REVIEWS

Inflammation Biochemistry and Drug Interaction. Proceedings of an International Symposium, Como, Italy, October 11–13, 1968. Edited by A. Bertelli and J. C. Houck. Excerpta Medica Foundation, Amsterdam (New York Office: New York Academy of Medicine Building, 2 East 103rd Street), The Netherlands, 1969. 359 pp. 17 × 24.5 cm. Price 9.8 Od Sterling/dfl. 81.00.

Within the last six years there were at least six international symposia which were devoted to the studies on inflammation and its related subjects. This present volume is the record of the second meeting sponsored by the International Inflammation Club and held within two years. It was devoted to the biochemical studies on inflammation and the mechanism of action of anti-inflammatory agents. The rapid progress, newer approaches, and the participation of other basic disciplines were some of the reasons accounting for the frequent meetings. The outcomes of these meetings were also very fruitful in promoting better world-wide communications between researchers and in unifying the basic interdisciplinary vocabularies.

There were forty-four papers by seventy-seven authors reported. Most of these papers were progress reports. The contents were divided into four sections and there were unavoidable overlaps.

It is very disappointing and regrettable that no discussion of the papers was included. Discussions in any symposium are always an important part of the meeting. There was one Foreword and one Summative Introduction to Inflammation but there was no conclusion or summary of the meeting.

The four sections are:

I. Proteolytic Enzymes in Inflammation—The role of proteases in inducing inflammation was discussed extensively in eight papers. The basic evidence is threefold: (a) inflammation is associated with activation of protease systems; (b) application of proteases can initiate the inflammatory process; and (c) many anti-inflammatory drugs were shown to have inhibitory effects on protease. There were a number of humoral and cellular proteases or protease systems involved in inflammation reported; however, none of them has ever been characterized.

II. Tissue Reaction and Collagenous Metabolism in Inflammation—This section includes seven papers. Anti-inflammatory agents have been shown to induce collagenolytic and proteolytic enzyme systems in rat skin and mouse and human fibroblasts, probably via the depression of an operon. The induced skin protease activated plasminogen, digested fibrin directly, and destroyed bradykinin, all of which could be important in anti-inflammation. Newer evidence for the possible role of lysosomal enzymes in the breakdown of a collagen and protein polysaccharide complex was presented.

III. Kinins and Other Factors in Phlogistic Reaction—This section includes thirteen papers. Further evidence of the involvement of kinins, mast cells, and platelet aggregation in inflammation was reported.

IV. Drug Interaction in Phlogistic Reaction—The antiproteolytic and prevention of protein denaturation were the two main mechanisms of action of anti-inflammatory agents discussed in this section, containing fourteen papers. No new idea or proposal has been suggested but a few new anti-inflammatory agents have been studied.

This book is a good library reference and it is also an excellent progress report on the biochemical study of inflammation.

Reviewed by K. H. Lee Department of Pharmaceutical Chemistry University of California San Francisco, CA 94122 **Lewis's Pharmacology.** 4th Edition. By James Crossland. Williams and Wilkins Co., Baltimore, MD 21202, 1970. xviii + 1360 pp. 14.5 × 22 cm. Price \$21.75.

The respected text of J. J. Lewis has been completely revised, rearranged, and rewritten. Outdated material has been deleted rigorously and replaced with much significant new material (299 pages more than the third edition). The page size of the previous editions has been retained and although the weight of paper used has been decreased (the print on the verso side of the page is quite readable), a very chunky book is the result.

Considering content and disregarding format, this revision is easily the most distinguished British text of pharmacology now available. It is interesting to note that this book may be ordered from continental distributors with a \$9.00 saving in price (same sheets, different binding, different title page, plus a dust wrapper). The English publisher is E. & S. Livingstone.

It should be emphasized that the book is about pharmacology or perhaps more specifically about pharmacodynamics—it is not a text of materia medica or pharmacotherapeutics. Chemical structures are given in great profusion as well as 56 well-organized tables. A unique feature of the book is the actual illustration of pharmacologic procedures and apparatuses (classic techniques) along with typical records or tracings.

The text is organized into 56 specific chapters and divided into four major divisions: General Pharmacology (introduction, drug administration-mobilization, drug metabolism-storage-elimination, drug dependence, receptor theory, biostatistics, screening and testing methodology, experimental aspects of pharmacology); Humoral Substances and Mechanisms (autonomic agents, serotonin, histamine and antihistamines, polypeptides and acidic phospholipids); Systematic Pharmacology (local anesthetics, analgesics, general anesthetics, anticonvulsants, psychotropic agents, emetics and antiemetics, expectorants and antitussives, respiratory agents, drugs acting on blood and blood forming tissues, cardiovascular agents, diuretics and antidiuretics, gastrointestinal principles, agents affecting the liver, hormones, vitamins, metals, dermatologic agents); and Chemotherapy (including antineoplastic drugs). The section dealing with humoral pharmacology is especially effective.

Each chapter contains a selective bibliography divided into two parts: (a) Books, Monographs, and Reviews; and (b) Original Papers. The index is adequate. Occasionally the generic names are different from their U. S. counterparts, but this does not present a serious obstacle for the serious reader. This reviewer has used the past editions of this book as the required text for undergraduate pharmacy students, and the book earned general student acceptance. The present edition seems to be equally appreciated. The principles and concepts and drug functions that are stressed in the book are timeless in their validity while drug names come and go.

The text is reasoned closely and the words weighed judiciously to present an excellent international overview of what pharmacology is all about. This overview is unique and valuable, especially since certain American texts emphasize only current therapeutic novelties, others ignore fundamental principles, others follow clique theory, and still others ignore that pharmacology is once again an international science. This book should be in every library concerned with the teaching of the health sciences. While this volume cannot be regarded as a primary source book for the professional pharmacologist, it can function as an excellent orientation book for the specialist seeking perspective for himself within the total scope of pharmacology.

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