

## REVIEWS OF BOOKS AND AUDIOVISUAL AIDS

Lawrence M. Solomon, M.D.  
Review Editor

**A Guide to Drug Eruptions, The File of Adverse Reactions to the Skin**, W. Bruinsma, Department of Dermatology, Free University, distributed by De Zwaluw, The Netherlands, in English, 1977. (112 pp, \$13.50, clothbound).

Dr. Bruinsma has compiled a most useful reference on cutaneous reactions to drugs. His first volume was published by Excerpta Medica under the same title in 1973 and the current volume (number 2) is not merely a revision, but rather a cumulative issue representing the additional drug reaction literature since 1973 (about half the references) or that not included in the first volume (the other half of the references). Both volumes are important for their separate references and a true drug reaction detective would want both volumes for the references. Some differences from the first volume include references listed in the tables as well as the textual references at the end of the chapter. This volume includes approximately 300 references on cutaneous reactions to drugs. The first volume contained about 200 references. The author indicates single references that provide easy access to the literature. More than 90% of the references are from the U.S. literature but a section includes adverse reactions reported to the File on Adverse Reactions to the Skin, Department of Dermatology, Free University, Amsterdam.

The current volume follows the same format as the first by providing sections on drug eruptions such as acne, alopecia, pigmentary disorders, exanthems, exfoliative dermatoses, urticaria, eczema, photosensitivity eruptions, lupus erythematosus, vascular reactions, purpura, porphyria, lichenoid, fixed-drug and vesico-bullous eruptions, erythema multiforme, toxic epidermal necrolysis and pruritus.

The book provides the practicing dermatologist with easily accessible data on adverse reactions related to the skin. The author states his intended purpose as a handbook and not to provide theory, although theory is briefly discussed in some sections such as the acneiform eruptions. Subsequent volumes are projected every 3 yr. Another feature of the book is a list of drugs and a list of reactions forming an extremely accessible method of getting to the appropriate information. Also, most drugs are ranked according to the estimate of frequency of occurrence of reaction per oral dose administered for urticaria and exanthematous categories. They are ranked as common (2% or greater frequency) down to rare or nonexistent (0.1% or less).

For the clinician, these 2 volumes may constitute the best compilation of the drug eruption literature. They are extremely easy to use, are inexpensive, and a good buy.

Dennis West, M.S., R.Ph.  
Department of Dermatology  
University of Illinois

**Elastases: Structure, Function and Pathological Role, Vol 6: Frontiers of Matrix Biology**, Karger, Basel, 1978.

The sixth volume of the series *Frontiers of Matrix Biology* covers 2 seemingly unrelated topics. The first half of the book deals with the structure, function, and pathological role of the elastases, a family of elastin-degrading proteases, while the latter part reviews the current status of research on cyclic AMP relating to the skin.

The review on elastases is written by Joseph Bieth from the Université Louis Pasteur, Strasbourg, who is himself to be credited with several important discoveries in this field. In a detailed and logical manner he describes the development of research on elastolytic proteases since the discovery of a specific pancreatic elastase in 1949. Subsequently, enzymes with elastolytic activities have been demonstrated in a variety of animal tissues, including human skin, aorta, and lung, as well as in various cell types, such as polymorphonuclear leukocytes, platelets, and alveolar macrophages. The data presented clearly point out that elastases cannot be classified as a separate group of enzymes with distinct mechanistic characteristics, but that elastolytic enzymes are part of the families of serine-, sulfhydryl-, and metalloproteases. The review then explores methods for assay and purification of these enzymes. It further details their physical-chemical character-

istics, such as covalent structure, conformation, and stability, as well as enzymatic properties, including specificity, mode of action, and the role of inhibitors and activators. The review of these areas is complete and the reference list is up-to-date. Unfortunately the review misses some recent, exciting discoveries on elastolytic enzymes which may play a role in the conversion of a precursor molecule, proelastin, to elastin. These latter studies were obviously published after the present book was completed.

Of particular interest to workers in the field of medicine is the discussion on the possible role of elastases in diseases. It is clear that degradation of elastic fibers plays a significant role in several pathological processes, such as pulmonary emphysema and arteriosclerotic changes of the vascular connective tissues; in addition, the leukocyte elastases contributes to the tissue damage in inflammation and related processes, such as leukocytoclastic vasculitis. In general, however, the review is not very helpful to a clinically oriented reader, but the quality of the text will be greatly appreciated by research workers interested in the biology of the connective tissue matrix and in particular in the metabolism of elastic fibers in health and disease.

The second half of the book deals with the role of cyclic AMP in skin. This part of the volume is a collection of 8 papers which are written proceedings of the 16th International Colloquium of Dermochemistry. The Colloquium took place in Paris at the Collège de France in November 1976. The first paper is by Professor Posternak from Geneva, who covers the general chemical and biochemical properties of cyclic nucleotides in great detail. Posternak's paper is a good introduction to general cyclic nucleotide metabolism for newcomers to the field.

The second paper in this collection is by Laudat from Creteil, France who discusses the characteristics of adenylate cyclase of adipocyte membranes from the adipose tissue of genetically obese and diabetic mice. Either obese hyperglycemic mice or diabetic mice demonstrate an impaired response to beta-adrenergic agonists. This paper is of interest to dermatologists, because such a defect is at least superficially similar to the reduced sensitivity to beta-adrenergic agonists, which the cyclic AMP system exhibits in psoriasis and atopic dermatitis.

Delescluse and Prunieras then review the effect of cyclic AMP and its derivatives on keratinization of cultured epidermal cells. These authors review the status of the recent work which indicates that cyclic AMP may inhibit epidermal cell proliferation and stimulate epidermal differentiation. Stefanovich of Germany then discusses how cyclic AMP might be used as a therapeutic agent in psoriasis. In a separate, but related chapter, Posternak and colleagues provide an update on their attempts to use cyclic AMP in the therapy of experimental skin tumors.

Perhaps, the best chapter in this collection was contributed by Marks and Grimm of Heidelberg. Marks is one of the pioneers in cutaneous cyclic nucleotide research. This chapter is a masterful review of their views regarding the role of cyclic AMP in the regulation of epidermal proliferation and differentiation. This is a complex and controversial area which is well handled by these particular authors and is well worth reading.

The last 2 chapters cover the interrelations between cyclic nucleotides and prostaglandins, with emphasis on the participation of these two molecules in inflammation. The complexities of this important interaction are presented in an understandable manner. The papers end with a conclusion by Prunieras, who does an excellent job of coordinating the main points of the eight different papers. This volume is the only book dealing mainly with cyclic AMP in the skin. For this reason, and because the subject is well reviewed, this book can be recommended for departmental libraries and researchers involved in cutaneous cyclic nucleotide and prostaglandin metabolism.

John J. Voorhees, M.D.  
University of Michigan Medical School  
Jouni Uitto, M.D.  
Washington University Medical School