

2019

The conscientious autopsy.

A. K. Williamson

Zucker School of Medicine at Hofstra/Northwell

Follow this and additional works at: <https://academicworks.medicine.hofstra.edu/publications>



Part of the [Pathology Commons](#)

Recommended Citation

Williamson AK. The conscientious autopsy.. . 2019 Jan 01; 9(2):Article 5588 [p.]. Available from: <https://academicworks.medicine.hofstra.edu/publications/5588>. Free full text article.

This Article is brought to you for free and open access by Donald and Barbara Zucker School of Medicine Academic Works. It has been accepted for inclusion in Journal Articles by an authorized administrator of Donald and Barbara Zucker School of Medicine Academic Works. For more information, please contact academicworks@hofstra.edu.

The conscientious autopsy

Alex K Williamson^{a,b} 

How to cite: Williamson AK. The conscientious autopsy. *Autops Case Rep* [Internet]. 2019;9(2):e2019098. <https://doi.org/10.4322/acr.2019.098>

The competently performed and thoughtfully reported postmortem examination remains a vital component of today's autopsy practice. The integral role which autopsy plays in documenting diseases and injuries that cause death is well recognized. Of equal importance, however, is that in revealing anatomic pathology (and in some cases microbiologic and biochemical alterations, as well), an autopsy enables morbid anatomy to be correlated with clinical signs and symptoms, thereby enhancing an understanding of the decedent's ailments. The artful practice of clinical-pathologic correlation, advanced by Giovanni Battista Morgagni in 1761,¹ takes time to master, but becoming skillful at assisting clinicians in understanding a decedent's medical history or in explaining the cause of a decedent's symptoms to family members remains one of the most rewarding aspects of autopsy practice.

In order to provide meaningful clinical-pathologic correlations, autopsy pathologists should be aware of relevant issues that exist prior to, or arise during, an autopsy, and they should effectively address those issues in a satisfactory manner with the postmortem examination. For example, when pulmonary thromboembolism is identified at autopsy, deep veins of the legs and, if necessary, the arms should be dissected. (N.B. In consented autopsies additional permission(s) for the procedure(s) from next of kin may need to be obtained). Sections of the occluded or empty vessels should be submitted for histology, in addition to sections of pulmonary emboli within vessels.²

Such a thorough evaluation of venous thromboembolism assists in 1) determining the

underlying cause of death (i.e., emboli by definition travel from somewhere, and most but not all pulmonary thromboemboli originate in the legs); 2) identifying a possible etiology of the thrombosis (e.g., potential phlebitis, extrinsic venous compression by tumor); and 3) approximately aging the thrombus and embolus (i.e., "acute", "subacute", or "chronic" clots). Complete evaluation and documentation of all relevant issues in such a manner optimizes clinical-pathologic correlation, allows objective medicolegal assessment of relevant issues, and reaffirms the value of autopsy among involved stakeholders.

Objectively documenting evidence that can elucidate injury, disease, and/or death, such as in the aforementioned case of venous thromboembolism, is a fundamental purpose of the autopsy and underlies its persistent importance in the medicolegal realm. Indeed, over the past half century hospital autopsy rates have declined around the world,³ while forensic autopsy rates have remained relatively unchanged (at least in the USA).⁴ The distinction between "hospital" autopsies, in which natural disease processes are evaluated, and "forensic" autopsies, in which injuries as well as natural and non-natural pathologies are investigated, understandably exists to support jurisprudence in various countries. Although forensic pathologists are expected to become adept in performing, reporting, and testifying about autopsies in civil and criminal court proceedings, all pathologists conducting autopsies should recognize that any death may have medicolegal implications and the findings from any autopsy can be drawn into medicolegal proceedings.

^a Northwell Regional Autopsy Service, Long Island Jewish Medical Center. New Hyde Park, NY, USA.

^b Zucker School of Medicine at Hofstra/Northwell, Department of Pathology. Hempstead, NY, USA.



In fact, among the various proposed reasons for declining hospital autopsy rates is the misperception among some physicians that autopsies increase the likelihood of malpractice litigation and/or render them culpable in such litigation.⁵ However, literature from the USA,⁶ Germany,⁷ and Italy⁸ exploring the role of postmortem examinations in cases of medical malpractice revealed that a majority of physicians were exonerated of the charges brought against them in cases where an autopsy had been performed. Moreover, the USA study showed that defendant physicians were acquitted of malpractice in the majority of cases, not only when autopsy findings favored the physician but also when autopsy findings favored the plaintiff initiating the lawsuit. In essence, unfavorable court rulings against defendant physicians involved standard of care issues rather than accuracy of clinical diagnoses in the cases examined by those authors.

A poorly performed and/or reported autopsy can be detrimental to physicians, can negatively influence perceptions of the autopsy among healthcare professionals and the public, and does not allow the autopsy's potential value to be realized. The same review of USA medical malpractice cases discussed above also demonstrated that suboptimal autopsy performance and reporting adversely affected the appeals process in nearly 20% of the examined cases.⁶ While the legal fate of a particular autopsy may not be known prior to its being completed, pathologists can always control the quality of their autopsy performance and reporting.⁹ With the privilege of conducting autopsies and advancing clinical-pathologic correlation comes the responsibility to be consistent, complete, and competent in all facets of autopsy practice.

Conflict of interest: None

Financial support: None

Submitted on: May 24th, 2019

Correspondence

Alex K Williamson
Department of Pathology - LIJ Medical Center/Northwell
270-05 76th Ave #B68 – New Hyde Park/NY – USA
11040
Phone: +1 718-470-7490
awilliamson@northwell.edu

REFERENCES

1. Ghosh SK. Giovanni Battista Morgagni (1682-1771): father of pathologic anatomy and pioneer of modern medicine. *Anat Sci Int.* 2017;92(3):305-12. <http://dx.doi.org/10.1007/s12565-016-0373-7>. PMID:27629485.
2. Gill JR. The medicolegal evaluation of fatal pulmonary thromboembolism. In: Tsokos M, editor. *Forensic pathology reviews*. Totowa: Humana Press; 2005. p. 285-304.
3. Burton JL, Underwood J. Clinical, educational, and epidemiological value of autopsy. *Lancet.* 2007;369(9571):1471-80. [http://dx.doi.org/10.1016/S0140-6736\(07\)60376-6](http://dx.doi.org/10.1016/S0140-6736(07)60376-6). PMID:17467518.
4. Hoyert DL. The changing profile of autopsied deaths in the United States, 1972-2007. *NCHS Data Brief.* 2011;(67):1-8. PMID:22142988.
5. Friederici HH. Turning autopsy liabilities into assets. *JAMA.* 1983;250(9):1165. <http://dx.doi.org/10.1001/jama.1983.03340090025013>. PMID:6876353.
6. Bove KE, Iery C. The role of the autopsy in medical malpractice cases, I: a review of 99 appeals court decisions. *Arch Pathol Lab Med.* 2002;126(9):1023-31. PMID:12204050.
7. Madea B, Preuss J. Medical malpractice as reflected by the forensic evaluation of 4450 autopsies. *Forensic Sci Int.* 2009;190(1-3):58-66. <http://dx.doi.org/10.1016/j.forsciint.2009.05.013>. PMID:19524380.
8. Casali MB, Mobilia F, Del Sordo S, Blandino A, Genovese U. The medical malpractice in Milan-Italy. A retrospective survey on 14 years of judicial autopsies. *Forensic Sci Int.* 2014;242:38-43. <http://dx.doi.org/10.1016/j.forsciint.2014.06.002>. PMID:25023215.
9. Williamson AK. Evolving autopsy practice models. In: Hooper JE, Williamson AK, editors. *Autopsy in the 21st century: best practices and future directions*. Switzerland: Springer Nature; 2018. p. 70-1.