'Forensic Pathology Reviews - Volume 4', Tsokos M (Ed), 2006 \$125 ISBN 1-58829-601-6 <u>Humana Press</u>

Continuing this excellent series of evidence-based reviews in forensic pathology, Tsokos has drawn together another practical and somewhat eclectic mix of topics that stimulate the furtherance of knowledge in this ever-expanding subject.

The pathological features of lightening strikes are presented, illustrated with photographs of the distinctive 'fern-like' patterns seen on the skin surface ('Lichtenberg figures'), and a review of the evidence for the pathophysiology of the phenomena seen in deaths of this sort.

Elder abuse is becoming increasingly important, and a review of the epidemiology of such abuse is clearly presented. Of particular interest to autopsy pathologists is the categorisation of decubitus ulcers in this population, with some interesting references indicating the medico-legal issues relating to the frequently encountered 'pressure sores'.

More could perhaps be included in this chapter on the patterns of such wounds, allowing the pathologist to make some comment regarding the possible situations in which these 'pressure sores' were sustained – for example, are they consistent with extended periods of sitting in a chair, or more consistent with pressure on the metal structures of beds etc?

An excellent review of sharp force homicide draws together a wealth of information from a variety of sources, on patterns of injury, with less emphasis than perhaps is found in 'traditional textbooks' on the morphology of wounds.

A useful summary of the capability to act following such inflicted trauma is given, which should stimulate the practitioner to revisit the literature in order to assist the courts in addressing issues relating to activity post-wounding.

The relationship between Marfan's syndrome and sudden death is explored, including arterial dissection as well as less obvious defects such as valvular lesions. The pathology of peliosis is also well described.

Deaths due to asthma are often said to be under-reported, and a detailed review of the gross and microscopic features of this condition are clearly presented. Trainee pathologists will find this review of interest, and the quantity of microscopic images surpasses those generally found in other textbooks covering similar ground.

Basic science makes an appearance, in the form of a chapter on the role of the endothelium in the pathology of 'septic shock', and organ failure, as well as a chapter on the role of apoptosis in tissue injury. However, this chapter does not really deal with forensic issues, and will be of less interest to those who have covered the basic science in their preparations for post-graduate pathology exams.

Previous volumes have included chapters on aspects of crime scene investigation, covering such topics as the phenomenon of 'hide-and-die' behaviour in hypothermia, for example, and in this current volume, a chapter on 'undoing' behaviour makes for interesting reading.

For those practicing in rural environments in particular, the issues relating to poisoning due to agrochemicals including paraquat are detailed.

Recent advances in post-mortem imaging have mirrored improvements in clinical imaging techniques, and much of the research into this topic has been driven by the work of the 'Virtopsy' group in Bern, Switzerland. The impact in adult forensic pathology in the UK has been somewhat limited, but practitioners from Leicester have gained valuable experience in this modality, and present an excellent overview of the techniques used, and an analysis of the utility of CT/ MRI in addressing some forensic issues.

For those who thought that ultrasound scanning remained the preserve of clinicians, a chapter on the utility of this imaging technique to autopsy work provides 'food for thought'!

Advances in forensic pathology are being translated into other arenas, and an interesting application in the veterinary world is described, chronicling the work of the Australian 'Dolphin Trauma Group'. It is hoped that future volumes include more 'comparative forensic pathology', in order to stimulate more widespread cross-pollination of ideas and research.

The closing chapter details a new technique for fixing lungs – in-situ fixation before opening the thorax. In the UK, current legislative changes limiting the use of tissues and organs at post-mortem may prevent such techniques becoming widespread, and it will be interesting to see if this technique receives support from practitioners in this country.

The publication of these timely reviews, allowing practitioners access to the international literature is to be commended. A minor criticism remains the use of monochrome illustrations, but their use does not detract from their overall usefulness, and this volume is strongly recommended to trainee pathologists and more experienced practitioners alike.