Forensic Osteological Analysis: A Book of Case Studies

Edited by Scott I. Fairgrieve, 340 pp, with illus, Springfield, Ill, Charles C Thomas Ltd, 1999.

This is a book of case studies on how skeletal analysis is applied to human and animal remains in medicolegal cases. The book probes the limits of forensic osteology and examines both successes and failures. The book does not teach the reader how to establish identification from skeletal remains, but rather supplies useful practical information about how actual skeletal analyses have been performed in a wide variety of cases.

The 20 chapters, written by 32 contributors, cover the broad gamut of forensic identification, including identifying human versus animal bones, sex determination, DNA analysis, cremated remains, historical cases, facial reconstruction, video superimposition, detection of strangulation, unusual skeletal anomalies, mass disasters, and human rights investigations. Material on the use of insects in death investigation is also included. There is an excellent discussion of the pathologic changes seen on human skeletons before, during, and after death.

The chapter on mass disasters discusses a collision between a passenger train and a freight train that occurred near Hinton, Alberta, Canada, in February 1986, resulting in 23 fatalities. The collision caused massive deformation of the passenger and freight cars with entrapment of the victims. An intense diesel fuel fire supplemented by spilled grain and sulfur from the freight cars hampered recovery efforts. Cold weather and large amounts of burned railcar insulation, which simulated burned bone, further complicated the process.

The chapter on the role of forensic anthropology in human rights issues presents compelling information on the difficulties encountered in investigating genocide cases on foreign soil. Among the obstacles to the exhumation of a 1991 mass grave at Ovcara, Croatia, believed to contain as many as 200 remains, were land minds, explosives, and military and political intimidation. During a 1994 civil war in Rwanda, Hutu extremists killed 500 000 to 800 000 Tutsi. Forensic experts, including forensic anthropologists, archeologists, and pathologists from various parts of the world, participated in the recovery and analysis of the skeletal remains that resulted from the genocide in the vicinity of a church in Kibuye, Rwanda. Heat, explosives, poisonous snakes, and heavy vegetation made the work hazardous.

The illustrations used in the book are of excellent quality, were carefully selected, and greatly facilitate understanding. Excellent references accompany each chapter. The book is primarily designed for students of forensic anthropology and presumes a background in human anatomy and osteology. Forensic pathologists and dentists who do identification work will also find this book very useful. The book provides an excellent overview of the field of forensic anthropology. It clearly delineates the potential contribution that can be made by the forensic anthropologist and archeologist in cases involving skeletal remains and encourages the early involvement of these specialists in the recovery of those remains.

EDMUND R. DONOGHUE, MD
Chicago, Ill

Alzheimer Disease


This is an excellent multi-authored text with chapters covering clinical presentations, epidemiology, confounding disorders, anatomic pathology, biochemical pathology, and therapy of Alzheimer disease. The chapters are written by the leaders in their respective areas and are appropriately detailed and very informative. The book is well organized, the figures and tables are clear and concise, and the chapters are well referenced. Usually with a multi-authored text there are weak chapters, but not in this case. In fact, it appears that the editors took great pains to be sure that each chapter was organized in a similar fashion, which makes for easy reading.

Although this is an excellent book, it may be too detailed for general pathologists and residents and is directed more toward neuropathologists. However, for those pathologists who wish to obtain a very good up-to-date overview of the clinical aspects, pathology, and basic science of Alzheimer disease, this is the book.

JOHN M. LEE, MD, PhD
Maywood, Ill

The Granulomatous Disorders


“With the growing numbers of immunosuppressed patients due to the Human Immunodeficiency Virus (HIV) epidemic, granulomatous infections are becoming clinically more important worldwide.” In The Granulomatous Disorders, Drs James and Zumla, as well as a distinguished group of clinical and experimental investigators, provide an up-to-date and comprehensive review of granulomatous disorders. This book is well
Crafted, combining the basic biology, immunology, molecular features, and clinical data from numerous experienced specialists to cover a broad scope of granulomatous disorders. The book is organized into 4 main parts, each comprising several well-written chapters and each followed by well-selected and complete references.

The first part of the book discusses the general biologic and immunologic aspects of various types of granulomas, including classification, clinicopathologic relationship, imaging studies, ultrastructure, and biologic behavior. Interestingly, the authors provide some evidence to suggest the concept of granulomatous lesions of unknown significance.

Part 2 of the book discusses the most common etiology of granulomatous disorders, namely, infectious granulomas. The authors review various granulomatous disorders caused by specific bacterial, mycobacterial, fungal, parasitic, and viral etiologies. Clinical presentation and microbiologic diagnosis of those infectious granulomas are described extensively.

The third part of the book addresses the relationship between granulomas and general pathologic conditions, such as cancer, autoimmune disease, vasculitis, and sarcoidosis. In addition, granulomas in primary immunodeficiency are discussed separately.

In the last part of the book, a detailed review of granulomas in human body systems is presented. This part is well written by different specialists and provides extensive information about granulomas in different organ systems, including pediatric granulomas. With very few exceptions, the gross and microscopic photographs and radiologic images are excellent.

Overall, this book provides a thorough and comprehensive review of granulomas and granulomatous disorders. It is designed not only for those working in specific areas related to granulomatous disorders, but also for general pathologists and clinicians.

QIN HUANG, MD, PhD
Maywood, Ill

Criminal Poisoning: Investigational Guide for Law Enforcement, Toxicologists, Forensic Scientists, and Attorneys


This book is part of a series on forensic science and medicine edited by Steven Karch, MD, for Humana Press. It is more of a compendium than a comprehensive text on the toxicology of poisons. The book is concerned with establishing a concise series of guidelines for the investigation of homicide by poisoning rather than a learned discussion of analytical toxicologic techniques. Poisoning as an exclusive and singular weapon of murder has not really been fully studied in depth, and the author attempts to define and defend this thesis.

The author begins with several chapters on the history of poisoners. The most common poisons that are used as murder weapons are given, as is an excellent definition for a poison (very useful in court); the process of poisoning is discussed as well. The psychological aspects of the poisoner and victims are extraordinarily well defined as to intent, motivation, means, and opportunity, revealing the poisoner's background, gender, and means of selecting the victim. The classic symptoms and pathologic changes of poisoning are presented throughout the text.

Perhaps the most important information for the reader is the thorough discussion of the method of investigation for law enforcement officers and pathologists unfamiliar with this type of crime. It leads the officer and pathologist in a series of investigatory steps from the crime scene to the performance of the forensic autopsy and, ultimately, to the presentation of evidence and findings in a court of law.

This text should be considered a valuable adjunct to any pathologist's library because of the extensive bibliographic material and references, useful diagrams, listings of the most common poisons, and explanatory discussion. The text is quite readable, comprehensive, and entertaining, as well as being an excellent source of information on poisons as a murder weapon.

RICHARD C. FROEDE, MD
Tucson, Ariz

Pathology


In the third edition of Pathology, the continued collaborative efforts of 2 globally recognized scientists and medical educators culminate in a comprehensive blend of classic pathology concepts and 21st century medicine. Continuing the tradition set forth a decade ago with the first edition, this book is well crafted, cleverly integrating the concepts of descriptive pathology, mechanistic pathophysiology, and clinical medicine. The many concepts and entities described within the book are not only thoroughly and concisely explained in the written text, but are also well complemented by a plethora of artistic computer-generated images, painted diagrams, and color photographs.

One of the strongest attributes of Pathology is the organization of its contents. The book is divided into 9 chapters covering general pathology, 20 chapters of organ systems-based pathology, and a concluding chapter that provides an introduction to diagnostic cytology. Within each chapter, material covering each disease entity is organized into concisely written sections of epidemiology, pathogenesis, pathology, and clinical features. In addition, the key points in each chapter are highlighted by boldface type and bulleted lists. Overall, each chapter is well orga-
nized, beautifully illustrated, and clearly presented.

In stride with 21st century pathology, the authors impressively demonstrate the novel contributions of molecular pathology, cytogenetics, and cell biology to our understanding of the pathogenesis of a wide variety of diseases. Furthermore, I was particularly impressed with the individual chapters covering diabetes mellitus and amyloidosis. Both chapters are not only well written, but also clearly demonstrate the newest information in these areas acquired by recent investigations.

Review of Pathology is a well-written, question-based review that clearly complements Pathology. The review is organized so that each chapter closely parallels its respective counterpart in Pathology. To this end, major concepts of both general and systemic pathology are thoroughly covered through a series of well-developed, topic-based question sets with accompanying descriptive answer sections. Furthermore, all questions are presented in the various formats utilized by the National Board of Medical Examiners, thereby providing an excellent review that should be more than adequate for students preparing for the US Medical Licensing Examination I.

Pathology and Review of Pathology are of exceptional quality; the texts present superb organization, rich content, and excellent illustration and photography. Overall, medical students and, indeed, veterans in the clinical and biological sciences will appreciate that Pathology represents a comprehensive reference and superior educational guide packaged in an elegant blend of science, medicine, and artistic creativity.

KEITH F. IZBAN, MD
Elmhurst, Ill

Tumors of the Testis, Adnexa, Spermatic Cord, and Scrotum


The Armed Forces Institute of Pathology (AFIP) has produced its third series of fascicles with a simple mission: Produce a high-quality, practical publication promoting biologically grounded unification of the nomenclature, while providing concise histologic and clinicopathologic information for the practicing surgical pathologist. Adhering strictly to this task, Ulbright, Amin, and Young have written a succinct, well-organized, and yet thorough standard for tumors of the male genitourinary tract.

Building off the second edition, published in 1973, the third edition has been expanded and improved in every way. It begins with a sweeping review of the embryology and anatomy of the male genitourinary tract. This chapter clearly defines the origins and traces the migration of the pathologically important cells, laying the basis for the rest of the volume. Schematics in this chapter and throughout the volume are easily grasped at a glance and correlate well with adjacent photographs.

Beyond schematics, numerous charts and tables have been added or updated since the last edition. They are easily interpreted at a glance and yet are packed with information.

Without a doubt, the most striking improvement on the second edition is the sheer quantity of color photographs accompanying each described disease. An extensive number of photographs go with each gross description, followed by mostly color photomicrographs and often electron photomicrographs as well. Most photographs are 10.5 × 7.5 cm and are of exceptional quality. Each photograph is shot at the appropriate magnification to demonstrate tumor architecture, nuclear detail, or both, as required to support the text. Most photographs are taken with hematoxylin-eosin staining; occasional specially stained slides highlight particular tumor nuances.

Along with the high-quality photography, the text is equally impressive in its concise yet inclusive treatment of each tumor category. Each chapter is organized into pathologic tumor subheadings. Each subheading is in turn boldly subtitled as to definition of disease; gross, microscopic, and clinical features; histochernistry; differential diagnosis; and even prognosis and treatment. This format divides each monograph into a quick reference, allowing readers to choose exactly those areas to which they need to refer. At the same time, reading any monograph leads to a thorough, up-to-date study of that disease. The text is written at a level suitable for study by the first-year pathology resident and yet makes an excellent “at-hand” reference for the surgical pathology attending.

Each chapter ends with an exhaustive bibliography. Most chapters contain more than 100 references, and some chapters offer as many as 300. References are cited from investigators worldwide and refer to hundreds of journals. References date as far back as 1926 and are as current as 1998, with the majority cited from the 1980s and 1990s.

Ulbright, Amin, and Young have done a commendable job of writing a thorough yet concise surgical pathology standard. Expansions in monographs, improvements in photography, and simplicity in organization have made this a high-quality, practical publication in keeping with the AFIP mission. The AFIP fascicles are a “must have” for modern surgical pathology practice. Fascicle 25 is an excellent example of their quality.

JOSEPH OHR, MD, RPh
Maywood, Ill

Viral Infections of the Nervous System


Viral Infections of the Nervous System (2nd edition) represents an excellent resource and leading reference in neurovirology. Professor Richard T. Johnson has updated this important textbook (published in 1998) and assimilated new findings and information following a 16-year interval since the 1st edition. As a single-author textbook, this work is easily readable, with continuity and a unified structure difficult to realize with multi-authored works. Professor Johnson's personal insights are interspersed throughout the book, insights that stem from his lifetime of investigations with multiple viral pathogens
and provide valuable perspectives regarding the historical background of important discoveries. This reviewer strongly recommends this work as a highly readable and compact textbook.

Viral Infections of the Nervous System is organized into 4 main sections entitled “General Principles,” “Acute Neurological Diseases,” “Chronic Neurological Diseases,” and “Other Perspectives.” In “General Principles,” basic principles of viral pathogenesis and host responses with special emphasis on the nervous system are described. In “Acute Neurological Diseases,” the pathogenesis of meningitis and encephalitis caused by multiple viruses, human herpesviruses, rabies, postinfectious demyelinating diseases, and postviral syndromes is discussed. New material abounds in the “Chronic Neurological Diseases” section regarding human and animal retroviruses, retroviral infections of the developing nervous system, and prion diseases. A thorough examination of chronic inflammatory and demyelinating diseases has been enhanced. The final section, entitled “Other Perspectives,” provides information difficult to find in other textbooks, such as discussions of oncogenesis in the nervous system and the nature of emerging viral infections. Recent concerns about West Nile Virus in the United States came after the publication of this book, and hence this encephalitis virus is only briefly described.

The rapid development of neurovirology since the publication of the 1st edition 16 years ago has necessitated the addition of new chapters describing human retroviruses and postviral syndromes. New material regarding human herpesviruses, prion diseases, and viral infections of the developing nervous system has been incorporated in this updated edition. Sixteen years represents a lengthy period between editions, but few, if any, current books describe neurovirology in such a focused and thorough manner. General virology textbooks such as Fields Virology (Lippincott Williams & Wilkins) and Principles of Virology by Flint et al (ASM Press) provide alternative textbook sources for neurovirologists and students of infectious diseases. These alternatives represent excellent references in general virology, but they lack the uniquely focused approach in neurovirology. Viral Infections of the Nervous System provides a cohesive approach to neuropathogenesis by describing neuropathologic similarities of diseases caused by different viruses while emphasizing key differences in viral pathogenesis caused by related viruses. Johnson authoritatively describes the historical context of important discoveries. Importantly, this book is not a complete reference for the diagnosis and therapy of viral infections, although these subjects are addressed briefly. Other resources, such as the Manual of Clinical Microbiology (ASM Press) and medical textbooks of infectious diseases, represent more comprehensive references for the diagnosis and treatment of diseases in medical virology.

Viral Infections of the Nervous System deserves an emphatic recommendation to medical and graduate students, physicians, and virologists. This book accomplishes its goal of providing a stand-alone reference for neurovirology and viral pathogenesis of the human nervous system. All major areas of neurovirology and prion diseases are included in this textbook. The cohesive presentation of a single-author work and the personal insights of a highly respected figure in the field lend additional value to this reference. Although neurovirology is rapidly expanding with applications of molecular biology, basic principles of pathogenesis are elegantly described and provide a durable framework for further studies. I hope that a 3rd edition will be published after a shorter time interval, and I congratulate Professor Johnson on an outstanding contribution to the virologic literature.

JAMES VERSALOVIC, MD, PhD, FCAP
Boston, Mass

Atlas of Gastrointestinal Endoscopy and Endoscopic Biopsies

By Theresa S. Emory, Herschel A. Carpenter, Christopher J. Gostout, and Leslie H. Sobin, 455 pp, with illus, Washington, DC, Armed Forces Institute of Pathology, 2000.

This new textbook can serve as a practical working reference for both gastroenterologists and pathologists. As stated by the authors in the preface, “the aim of the atlas is to facilitate clinicopathologic correlation in the diagnosis and enhance effective interaction between gastroenterologists and pathologists.” This textbook achieves that goal.

The textbook is arranged in 4 parts (esophagus, stomach, small intestine, and large intestine); each part is introduced with the endoscopic examination and normal histology. Each disease entity is discussed in a concise manner, describing the morphology, endoscopic features, clinical features, and the differential diagnosis, followed by appropriate photographs. The writing style is matter-of-fact and to the point. Most importantly, the authors do not pretend that an exact diagnosis can be rendered all the time, and in those instances, they stress the importance of the clinicopathologic correlation and formulating a differential diagnosis. Every photograph is provided with a complete description. The presentation balances the endoscopic findings and the histologic findings, so that neither the gastroenterologist nor the pathologist will feel shortchanged. The text is well written, succinct, and easy to read, allowing the book to be used when needed, such as during sign-out or even as a guide for teaching in lectures or conferences.

The atlas contains more than 1000 photographs of both endoscopic and histologic findings. The photographs are clear and focused, with the endoscopic findings placed near the histologic findings; thus, the images are essentially seen side by side. In addition to photographs illustrating both the healthy stomach and injuries to the stomach, tables and diagrams are used. A table is also used in the section on the large intestine to describe histologic features and their associated etiologies in the various patterns of injury. Tables are not used in the sections for the esophagus and the small intestine.

A list of additional references are given in Appendix 1 for further reading. For those interested, a standardized format for final pathology reports used at one of the authors’ institutions is presented in Appendix 2.
This work is an essential textbook for both gastroenterologists and surgical pathologists. Whether one is in practice or in training, the *Atlas of Gastrointestinal Endoscopy and Endoscopic Biopsies* by Drs Emory, Carpenter, Gostout, and Sobin should be an excellent guide for physicians interested in diseases of the gastrointestinal tract.  

**Marilyn C. Ciesla, MD**  
Maywood, Ill

---

**CORRECTION**

In the book review for “Disorders of the Spleen” that appeared on page 1386 of the September 2000 issue, Richard S. Neiman, MD, and Attilio Orazi, MD, MRCPath, were listed as editors. Dr Neiman and Dr Orazi are actually authors of this book.