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Preface

The various granulomatous diseases are globally prevalent and afflict hundreds of millions of humans. The granulomatous tissue pathology was first described in tuberculous lungs over 200 years ago. Since then, great advances in the characterization of the granulomatous tissue response have been made. Work in the fields of descriptive histopathology, bacteriology, T-lymphocyte-mediated immunology, and cytokine/chemokine-related molecular biology contributed to our knowledge of the granulomatous response. With the advent of modern microbiology and immunology, several useful animal models that contributed important concepts to the understanding of this chronic multicellular tissue inflammation were created. The acquired knowledge established two major concepts: (i) granulomata are protective host responses and (ii) they can cause considerable tissue destruction and pathology.

Because granulomatous conditions occur in a wide array of diseases with microbial, fungal, protozoan, viral, helminthic, or metallic etiologic agents, the published literature is widely dispersed. Therefore, periodic summaries of the state of the art of the field are warranted. The aim of the present book was to bring together under one cover updated knowledge on experimental and clinical granulomatoses. There was no intent to include in the book all the existing granulomatous diseases; rather, the intent was to present prototypic models and diseases and to establish a blueprint for the formation and maintenance of the granulomatous process.

An overview of the chapters shows the tremendous progress made during the past decades. With regard to pathogens/invaders, the granuloma remains an acknowledged, efficient protective response. The importance of the T-lymphocyte-mediated immune response in sarcoidosis and Crohn’s disease, which as yet lack identifiable etiologic or inducer agents, has also been recognized. Cytokines and chemokines took center stage as the key mediators of tissue inflammation. Researchers now probe the role of cellular receptors, signal transducing factors, and gene regulation to gain a better understanding of the protective/destructive potential of the granulomata. It is hoped that such advances will be translated into improved modalities of therapy, especially in the separation of protection from tissue destruction.
The major goal of the book was to promote the interchange among microbiologists, immunologists, researchers of inflammation, and clinicians. I was fortunate to be able to secure in this venture the participation of contributors who are leaders in their field. Their efforts in providing high-quality thought-provoking chapters and their patience during the revisions are much appreciated. The essential help provided by Arthur M. Dannenberg and Noel R. Rose, who reviewed the proposal for the book and recommended its publication, is gratefully acknowledged.

Lastly, great appreciation and gratitude is expressed to Gregory Payne, Senior Editor of ASM Press, who enthusiastically received the suggestion of an updated granuloma-oriented book and patiently guided us to bring this book from inception to its final production.

Dov L. Boros
November 2002
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