

Book reviews

Apoptosis and inflammation. Ed James D Winkler. (Pp 256; DM228.) Basel: Birkhäuser Verlag, 1999. ISBN 3-7643-5795-9.

Apoptosis is one of the hottest topics in present day research, offering an umbrella for studies in the fields of general biochemistry, cell biology, cellular differentiation, molecular biology, and immunology. A few years ago it became clear that there is also a strong link between apoptosis and autoimmunity. In some autoimmune diseases it has been shown that there is a defect at some step in the apoptotic cascade of events which, in genetically susceptible people, may lead to a change in the delicate equilibrium between life and death of certain cells. Such a lack of balance may ultimately be the cause of either too much cell death or too little. Similarly, many studies have shown that autoantigens become modified during apoptosis, and that these modified antigens are translocated to the blebs at the periphery of the cell. It is likely, although not proved, that exposure of such modifications may ultimately lead to the generation of autoantibodies. One of the intrinsic possibilities of such a mechanism could be that the (disturbed) apoptosis of a specific cell type might lead to a localised inflammation and a local production of a certain autoantibody. Such a mechanism could provide an explanation for the often observed specificity of autoantibody production in a specific disease.

Apoptosis and Inflammation offers an excellent overview of apoptosis in different cells important for the process of inflammation, and its possible role in certain inflammatory diseases. There are two chapters on signals for apoptosis important to inflammatory cells—namely, growth factors and arachidonic acid metabolism. Next, the book focuses on effects at the cellular level, on cell survival versus death and signals critical for cell function in both normal and disease states. This part contains very informative reviews on apoptosis of lymphocytes, chondrocytes, and keratinocytes. Finally, it focuses on events at the level of tissue and disease, looking at the evidence for altered apoptosis in inflammatory diseases such as rheumatoid arthritis, osteoarthritis, lupus, and renal disease. Together these chapters provide a timely and extensive overview of the state of the art, not only for the scientist working in the field of apoptosis but also for the clinician who wants a better insight into disease.

From an educational viewpoint it is a pity that only a few schematic figures have been included. Most of the chapters are primarily text containing many references and thus require a deal of endurance from the reader. For example, there is only one figure, in the middle of the book, which gives a schematic overview of the most common pathways leading to activation of caspases and apoptosis. Since these pathways have a decisive role in the understanding of most chapters it would have been appropriate to have included an introductory chapter discussing the details of the various mechanisms of apoptosis.

However, for those who are familiar with these mechanisms, this is a fine book that has much to offer.

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The lupus book. Daniel J Wallace. (Pp 271; US\$25.) Oxford: Oxford University Press, 2000. ISBN 0-19-513281-5.

Lupus is a common and complex disease. This book is written for patients, but physicians and health professionals dealing with systemic lupus erythematosus will also find it useful. The author's aim is to provide readers with all necessary information and practical advice.

The first part deals with the definition, a brief historical review, and the epidemiology of the disease (the prevalence is probably still underestimated). The second is devoted to the mechanisms of inflammation and immunity, which are explained with welcome clarity, as are the causes of the disease. The third deals with genetic factors, "environmental villains", and drugs.

The fourth part ("where and how the body can be affected by lupus") is extremely important, as it takes the reader through the diagnostic process using an approach that considers symptoms and signs organ by organ: skin, joints, lungs, kidneys, etc. Laboratory tests are explained. The emphasis is on the neurological manifestations and much attention is paid to behavioural changes. Patients need to be made aware of the frequent difficulty the physician has in making a differential diagnosis.

The fifth part covers the treatment of systemic lupus erythematosus from a practical clinical perspective. It is emphasised that treatment is multifaceted and will not succeed unless all aspects are carefully considered: physical measures (avoiding exposure to the sun, regular exercise, rehabilitation), coping (the message is: "you can help conquer lupus"), and drugs. Interestingly, the text includes an exhaustive chart of herbs for antiarthritis agents, skin and gastrointestinal treatments, with claimed uses, active ingredients, and potential side effects.

Finally, the prognosis varies from person to person and is dependent on many factors, but patients who have a positive attitude and good coping mechanisms have a better prognosis.

The Lupus Book concludes with an exciting perspective for the year 2015, thanks to progress in healthcare systems and in research.

This second edition has benefited from numerous developments which have occurred in lupology over the past five years and new sections on apoptosis, cell signalling, lupus susceptibility genes, selective Cox-2 inhibitors, newer immunosuppressive treatments, and osteoporosis are included.

Concise and readable, it fulfils its objectives: all necessary information on basic knowledge and practical problems of the disease are given in a comprehensive manner, perhaps sometimes oversimplified, with an optimistic tone. The style is clear and precise, but nowhere dry. The answers to all the important and practical questions are included with no major omission. The glossary and the indexing are excellent. It is an important and valuable resource not only for patients but also for their care givers and for anybody concerned with lupus.

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