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# MEDICOLEGAL INVESTIGATION OF DEATH

Guidelines for the Application of  
Pathology to Crime Investigation

*Edited by*

WERNER U. SPITZ, M.D.  
RUSSELL S. FISHER, M.D.

Second Printing  
**MEDICOLEGAL INVESTIGATION  
OF DEATH**

**Guidelines for the Application of Pathology to  
Crime Investigation**

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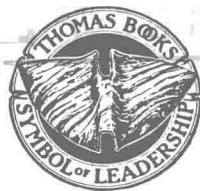
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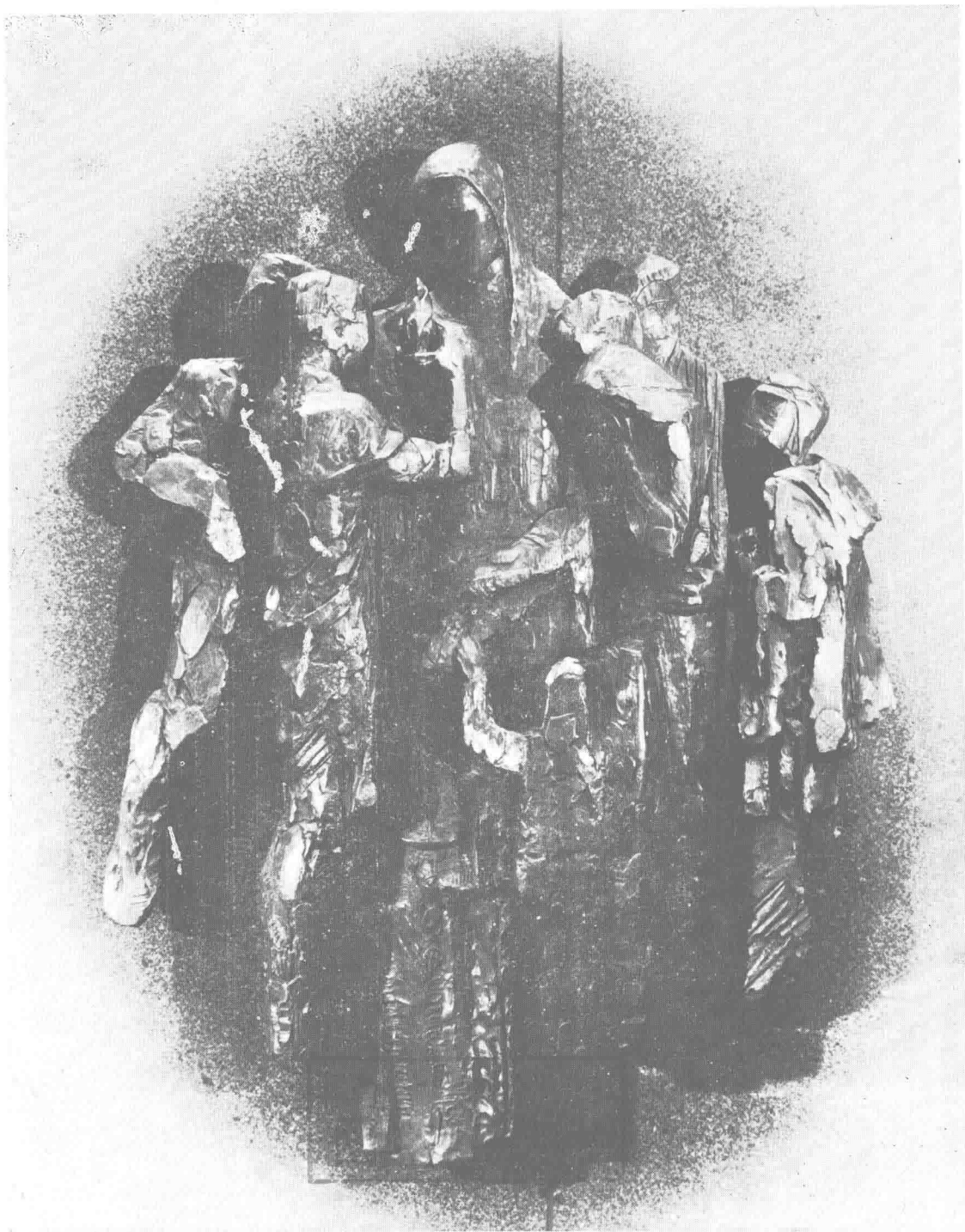
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MEDICOLEGAL INVESTIGATION  
OF DEATH



"The search for truth is the essence of forensic pathology. This truth forms an essential link between the enforcement of law and the protection of the public in the administration of justice." This picture shows a sculpture by Una Hanbury, located in the lobby of Maryland's Medical Examiner's Building in Baltimore. The guardian figure on the left represents law. Next to it the doctor holds up the lamp of knowledge towards the symbolic figure of justice. Justice is interpreted in its aspect of love. The general public is suggested by the group of figures on the right. An inscription underneath the sculpture reads: "Wherever the art of medicine is practiced there is also a love of humanity." (Hippocrates)

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## FOREWORD

"Mordre wol out," Chaucer's Prioress tells us. But those who work in homicide investigation, forensic pathology, and criminal law know better. The true manner of death which may have been murder is not determined in tens of thousands of cases annually in our violent land. The cost to the nation in truth, justice, health, and safety is enormous.

Had Hamlet put aside indecision, sentimentality, emotion, the wan grief spent on the skull of the jester of his youth "Alas, poor Yorick! I knew him, Horatio" and obtained an autopsy on his dead father, the King of Denmark, Shakespeare's play might have turned from tragical to historical. Surely, we now see how our failures can affect history itself. The violent death of a President will always cause the deepest fears and suspicions. There will always be the allegation of gunfire from a grassy knoll.

We can determine the truth and medical science must play a major role. The coeditor of this important volume was one of 4 professionals I called on as Attorney General, to review the autopsy photos and x-rays of our beloved President who looked "forward to the day when America would no longer be afraid of grace and beauty." In a time of profound doubt and international concern, with the highest integrity, self-discipline, and professional skill, Dr. Fisher contributed to those most reassuring phenomena, facts linked together pointing to truth.

How many men in America can qualify for such a task? That this is the first volume in 25 years dealing directly and effectively with the subject of medicolegal investigation of death tells us that our neglect here is enormous. The deaths of John F. Kennedy, Medgar Evers, Malcolm X, Martin Luther King, Jr., Robert Kennedy, and Whitney Young, Jr., show how our inadequacy can alter our destiny.

About 4:45 a.m., on December 4, 1969, two young Black Panthers, Fred Hampton and Mark Clark, were killed by gunfire in the City of Chicago. The shooting occurred during the course of a police raid on Panther headquarters. There followed an official inquest, a protest inquest, three autopsies, and three grand jury investigations. Each of the autopsies was performed under conditions in a manner or reported in a way, that added to speculation over the real cause of death.

A community has been left in profound doubt as to the identity of the guns from which the bullets causing death were fired, even the direction of entry and number of shots. Were the deaths accidental? Were police justified in this use of deadly force? Were the dead murdered by the police? Was Fred Hampton drugged at the time of death? That over five thousand people attended his funeral indicates the impact of our failure to establish the truth. The resulting division in the community will affect the

quality of life there and through those who live there, elsewhere, for a generation or more.

Perhaps many pathologists avoid medicolegal investigation of death because its contribution to life is not clear and the happy side of the docket is with the life savers. A study of such chapters as "Investigation of Deaths from Drug Abuse," "Forensic Aspects of Alcohol," and "Aircraft Crash Investigation" immediately demonstrates the great importance of this field in life saving and social problem solving. Indeed, few in the medical profession will be more involved in the action and passion of our times than those who seek to find and demonstrate these medical facts. We can foresee the risks of wilfull destruction of crowded airplanes and the meaning to mass, urban technological society.

With a hundred new dangerous drugs to be created by chemical science in the next 5 years, with a youth culture in an age of anxiety approaching incoherence, with grossly inadequate preventive research, it often will be the autopsy that tells us of the new synthetic chemicals threatening life. With this knowledge, society can endeavor to cope with one of its most difficult problems.

There are few crueller injustices directly inflicted on an individual by government than conviction of a crime one did not commit. Important chapters such as "Sudden and Unexpected Death from Natural Causes in Adults," "Trauma and Disease," and "Injury by Gunfire" show us how easy it is to misjudge the cause of death where circumstances are suspicious. It is of the utmost importance to the individual, to society, to truth, justice and safety, that we find the facts concerning death.

Because of its pathos, we too often ignore the truths disclosed in Chapter XIX, "The Childhood Maltreatment Syndrome (The Battered Child)." How many of our most violent criminals were the subject of physical abuse as children? Forensic pathology can give us some indication. It is important that we know. The national attitude toward violent crime could be dramatically changed by this truth.

Few professions create greater despondency about the goodness of man and the worth of life than the practice of criminal law. Not many human documents are more pessimistic than Clarence Darrow's autobiography. Few activities tend to diminish an appreciation of life more than forensic pathology as generally practiced. Neither should be. The criminal lawyer seeks justice — the forensic pathologist, truth. Noble causes. If both will abandon rhetoric, ancient dogma and fictive contentions in favor of finding and presenting fact, which is the teaching of this text, their proper purposes will be fulfilled. Practitioners will then enjoy the satisfaction of helping people.

We must have the courage, indeed the ardent desire, to know the causes of death. We cannot let the *corpus delicti* diminish our capacity for joy. We should not faint at the photos here. They are true and while all truth may not seem beauty, all truth can strengthen our humanity. Then, however irresolute, we will find the compassion like Hamlet to hold in our

hands the skull of a beloved friend, look on it and say "Here hung those lips that I have kissed I know not how oft." The great and constant need of those who investigate homicide and practice forensic pathology or criminal law is a warm humanism. A people who will not face death cannot revere life.

But these are mere musings. Study this work.

Ramsey Clark

Washington, D.C.,  
14 July 1972

## PREFACE

Whenever a new textbook is to be written three basic questions should be answered by the authors: Why, who needs it? Is it needed now? Why should the authors in question, rather than others, undertake the work?

In the last thirty years there has been increasing sophistication in the training of police officers assigned to homicide investigation. To a significant degree this has been due to the philosophy developed at the Harvard Medical School in the late 1940's of teaching homicide investigators the nature of the medical aspects of injuries. This has led to the development of a sizeable corps of highly expert individuals in this field. The need for this type of information has also been greatly emphasized by the fact that throughout a large part of the United States the medical investigation of death at the scene is woefully inadequate, conducted by untrained and unskilled coroners who are frequently nonphysicians. No new textbook oriented to the homicide investigator or the novice forensic pathologist has appeared in the last 2½ decades. It is our aim to meet the need by presenting, in readable style, an authoritative text embracing all aspects of the pathology of trauma as it is witnessed daily by law enforcement officers, interpreted by pathologists of varying experience in forensic pathology and finally used by attorneys involved in the prosecution and defense in criminal cases, as well as by those engaged in civil litigation.

Since the text is addressed to a wide range of professional disciplines, some of the chapters are inevitably directed more towards readers with medical backgrounds, whereas others are suited for general understanding. Nevertheless, the large number of illustrations and diagrams will, we hope, render the text comprehensible to all who are interested in the interpretation of forensic pathologic findings.

As it has been noted above, no up-to-date textbook covering the material contained herein is currently available. While working in the Maryland Medical Examiner's Office and its partner in teaching and research, the Maryland Medical-Legal Foundation, we have accumulated a large volume of material upon which to base the text. This material and experience also serve to answer the question: Why us? We have been concerned not only with the day-to-day investigation of sudden and violent deaths in a state-wide medical examiner's system, but also, with teaching in medical and law schools in Baltimore and elsewhere throughout the country as well as with training of young pathologists who wish to become expert in the field. Furthermore, we have been conducting the *Frances G. Lee Seminars in Homicide Investigation* for state and other police officers for many years. It is our hope that our experiences and those of our coauthors will make a significant contribution to the improvement of the investigation of sudden and violent death, the prosecution and defense of those related to such events, and the protection of the public welfare.

W.U.S.  
R.S.F.

## ACKNOWLEDGMENTS

The idea of compiling a book such as this was not new to us. We had been toying with this thought many times in the past. However, by insisting on the need for such a book and by impulsively establishing contact with the publishers, Col. James T. McGuire, Superintendent of the Illinois State Police, gave us the necessary impetus to go ahead with our plan. To him goes our appreciation for his insight and understanding of the need for dissemination of experience in the pathology of trauma among law enforcement personnel to help ensure a better administration of justice.

Our thanks to all those who have contributed to this book with their knowledge and experience, and who have thereby helped us make this endeavor possible.

Finally, our sincere gratitude to Hannelore Schmidt-Orndorff for her able assistance with the editorial work. Her continuous drive and suggestions have helped immensely in the task of preparing the manuscript from its inception.

The editors also wish to acknowledge the cooperation of the photographers of the Medical Examiner's Office in Baltimore—Walter C. Carden and M. Gibson Porter—for the preparation of the illustrations of the chapters contributed by the editors as well as Chapters IV, XX, and XXI.

W.U.S.  
R.S.F.

“In fine, nothing is said now  
that has not been said before.”

TERENCE (185-159 B.C.)

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