

Book Review

Emanuel Rubin, Fred Gorstein, Raphael Rubin, Roland Schwarting, David Strayer (eds): Rubin's Pathology (4th edn), 1587 pp, Philadelphia, PA, Lippincott Williams & Wilkins 2004 (\$89.95).

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The field of pathology has evolved in the past several decades from a rather narrow discipline mainly concerned with the morphologic expression of disease at the gross and light microscopic level to one encompassing a wider view of how cells and tissues react to a spectrum of internal and external stresses at the molecular, genetic and immunologic levels. At the same time, greater emphasis has been placed in this discipline on the correlation of structural change and function. The morphologic aspects of disease cannot and should not be studied without adequate attention to their clinical consequences. This paradigm shift is reflected in the new approach to the field by the current major textbooks of pathology. So rapid has been the accumulation of complex molecular and genetic information underpinning most diseases and so protean are their clinical syndromes, that with rare exceptions textbooks today require multiple contributing authors with specialized backgrounds. Furthermore, these texts must be updated at least every 5 years to insure that their information is current.

The 4th edition of Rubin's Pathology, one of the leading texts since it first appeared in 1989, was released this spring. Interestingly, the new 7th edition of the other major textbook of pathology, Robbin's and Cotran's *Pathologic Basis of Disease* by Elsevier Saunders will be released at approximately the same time. The textbook retains all the major features of the previous edition, but there is no doubt that the material was to a great extent and sometimes completely revised and updated. A lot of new data were incorporated. A number of new contributors have been added. For example, Ivan Damjanov provides an excellent, well-illustrated chapter on the lower urinary tract and male reproductive system. There is a new section on the growing role of cytopathology by Marluce Bibbo, and a new chapter on the skin by Craig Storm and David Elder. The chapter on infectious diseases has been updated and includes a short discussion of the recent SARS epidemic caused by a novel coronavirus probably mutated from a nonhuman host. All these new chapters and the revised old chapters

read well and are most informative. Both the contributors and the editors did a great job, for which they deserve kudos.

This comprehensive single-volume text consists of nine chapters devoted to basic general pathology and 21 chapters devoted to diseases of organ systems. It is primarily oriented to the needs of the medical student, although it would be a valuable addition to the library of the pathology resident and practicing pathologist and in fact to most practicing clinicians wishing to learn more about the nature of the diseases they are treating. In my opinion, its strength lies in the early chapters covering such topics as the basic cellular, molecular and genetic mechanisms of cell injury and cell death. Knowledge of the ubiquitous role of apoptosis, for example, and how it is triggered in a variety of physiologic as well as pathologic conditions, is difficult to acquire by relying only on journal review articles. For the intellectually curious pathologist, I urge the investment in this highly readable textbook.

The text was laid out in an esthetically pleasing manner and is organized in a student-friendly manner, with consistent icon-flagged subsections for each disease entity, covering epidemiology, pathogenesis, clinical features, etc. Future editions might consider including a glossary of terms used at the beginning of each chapter, presently provided only in the chapter on developmental and genetic diseases. Also available is a CD supplement *Virtual Pathology Slide Set*, which could be used for teaching students histopathology.

As with any other book, one could find some minor inaccuracies, typos or arguable points. For example, while I agree with the statement that the relationship of oligospermia to varicocele is still unclear, mention should be made that it almost invariably occurs with left-sided varicoceles and is probably related to the anatomy of the origin of the internal spermatic vein on that side. An unfortunate typographical error dates the Asian outbreak of SARS to 1993 instead of 2003. Such quibbles should, however, not detract the potential users from this otherwise first class textbook, which appears to be improving with each edition. It remains one of the two leading textbooks of pathology, ideally suited for the medical students of the 21 century.

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