

BOOK REVIEW

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Review of: *Forensic Autopsy: A Handbook and Atlas*

REFERENCE: Pomara C, Karch SB, Fineschi V, editors. *Forensic autopsy: a handbook and atlas*. Boca Raton, FL: CRC Press, 2010, 147 pp, ISBN 978-1-4398-0064-5 (Hardback).

The premise of this book by multiple authors is “accurate information is needed to make accurate postmortem diagnoses and that, in turn, requires an accurate postmortem dissection examination.” To this end the book presents eight chapters devoted to the autopsy dissection technique and ancillary studies. The book does not describe pathologies or present an atlas of forensic pathology. It is arranged as follows:

Chapter 1 is A Methodological Approach to the External Examination that describes in four pages the external forensic examination of clothes, personal effects, time of death indicators, and body surfaces. The recommendation that height and weight be expressed in centimeters and kilograms would require translation into inches and pounds for an American jury. However the addition of body mass index to the usual collected metrics is a good idea. There are no illustrations or photos of forensic findings on external examination or any description of how to describe forensic lesions. A major deficiency for a book on the forensic autopsy is the absence of instruction on the importance of photography to document damage to clothes, body identification features, the body, or injuries. There are two photos—one a lateral shot showing the side of a body and another of the back of a body with the body resting on its side.

Chapter 2 is 67 pages or nearly half (46%) of the book and is the atlas part of the book. The text is a step-by-step description of autopsy procedure with numerous photographs to show the detailed dissection techniques recommended by the authors. There is instruction on dissection of the face, extremities, and removal of each organ. The authors recommend layered dissection of the neck but do not mention the benefit of allowing the neck to drain after removal of the brain and thoracic organs to enhance visibility of injury. Significant deficiencies are the absence of information on autopsy safety or reporting. Collection of blood and gastric contents is recommended but there is no discussion on choosing the toxicology specimens needed for specific classes of toxins.

Chapter 3, 17 pages, is devoted to the Pediatric and Fetal Autopsy. The ductus arteriosus is described as Bottalo’s duct. The author recommends examination of the heart-lung-aorta bloc only after fixation. Four paragraphs describe dissection of the cord and placenta. The author advises collection of samples for toxicology, metabolic testing, and archiving blood for DNA analysis.

Chapter 4 covers Laboratory Technologies and Methodologies including tissue blocks, stain solutions and staining, mounting procedures, and several paragraphs on immunochemistry.

Chapter 5 describes in five pages Confocal Laser Scanning Microscopy (CLSM) with illustrative micrographs. CLSM is not a technique in common usage in the United States. The author describes high-speed and high resolution confocal and multiphoton microscopes as allowing researchers to obtain three dimensional (3-D) and four dimensional (4-D) images of cell morphology. The technique is reported as useful in studying sudden cardiac death by identifying abnormal cardiac myocyte morphology, intracellular calcium in the channelopathies, abnormalities of the intercalated discs and Na⁺ channel expression in Brugada Syndrome, and degranulating mast cells in anaphylaxis.

Chapter 6’s five pages briefly describe the utility of radiography, computed tomography, and Virtopsy[®] with a paragraph on magnetic nuclear resonance imaging.

Chapter 7 discusses the genes associated with sudden unexpected heritable heart diseases including a detailed table of genes associated with Long QT Syndrome.

Chapter 8 is a protocol for examination of the V3–V4 segments of the vertebral artery.

References are recent and include Ludwig’s *Handbook of Autopsy Practice*, the College of American Pathologists’ texts on Forensic Pathology and Autopsy Performance, and other forensic texts. However, the chapters are uneven in the emphasis and description of the components of a forensic autopsy. The autopsy as described by the authors is more typical of a hospital autopsy of a natural death rather than the autopsy as part of the typical American forensic autopsy caseload that is heavily weighted with violent deaths needing detailed documentation of injury. Overall the book does not seem to meet the promise of its title as a forensic autopsy handbook or atlas or satisfy the need for instruction in the techniques needed for the forensic autopsy.

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