, that as a matter of factual sequence, it is logical to infer causality based on reasonable probability. Such an attitude, if it were achieved, would greatly alleviate the difficulty in which thousands upon thousands of injured people regularly find themselves, as a result of the want of complete medical knowledge of causes of some physical or mental conditions of ill-being. As it is the purpose of the law to reach a conclusion based upon reasonable inferences and probabilities, not absolute certainty, it should likewise be the purpose of medicine, to the extent that it becomes involved in law, to seek to help attain such an objective within the limits of available knowledge, whether that knowledge is absolutely certain or only reasonably so.

The Problem of Courtroom Communication

Without the field of medical-legal philosophy, and within the realm of practical analysis, there are other problems facing the medical witness and the trial lawyer that deserve attention.
One of the most common problems, strangely enough, arises in the cases being tried by experienced trial attorneys and learned medical witnesses. Very often, with the acquisition of medical knowledge that results from extensive work in the courtrooms, the trial lawyer is able, in his presentation of testimony through medical witnesses, to engage in discussion with them on very nearly the same level of expression and thought that is usually employed by these doctors and their medical associates. Likewise, medical witnesses are wont to give testimony on a level that is customarily used at medical seminars or medical schools. If the trial lawyer is not conscious of these circumstances, a point is reached at which the evidence being elicited may well be above any possible level of understanding of the average jury. One must never lose sight of the fact that the average American jury is comprised of a cross-section of men and women and that, in the main, they are drawn from the working class. This general group cannot have extensive medical background nor the level of education with which either the experienced trial lawyer or the medical witness is equipped.

It is thus essential that both the trial lawyer and the medical witness be cognizant of and responsive to the need for the reduction of the medical testimony to the level of understanding of the jury, whether the issues involve simple or complex matters. More often than not, when observing the trial of a case, one hears a very learned dissertation about an injury from which a plaintiff is suffering, couched in technical medical terms that may be understandable to the court and the participating lawyers and doctors but which fail to convey clearly to the jury the real significance of the injury so that it can properly evaluate it, from the viewpoint of either the plaintiff or the defendant. The more complex the injury and the greater the problem of medical-legal causation, the more necessary it is to simplify the presentation of evidence so that it is rendered in the kind of everyday language that the jury can understand.

Not long ago, during the trial of a case, a doctor had testified at length as to the "narrowing of the intervertebral space between C-3 and C-4, at a point below the level of the Atlas on the axis, which are made up of C-1 and C-2, with a herniation of the nucleus pulposus." The jury was listening intently but signs of perplexity appeared on their faces. Finally, one of the jurors raised his hand and asked if he could pose a question. (In Illinois jurors are not permitted to ask questions except by agreement of counsel.) Counsel agreed to let the juror ask the doctor a question. The juror blandly addressed himself to the doctor with "Doctor, we know that you and the lawyers understand each other when you talk about this intervertebral disc, the spaces and this pulposus stuff, but can you explain to us what was really wrong with the man?" This may be an extreme example, but it clearly points to the basic need for the re-
duction of technical testimony by explanation or analogy to common understanding. The obligation to avoid this problem rests squarely upon the trial lawyer in the pretrial conferences with the medical witnesses and in his handling of the testimony during the trial of the case.

THE USE OF VISUAL AIDS

Closely related to the foregoing problem is a consideration of the use, in a proper case, of the available visual aids. In the field of demonstrative evidence these aids will enable the doctor to convey more clearly to the jury a picture concept of the medical conditions being described. Visual aids, such as reproductions of the body in skeletal form, medical drawings, slides, and blackboard illustrations should be used when they will more easily explain the nature of the injury.

The value of these exhibits is quite obvious, when one considers how it is that jurors form, or attempt to form, a picture-concept of the subject matter of the medical witness' testimony. As the witness testifies, a multiple mental process is taking place in the minds of the jurors. Each of them is trying to translate the technical descriptions into a mental picture of what the juror believes the medical witness is describing. The use of available visual aids enables the witness to convey more clearly and expeditiously to the jury the substance of his testimony, thus eliminating the necessity of multiple mental processes otherwise taking place in their minds, by means of direct creation of the picture-concept of the medical condition.

The right to invoke the use of such visual aids is well established in most jurisdictions, on the premise that a witness testifying to any scientific matter may use any object that tends to assist him in explaining the subject matter of his testimony, so long as its use is relevant to the issues and actually explanatory. The principle applies whatever the nature of the visual aid is, that is, whether it be a skeletal object, medical charts, slides, medical drawing, or illustration on a blackboard, since the purpose of use is actually the same.

It must be remembered that whenever any of these visual aids are used for the purpose of illustrating the verbal testimony of the medical witness, they are not real evidence in the sense that they are primary

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13. The use of a blackboard by a medical witness for the purpose of illustrating his testimony should not be confused with the question of the right of an attorney to use a blackboard during argument to the jury for the purpose of presenting mathematical computations as to damages. This involves a totally different problem, as well as different principles of law.

exhibits; they fall rather into that class of evidence usually referred to as auxiliary or adjunct evidence. This is so because the object used is, in the usual situation, a skeleton, chart, slide, or drawing of a normal part of the anatomy and not a true reproduction of the injured part of the body as such. The object is marked and identified as an exhibit so that the record may demonstrate that it is being used by way of explanation, but it does not become an exhibit in evidence, for use by the court or jury in considering a finding or verdict. Such an object could be considered as a primary or original exhibit in evidence, it would seem, only in the case of a medical drawing constituting a tracing of an X ray, in which the details of injury are reproduced. However, in the ordinary medical drawing, for the purpose of illustration, there is added to the tracing of the X ray the outlines of a normal human body, or part of a body, together with other anatomy, to aid in explaining the relationship of the bone injury to the other parts of the anatomy. In that case, the medical drawing is no longer a true reproduction of the particular part of the plaintiff's body and, for that reason, could be used only as auxiliary evidence under the foregoing principle, for the purpose of illustrating or explaining the testimony of the medical witness.

Display of the Injury Itself

There remains one problem, with relation to the evidence to be presented by the medical witness, that warrants serious discussion. In order to make the testimony understandable, and the nature and extent of the injury clear enough to evaluate, it is essential to exhibit the injured part of the body, when possible, to the triers of the fact. This is sometimes done before the medical witness has testified, and although in such case it does not constitute a part of his testimony, it is very important inasmuch as it serves to illustrate and clarify it. There is respectable authority to the effect that such exhibition of the injured part of plaintiff's body may be made during the testimony of the medical witness, in which case he points out and explains the nature and the extent of the injury by using that part of the plaintiff's body as his exhibit.15

The right so to exhibit the injured part of the plaintiff's body seems to be well established in the law of all of the jurisdictions in this country.16 The rule laid down in all of the cases seems to be that the

16. Bluebird Bakery Co. v. McCarthy, 36 N.E.2d 801 (Ohio Ct. App. 1935), where jury felt and manipulated plaintiff's skull; John Holland Gold Pen Co. v. Juengling, 2 Ohio App. 20 (1913), where part of scalp torn from plaintiff's head was preserved in alcohol and permitted to be shown to jury; Minnis v. Friend, 360 Ill. 328, 196 N.E. 191 (1935); Pittsburgh, C.C. & St. L. Ry. v. Lightheiser, 168 Ind. 438 (1906); Schroeder v. C.R.I. & P.R., 47 Ia. 375
plaintiff has the right to exhibit the injured part of the body to the jury for the purpose of conveying to the jury information as to the nature and extent of the injury, subject to the sound discretion of the court. The unfortunate part of the statement of the rule is that the decisions do not define how the sound discretion of the court is to be exercised. Some of the trial courts, in a practical sense, seem to exercise that discretion on the basis of a predetermination in their own minds of which way the verdict of the jury should go. In other words, if it were the type of case that the court felt was one in which the plaintiff should prevail, then the exhibition of the injury would be permitted. If, on the other hand, the court felt that the exhibition of a serious injury might tend to influence the jury in its determination on a close question of liability, then the request for the exhibition would be denied. This, in essence, amounts, in the cases in which it has been done, to an exercise by the trial court of improper control over the verdict by rulings on evidence. Basically, the courts should permit the exhibition of the injury if it is relevant to the issue of damages in the case, and determine the question of the weight of the evidence when the time comes to rule upon the jury's verdict, on consideration of the post trial motions. At least one court has faced this problem and recently held that the trial court does not have the right arbitrarily to refuse to permit an exhibition of the injury to the jury, unless there appears in the record a basis for the exercise of discretion with relation thereto.  

CONCLUSION

This discussion of the problems of presentation at trial has presupposed an acquaintance with the sort of very complete research in the fundamentals of the causality concepts of the medical and legal fields, done by Professor Ben Small of the Indiana University Law School and Albert Averbach of New York.

It is hoped that the discussion will serve to project to the trial lawyer the impact of the problems upon the everyday practice of negligence law, and to suggest the beginning of a solution. In an immediate sense, it obviously is the obligation of each trial lawyer to attempt in his relationships with the medical profession to reach a better understanding with those medical witnesses with whom he comes in

\( (1877); \) Davis v. Antol, 212 Ky. 149, 278 S.W. 573 (1925); Garozynski v. Daniel, 190 Md. 1, 57 A.2d 339 (1947); Grove v. City of Battle Creek, 95 Mich. 266, 78 N.E. 1033 (1893); Wilson v. Thayer, 115 Neb. 579, 213 N.W. 966 (1927).

contact, and to so conduct himself in his relationships with them as to point towards a greater understanding in the future. From a long-range view, the real answer seems to be an attempt in some way, through the law schools and medical schools, to inculcate in the minds of the students the joint responsibility of both of the professions to the injured person, a realization of their respective places in the processes of the law when they do become involved with it, and a greater respect on the part of each for the beliefs and opinions of the other. This attempt at understanding is already taking place between the bar associations and medical societies in the attaining of joint standards of conduct or interprofessional codes directed at better understanding of their mutual problems. The positions of the two professions are actually not irreconcilable so long as there are in each of those professions great numbers of men of understanding and dedication to the cause of the public, which both professions serve.