
Preface

The development of specialized areas of expertise within the field of forensic science places heavy demands on the forensic pathologist, as well as the medical examiner and the coroner, to provide satisfactory answers to the investigating authorities in specific cases. *Forensic Pathology Reviews, Vol. 1* concentrates on common forensic pathological topics likely to be encountered in the daily routine, as well as on specific pathological conditions rarely seen in the autopsy room.

Chapter 1 provides a fundamental and detailed look at what the forensic pathologist, as well as the medical examiner and the coroner, can expect when dealing with burn victims and offers expert guidance on how best to accurately interpret both gross pathology and histological changes. Chapters 2 and 3 focus on trauma deaths and provide an interesting insights into the reconstruction of events in fatalities resulting from kicking and trampling, as well as an up-to-date overview of new immunohistochemical markers applicable to the investigation of traumatic brain injury. Chapter 4 provides an exhaustive overview of the pathology of the central nervous system in drug abuse and points out clinical as well as toxicological implications relevant to the forensic pathologist. Chapter 5 takes a comprehensive look at the pathological examination of the heart in cases of sudden cardiac death and provides details of appropriate dissection techniques and the interpretation of histopathological findings. Chapters 6 and 7 present medicolegal problems in cases of neonaticide and sudden infant death, pointing to possible pitfalls associated with the forensic expertise in such cases. Chapters 8 and 9 cover the pathological features of *Mycoplasma pneumoniae* and Waterhouse-Friderichsen syndrome, two infectious diseases that have been generally overlooked in the textbooks and manuals of forensic pathology.

Chapters 10 and 11 are of special interest to police officers and other members of investigative agencies. These chapters cover the whole spectrum of odd scenarios, such as accidental autoerotic deaths and hypothermia fatalities, that can present at the death scene and hence may lead the inexperienced investigator to the false conclusion about the occurrence of a crime. Chapter 12 describes the pathological features of maternal death from hemolysis, elevated liver enzymes, and a low platelet count (HELLP), showing the relevant aspects

every forensic pathologist should know when giving a medicolegal expertise in a suspected case of medical malpractice related to this syndrome. Chapter 13 addresses the pathology of injuries resulting from resuscitation procedures and how to distinguish these artifacts from the sequels of a natural disease process or trauma that occurred prior to resuscitation. Chapter 14 deals with the interpretation of alcohol levels in different specimens from deceased and living persons, including the presentation and usage of formulae for the estimation of alcohol concentrations, as well as the observance of the legal chain of custody in such cases. Chapter 15 devotes attention to a rare, but nonetheless important, pathological finding, iliopsoas muscle hemorrhage, and the potential forensic differential diagnoses and interpretation of this finding in the light of autopsy.

I owe great thanks to my contributors who are well-recognized national and international researchers and pioneers in their particular scientific fields. Each of them deserves my deepest loyalty for making their practical and scientific knowledge available.

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