


# Forensic Pathology Reviews

Volume 5

Edited by

**Michael Tsokos, MD**

 Humana Press

# Forensic Pathology Reviews, Volume 5

# FORENSIC PATHOLOGY REVIEWS, VOLUME 5

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*Michael Tsokos, MD*, SERIES EDITOR

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# Forensic Pathology Reviews

Volume 5

by

**Michael Tsokos**

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*To my son Julius*

# Preface

The *Forensic Pathology Reviews* series has gained considerable attention worldwide over the last years and thus I am very pleased to present another, now the fifth, volume of this series.

As with previous volumes, it is an attempt to focus on both practical and scientific aspects of the different areas of expertise within the broad field of forensics. Advances in forensic sciences and a profound knowledge of the results will strengthen and enhance the role of forensic medicine and pathology in the courtroom and will thereby help to solve crimes and bring justice.

The future of forensic sciences depends, more than ever, on attracting outstanding individuals to research and it is hoped that this book not only imparts the state-of-the-art of special topics of forensic medicine and pathology to those working in the field of forensics but also helps to encourage and inspire young forensic scientists for future research projects.

I gratefully acknowledge the help and support of the authors who contributed to this book.

Michael Tsokos, MD

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Professor Michael Tsokos is the Director of the Institute of Forensic Sciences and Legal Medicine, Charité – Universitätsmedizin Berlin, in Berlin, Germany. He is also the Director of the Governmental Institute of Forensic and Social Medicine in Berlin, Germany. He is the primary or senior author of more than 200 scientific publications in international peer-reviewed journals and the author as well as editor of a number of books dealing with topics of forensic pathology.

In 1998 and 1999, Professor Tsokos worked for a time with the exhumation and identification of mass grave victims in Bosnia-Herzegovina and Kosovo under the mandate of the UN International Criminal Tribunal. In 2001, he was honored with the national scientific award of the German Society of Forensic and Legal Medicine for his research on micromorphological and molecularbiological correlates of sepsis-induced lung injury in human autopsy specimens. In December 2004 and January 2005, Prof. Tsokos worked with other experts from national and international disaster victim identification teams in the

region of Khao Lak/Thailand for the identification of the victims of the tsunami that struck South East Asia on December 26, 2004.

He is a member of the International Academy of Legal Medicine, the German Identification Unit of the Federal Criminal Agency of Germany, the German Society of Forensic and Legal Medicine, the National Professional Association of Forensic Pathologists, and the American Academy of Forensic Sciences. Professor Tsokos is one of the Editors of *Rechtsmedizin*, the official publication of the German Society of Forensic and Legal Medicine, member of the Advisory Board of *the International Journal of Legal Medicine*, member of the Editorial Board of *Legal Medicine and Current Immunology Reviews* and the *European Editor of Forensic Science, Medicine, and Pathology*.

**Part I**  
**Death from Environmental Conditions**