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BOOK REVIEW

Amyloid and Amyloidosis

Grateau G., Kyle R. A., and Skinner M., eds. (2004)
Boca Raton, FL: CRC Press, 551 pages. $169.95.
ISBN 0-8493-3534-5

Field of Medicine

Neurobiology

Format

Hardcover

Audience

Graduate and medical students, residents, researchers, and clinicians whose efforts focus on understanding, and unraveling the multifaceted mysteries of amyloidosis and amyloid's complex role in the etiopathology of human disease.

Purpose

Amyloid and Amyloidosis is a compilation, taken from papers presented at the Tenth International Symposium on Amyloid and Amyloidosis that was held in Tours, France, from April 18–22, 2004. As the content of this volume attests, significant advances have been made in the understanding of the biology of amyloid and amyloidosis and its treatment since the last meeting and the First International Symposium on Amyloid and Amyloidosis, which was held in 1967 in Groningen, The Netherlands.

Content

This volume is divided into eight sections, covering the topics of amyloid fibrillogenesis, immunoglobulin light chain amyloidosis, amyloid protein A amyloidosis, familial amyloidosis, central nervous system amyloidosis, localized amyloidosis, therapeutics, and a most interesting final section covering the Satellite Symposium sponsored by Neurochem Incorporated, a Montreal, Canada-based biopharmaceutical company specializing in anti-amyloid neuropharmaceuticals. This later Satellite Symposium addressed current concepts and "hot topics" in a concluding extended abstracts section entitled "Emerging Clinical Practices in A Amyloidosis," "The Changing Face of Amyloidosis," "Uncommon Conditions Underlying AA Amyloidosis," and "Therapeutic Management of AA Amyloidosis: From Bench to Bedside."

Highlights

Synthesized by a collection of invited international experts, the extended abstracts in this

volume currently represent one of the most rigorous assemblies of state-of-the-art amyloid research, covering the biology of amyloid proteins, amyloid fibrillogenesis, and amyloidosis in various human diseases. Protein-folding disorders; their genesis, development, and relationship to amyloid deposition; and the results and discussion of extensive clinical trials and novel therapies that address current concepts in the treatment of amyloidosis are covered in some detail in various articles. Furthermore, this collection of extended abstracts provides a contemporary snapshot dealing with the biological and genetic basis for amyloid deposition; the methodologies used in the characterization of biological amyloid in various human diseases; and the past, present, and potential future therapeutic strategies for the clinical intervention of amyloidosis. Interestingly, included are the descriptions of several specific case histories addressing the etiology and pathophysiology of amyloidosis that stem from infection, fever, rheumatological disease, inflammatory bowel disease, malignancy, neurological disorders, and those of unknown origin, as well as the pharmacological approaches that have been used in their therapeutic intervention.

Limitations

Amyloid and Amyloidosis has several noteworthy limitations. One concern is that this volume lacks a defined overview or detailed introduction and summary to the body of medical research that is described in the book. This would be a valuable addition in such an assemblage of research work from many different areas of amyloidology that uses various approaches and models. There is also a notable shortage of research reports regarding central nervous system amyloidosis and especially those dealing with one of the major health concerns of our time: Alzheimer's disease. Abundant available data suggest that the etiology and pathogenesis of Alzheimer's disease is intimately interwoven with amyloid biology and amyloidosis and that this insidious neurological disorder involves a subtle and progressive amyloid deposition; however, there are only about six papers and nine short references to Alzheimer's disease. Additionally, although some of the papers in this volume are presented as brief reviews of the authors' own works, others are presented as short research papers in the standard introduction–methods–results–conclusions format, several others are written as short one-page, unstructured review papers on general amyloidosis; still others are presented as focused and selected case histories. This makes the extended abstracts contained within this issue appear, at times, as a collection of distantly interconnected papers that are discontinuous and difficult to follow. On the other hand, a 7-page author–co-author index, and a comprehensive 17-page subject index greatly enhance the usefulness of this volume for the reader, enabling the search for the most recent work coming out of a particular investigator's laboratory, or identifying the most contemporary scientific research dealing with a specific subject matter or topic concerning amyloid biology.

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