Medical Kidney Diseases

Morphology-Based Novel Approach to Renal Biopsy

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Preface

Medical Kidney Diseases is the outcome of a question I have been asked several times by nephrology fellows since I started practicing renal pathology in 2011: Is there any good resource we can use for our boards? Nonneoplastic renal diseases mostly represent a nonspecific pattern of injuries by light microscopy (LM), and correlation of LM with immunofluorescence (IF), electron microscopy (EM), and clinical history is needed for optimal interpretation. This book provides a simple and practical approach to renal biopsy by providing a pertinent differential diagnosis related to various patterns of injuries involving renal parenchyma by LM and reaching a correct diagnosis by assimilating IF and EM findings. This scheme is similar to what renal pathologists follow during routine practice.

The book is divided into four sections: glomerular, vascular, tubulointerstitial, and transplant renal pathology. Each section is divided into multiple subsections based on the particular pattern of injury by light microscopy. A pertinent differential diagnosis is provided for the particular pattern of injury, followed by real-life cases that I have accumulated during the course of my practice. Each case starts with a clinical history followed by renal biopsy findings with accompanying light microscopy, immunofluorescence, and electron microscopy images; diagnosis; key morphologic features required for the diagnosis of that particular disease; and clinically relevant points.

The book is designed to provide brief and concise yet comprehensive information to pathology residents and nephrology fellows in preparation for their Board examination. It will also serve as a quick handbook for practicing general pathologists during routine practice if they come across a renal biopsy, as well as for nephrologists during preparation for recertification exam.

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