

The Autopsy-Medical Practice and Public Policy

Rolla B. Hill Robert E. Anderson

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To our students and teachers, with gratitude for all that they taught us,

and

to the patients we have autopsied, with gratitude for all that they taught us. They made their final contribution.

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## Foreword

#### Frederick C. Robbins

Drs. Hill and Anderson have written an excellent treatise on the importance of the autopsy in health care, contributing to research, patient care, teaching, and to the planning and conduct of public health programs. They document the benefits of the autopsy most persuasively and are not loath to point out the problems that have led to its decline in recent years, and even to criticize their fellow pathologists for their part in allowing the present situation to evolve.

Historically, the ability to dissect the human body and to examine it after death required the overcoming of societal taboos, but has been an important factor in the development of modern scientific medicine. The autopsy became established in much of the Western world as a central component of good medical practice. Hospitals were required to maintain a certain autopsy rate in order to be accredited. Interns and residents were expected to obtain permission for autopsy on all deaths, and failure to do so required an explanation. As described by Hill and Anderson, the benefits derived from this tradition are numerous.

Most of my generation in medicine accepted without question the importance of the autopsy for medical care and for the education of physicians and other health professionals. I can vouch from personal experience for the teaching value of the autopsy. It was my privilege to assist our professor of pathology, who also served as state pathologist, in the performance of autopsies in communities throughout the state. Most were performed in funeral parlors, sometimes under primitive conditions. The range of diseases and conditions examined was extensive. I was expected to participate in the conduct of the autopsy and later to review the slides. Active participation enhanced learning, and many of the cases examined are still vivid in my memory. Not only did I learn medicine, but the experience provided a sociological education as well. Although this experience was unusual and not available to everybody, each student in the class participated in the conduct of a number of autopsies and was required to write them up. It is disappointing to see the decrease in student participation in autopsies, which, along with the reduction of laboratory teaching in many schools, removes the student even further from active participation in the study of disease and leaves him or her a passive learner.

Another important teaching function of a properly conducted autopsy is to provide those who cared for the patient with a view of the actual pathologic processes. The demonstration by the pathologist of the autopsy findings, the anatomic basis for the symptoms and signs, can be an excellent teaching experience for all concerned. It appears, however, that this is becoming less common, and even when it is done, is not always conducted in a manner to promote education. The clinicopathologic conference is another means of exploiting the autopsy for education, permitting the integration of basic science and clinical medicine in an interesting and often exciting way. The clinicopathologic conferences at the Massachusetts General Hospital, published each week in the *New England Journal of Medicine*, remain one of the more popular features of that journal, although live audiences for such exercises are vanishing.

I realize that it is easy to become sentimental about issues such as the autopsy from past experience, often many years ago. I also recognize that medicine has changed profoundly and that diagnostic techniques are vastly improved over what they were only a few years ago. It is not surprising that many believe the autopsy can contribute very little new information to that already determined with modern diagnostic procedures. Nevertheless, as detailed by Hill and Anderson, in spite of the considerable diagnostic resources available during life, misdiagnoses are discovered at autopsy no less frequently today than in less sophisticated times.

Although progress in medical practice has tended to decrease the interest of the clinician in autopsy findings, other advances have made autopsies even more desirable. The harvesting of organs for transplantation requires postmortem examination not only for removal of the organ or tissue, but also to ascertain the donor's state of health. With the proliferation of powerful new treatment modalities, many of them experimental, the autopsy is important in monitoring their effects. Quality assurance is another topic currently receiving much attention: traditionally, the autopsy has been a means of assessing quality of care, and could be useful in implementing quality assurance programs, but only if done with some frequency. I had also assumed that autopsies were important in providing accurate mortality statistics but was distressed to discover that even when autopsy findings are available, they are seldom used to correct or supplement a death certificate. Therefore, the mortality data that are used for health planning are derived from death certificates filled out by the physician at the time of death, with all of the inaccuracies this process is known to entail. Finally, new diseases still occur in unexpected places and in unexpected guises. The recent appearance of acquired immunodeficiency syndrome is an excellent example. Without postmortem studies it would have been difficult to characterize this entity and define its pathogenesis.

A major factor inhibiting the conduct of autopsies is the cost. In this day

of cost containment, every expenditure must be justified. With prospective payment mechanisms now in place in many countries, hospitals must consider whether the support of autopsies is cost-effective. Obviously, pathologists will not be encouraged to perform autopsies unless reimbursement is forthcoming from some source.

It is evident that there are real reasons why the autopsy rate in most of the Western world has declined seriously, to the point that in the United States fewer than one in ten deaths is autopsied, and of those at least half are done for medicolegal reasons. Is this a matter of major concern for the public's health? Obviously, some believe it is, and Hill and Anderson have described many of the potential benefits. On the other hand, some believe that the autopsy no longer serves a useful function, except possibly for medicolegal purposes. Recently in the United States, a small interdisciplinary group was formed by the Institute of Medicine at the National Academy of Science to examine the question of the value of the autopsy today, and to determine whether a public policy should be adopted in regard to autopsies, as has been proposed by a group of pathologists. Their answer was that they regarded the decrease in the autopsy rate to be a matter of concern from the point of view of research, clinical care, teaching, and the generation of accurate data. They suggested that it would be desirable to have a more extensive review of this matter by an objective multidisciplinary body, and that on the basis of this study an appropriate national policy could be enunciated if deemed desirable. Perhaps Hill and Anderson's book will help stimulate action toward this end.