

# Forensic Pathology

## A New Prescription for Civil Cases

By Cyril H. Wecht, M.D., J.D.

As medical testimony becomes more prevalent and sophisticated, attorneys are becoming increasingly aware of the desirability of procuring a medical expert who is also cognizant of the subtle legal aspects of their case.

His extensive medical-legal

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background makes the forensic pathologist uniquely suited to testify in the currently complex civil cases. As a result, he finds himself quite often drawn out of his traditional province of criminal law into the civil arena. For a full appreciation of the role a forensic pathologist can play in civil litigation, attention should first focus on the differences between hospital and forensic pathology, and then on the role of the forensic pathologist in criminal investigations.

### Forensic v. Hospital Pathology

These two areas of pathology differ significantly in their goals and approaches to a medical investigation. The hospital pathologist seeks to

ascertain the pathological findings, and then correlate them with the existing clinical data. In other words, using tissue examinations and laboratory analyses, he attempts to explain with his findings the particular signs and symptoms of a disease that were clinically observed. This matching process occasionally tends to result in a less than objective report.

The overwhelming majority of hospital autopsies involve natural deaths. Accordingly, the pathologist has little opportunity to develop a meaningful understanding of the medical, philosophical, and legal problems associated with the determination of the *manner* of death. For him, essentially every death is natural, and even gross or obvious

medical negligence may pass undetected, or be labeled as a natural complication of a disease.

Moreover, due to the fact that he works directly in, and usually for the hospital, it is understandable that the hospital pathologist may not always make an entirely objective and unbiased analysis of causation of death. He simply is too close to the situation and may have vested interests to protect.

The forensic pathologist operates under totally different conditions. A clinical history of the deceased frequently does not exist; in some instances, even his identity is unknown. Thus, even if he were intellectually disposed to do so, the forensic pathologist cannot match his findings to clinical observations.

The important point is that a forensic pathologist is *not* predisposed to protect anyone by finding (or not finding) any particular morphological changes. The value of his work lies in his total objectivity: reporting what he finds, and then, using his extensive training and experience, taking the next step so unfamiliar to the hospital pathologist — postulating what *caused* the results he found. Establishing causation as part of his formal function sets the forensic pathologist apart from all other medical experts. No other area of medicine formally and routinely concerns itself with such a determination.

The forensic pathologist draws causation conclusions based upon several factors: his extensive educational background, his high exposure to unexplained deaths which demand answers, and the intensive medical-legal investigation he conducts in all cases he handles. The medical-legal investigation concerns itself with the following aspects of a death:

- *Who* is the deceased?
  - sex, race, age, unique characteristics.
- *When* did death and the injuries occur?
- *Where* did the injuries and ensuing death occur?
- *What* injuries are present?
  - type, distribution, pattern, cause, and direction.
- *Which* injuries are significant?
  - major vs. minor injuries, true vs. artefactual or postmortem injuries.
- *Why* and *how* were the injuries produced?
- *What* actually caused the death?

Using his specific training in determining causation and various investigative techniques, the forensic pathologist can provide highly accurate answers to the above questions. The ramifications of credible answers to these questions in civil litigation are obvious. An imaginative attorney should be able to discern a multiplicity of ways that a forensic pathologist can aid his case.

However, forensic pathology can only be valuable if utilized. For exam-

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ple, in suspected medical malpractice cases that result in death, a hospital autopsy, or worse, no autopsy, may fail to provide sufficient medical information upon which to base a case. Therefore, an attorney that does not push for an autopsy in a medical-legal case by a forensic pathologist may not effectively be representing his client's best interests.

#### **Forensic Pathologist's Role in Criminal Cases**

This section must begin with what a forensic pathologist is *not*:

He is not, nor should he be, an advocate or a formal arm of the pros-

ecution. The forensic pathologist must maintain a detached scientific objectivity while seeking the answers to the above questions, and in any subsequent testimony he may give;

He is *not* concerned with the guilt or innocence of a given defendant, but rather with the scientific determination of the time and manner of death.

It should be noted that, because he will probably be the only forensic pathologist involved in a case, he bears a great moral and ethical burden of objectivity in seeking the truth. To conduct a biased investigation is even more reprehensible than doing an incomplete investigation. At least it is known that an incomplete investigation is just that: incomplete. Therefore, an unsatisfied party could have the work completed. A biased investigation, on the other hand, purports to be complete and fair when, in fact, it is not.

Perhaps the best and most widely-known example of a biased medical-legal investigation occurred following the assassination of President John F. Kennedy. This example will serve to illustrate two points:

Although the pathologists involved were competent in a hospital setting, they were lost in the area of forensic pathology.

They sacrificed their objectivity by beginning their autopsy with preconceived conclusions in mind. This lack of objectivity caused a biased autopsy to be performed. The recent discovery of this information now raises questions that may forever remain unanswered because evidence is no longer available.

When they started their autopsy on Friday, November 22, 1963, the pathologists were officially informed that Lee Harvey Oswald was the sole assassin — that he had fired all shots from above, behind, and to the right of the President's car. There was tremendous pressure on the pathologists to make their findings "fit the facts," and they did.

Under the circumstances, it is my contention that, in fact, an entirely objective autopsy was not performed in this case. For instance, the pathologists involved did not travel to the scene of the event, which is the first step in any thorough, effective medical-legal investigation of a complex nature. A forensic pathologist knows the value of an on-the-scene investigation. Once the scene has

been altered in any way, it can never be completely reconstructed, and evidentiary "bridges" may be forever lost as a result. Such a loss may affect the accuracy of the final conclusions of the investigation. Thus, in the J.F.K. case, the primary sin of the pathologists was to begin with facts and conclusions drawn by others — an inverted investigation.

To proceed in a more general fashion, the next major step following the on-the-scene investigation of a homicide is the autopsy. Pictures of the deceased's clothing and external characteristics are meticulously taken. Every wound must be carefully measured and documented. The actual autopsy must be thorough and complete, even though gross observations may indicate that further study is unnecessary. An example will illustrate the importance of a complete and thorough investigation, and also the responsibility of the forensic pathologist to be objective and to note any incongruous evidence.

A 27-year-old black woman was found nude on her living room floor in a supine position with legs spread. There was blood on a nearby piece of newspaper, a pillowcase was beside her head, and something was protruding from her vagina. The scene indicated a classical case of a sexually-related homicide. This was corroborated by an autopsy finding of fresh spermatazoa in the woman's vagina, and by the woman's daughter's statement that a man had been with her mother earlier that evening. The man was quickly apprehended, but he insisted the woman had been fine when he left her. Not unexpectedly, his story was "dismissed."

However, upon completion of the autopsy, no clue as to the actual cause of the woman's death had been discovered. She showed no signs of beating, stabbing, gunshot, or strangulation. A step was then performed that must always be done when confronted with a sudden, unexplained death in a black person: a sickle-cell anemia preparation. The woman did, in fact, have sickle-cell anemia. Microscopic slides showed that she also had viral pneumonitis and a viral myocarditis, either of which could have killed her. Further investigation revealed that there were no injuries to the vaginal wall, which is atypical of sexual assault-homicides.

The pieces of the puzzling case finally fell into place after further interrogation of the woman's male friend. She was a nymphomaniac. On the day in question, her lover had been unable to satisfy her. The protrusion from her vagina was an object with which she had been masturbating following her boyfriend's departure. The woman had died from sickle-cell crisis, precipitated by her undiagnosed disease processes and probably further aggravated by her strenuous sexual activities.

The temptation is strong in such cases to perform an incomplete or biased autopsy and let the obvious

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physical circumstances govern the final outcome of the case. There are undoubtedly many "victims" of such a temptation who are in jail or who have been executed in years past. In this case, the investigation repeatedly produced evidence that just did not fit. Had we been less objective, the boyfriend might well be another of these "victims."

Forensic pathologists tend to be thought of in terms of violent deaths resulting from gunshots, stabbing, and the like. However, types of deaths are not his only area of inquiry. By examining the vaginal and anal areas, especially the vaginal mucosa; and noting other possible signs of forced entry, the forensic pathologist makes determinations as to whether or not rape has been com-

mitted. He can also use various typing techniques on spermatazoa to disqualify specific defendants as perpetrators of such a crime.

In recent years, toxicology, the study of poisons, has become more important to forensic pathology in studying and helping to control drug and alcohol abuse. In other words, the role of the forensic pathologist in the criminal area has been expanding and continues to expand beyond just the determination of time and manner of violent or mysterious deaths.

### **Why a Forensic Pathologist in a Civil Case?**

In civil litigation, a forensic pathologist can be exceedingly valuable when attempting to establish causation. Two factors set the forensic pathologist apart from other medical experts.

In spite of enormous advancements over the years, medicine remains largely an art. Pathology, however, has a unique "after-the-fact" perspective, which allows it to be the most scientifically exact of all the areas of medicine. This, of course, lends great credibility to the testimony of a pathologist. The forensic pathologist provides the crucial added dimension of expertise in establishing the cause of the results he observes in the studies.

Causation of the injuries will, of course, generally be a, if not *the*, major factor in any personal injury, wrongful death, or medical malpractice act. Since *causation* of injuries does fall within the special expertise of the forensic pathologist, it behooves the astute attorney to employ such an expert when attempting to prove his case. Furthermore, because of their role in criminal actions where causation is so very important, forensic pathologists tend to be more willing to commit themselves to a specific cause of injury. This leads into the next aspect that makes a forensic pathologist more valuable on the stand than other medical experts.

His training and experience make him extremely sensitive to the level of proof necessary to prove causation. For instance, most physicians, and tragically some attorneys and judges, fail to appreciate the difference that exists between the quantum of proof required in a civil case from that re-

quired in a criminal case, from a medical standpoint.

For example, while it might be possible to establish a causal relationship between an automobile accident and the subsequent death of the driver as a result of a blowout of a preexisting berry aneurysm of a cerebral artery, I would have great reluctance to establish such a causal relationship in a criminal case where a defendant's life may be at stake on the basis of a scientific postulate that defies proof "beyond a reasonable doubt." Confusion of the "reasonable doubt" standard and the "preponderance of the evidence" standard commonly results in less than helpful medical testimony.

Many physicians also fail to understand the difference between medical proof in the courtroom and medical proof in the laboratory. Reasonable medical certainty in a civil case requires quite a different degree of scientific proof than that required in a typical research project. The medical emphasis of causality is more complex, implicating multiple effective factors and mechanisms. It is more rigid and strict in its requirements of indisputable proof, because the aim is toward understanding the pathogenic processes culminating in death. The legal emphasis on causality is more empirical and practical; it focuses on the probable and legally effective cause of death, even if tangential in nature. The objective of the inquiry is, of course, determination of legal responsibility. Distinguishing between these types and levels of proof is a process with which a forensic pathologist is intimately familiar.

Many situations in which a forensic pathologist can aid a civil case may now be apparent. There are, however, some situations that do not readily come to mind.

Industrial and job related hazards may compose the basis of workmen's compensation claims and civil suits. Unfortunately, any such actions are not pursued because of the difficulty in proving causation. As has been shown, the forensic pathologist specializes in establishing causation. He is especially useful in these cases because constant advances in toxicology and other medical investigative techniques have helped to establish causal connections between various industrial toxins or by-products of a specific job, and

diseases such as black lung or silicosis, or industrial poisonings, deaths, and disabilities.

Widespread and effective use of forensic pathology can be made in medical malpractice cases. The objectivity of the forensic pathologist helps to obviate the traditional problem of a physicians' unwillingness to testify against other physicians. He is morally and ethically bound by his training to report the cause of a death, even if doing so involves indicating another physician's negligence.

Another common difficulty in medical malpractice cases is establishing the probability that a particular situation has caused death. Here the forensic pathologist's familiarity with the various kinds and

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levels of proof (civil vs. criminal vs. medical) may make him the only expert willing or competent to testify.

A man suffering from chest pains, nausea, etc., arrives in a hospital emergency room. His condition is diagnosed as indigestion and the man returns home. Several hours later he suffers a massive myocardial infarction from which he dies. The defense in a subsequent medical malpractice suit will probably argue at some point that even if the correct diagnosis had been made in the emergency room, the man would have died. The competent plaintiff's attorney must anticipate and negate such a secondary argument.

This result can be obtained by the testimony of an expert who is willing to hypothesize as to the probable results of various courses of action (e.g., proper diagnosis and immediate

hospitalization in the above case).

The forensic pathologist frequently deals with and understands the legal significance of probabilities in a medical setting. Additionally, he often observes the aftermath of various courses of action. For these reasons, the forensic pathologist is especially qualified to help close the doors on such secondary defenses.

Recently, the testimony of the forensic pathologist has assumed new significance in automobile manufacturer's liability cases. Time and again he observes the injuries resulting from the application of blunt forces. Through this experience he becomes an expert as to what shapes of objects will produce what degree of injury.

This specialized knowledge has been accepted in various courts in the form of a forensic pathologist's testimony as to how the design of a vehicle *increased* the injury sustained in an accident. Testimony of this nature must be given in "secondary impact" cases. To sustain the necessary burden of proof in such cases, the plaintiff must also show an alternative and safer design and substantiate the lesser degree of injury which would have been sustained had the safer design been used. A forensic pathologist's willingness to hypothesize and his knowledge of blunt force injuries makes him the only expert one can reasonably use to make such a case.

### Conclusion

This article has highlighted the unique aspects of forensic pathology that make it so valuable to the criminal and civil justice systems. Practitioners of this medical specialty already play a significant role in many criminal cases. Hopefully, this discussion will serve to further educate the civil trial bar so that its members will make greater and more telling use of forensic pathology testimony in their various cases. Even more importantly, the previously unaware attorney should now be cognizant of the extent and value of the information a thorough medical-legal investigation can provide. In the best interests of his client, an attorney must pursue the appropriate medical development of his case into the furthest recesses of the pathology laboratories and autopsy rooms. ▴