
The object of this monograph was the study of the cellular exudate and, in particular, the occurrence of basophilic leukocytes, in the course of delayed immune reactions using the skin window technique. The principle of this technique, originally described by Rebuck [Anat. Rec. 76: 46 and 93 (1940)], is that of fixing small cover slips to the skin after removing the superficial part of the epidermis; the inflammatory exudate cells will then adhere to the cover slips, which are stained and examined microscopically. One advantage of this technique is that it is possible to follow changes in the exudate cells in the same subject without substantially disturbing the course of the reaction.

The experiments were performed on human subjects of both sexes ranging in age from 16 to 82 years. The majority were patients admitted for minor surgery, nine had ulcerative colitis and a group of seven had Hashimoto’s thyroiditis. Normal controls included six pairs of monozygotic twins. By this technique, the effect of a great number of agents (dinitrochlorobenzene, tuberculin, diphtheria toxin, thyroid extract, peripheral lymphocytes and leukocytes) on the cellular exudate was followed in non-sensitized subjects as well as in delayed immune reactions.

In the latter, four types of cells were regularly observed: macrophages, polymorphonuclear, eosinophilic and basophilic leukocytes. The results indicate that the sequence of polymorphonuclear leucocytes and macrophages did not differ from that in nonspecific inflammation. Eosinophils were present at 3 h and their number increased on the second day. Basophils were found at the end of 6 and increased in number until about 45 h after the reaction had started. The relative number of basophilic leukocytes was sometimes 50 times that in the blood whereas in controls, no basophils were found. Apart from the findings reported by Priest and Rebuck, Wolf-Jürgensen is the first to demonstrate that basophilic leukocytes may accumulate locally in tissues. The work presented provides good evidence that such an accumulation of basophils occurs in the skin in different types of delayed immune reactions. The book is well presented and beautifully illustrated. However, the subdivision into chapters, each of which includes a definition of the type of reaction described, a review of the literature, the author’s findings and their discussion, makes it rather difficult to find one’s way through. The important problem of differentiating the basophilic leucocyte from the tissue mast cell, not always easy, is touched upon only incidentally. Despite these drawbacks, the book can be recommended for those interested in the skin window technique or the role of basophils in delayed immune reactions.

R. Keller, Zurich


Many contributions to this volume are of great interest to immunologists. Globerson and Auerbach discuss thymus differentiation, Ginsburg the growth and differentiation of lymphoid...
cells on embryo-cell monolayers. McCulloch, Till and Simono-witch review the role of independent and dependent stem cells in the control of hemo-
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poietic and immunologic responses. In a number of papers the value and limitations of electron microscopic observations is discussed by Anderson, De Harven, Hayflick, Hummeler and others.
Barile’s paper on ‘Mycoplasma (PPLO), leukemia and autoimmune disease’ is very stimulating. The microbial etiology of some so called autoimmune diseases must be considered as a possibility. Barile’s review gives a critical and well documented (89 references) review of facts and ideas. Pease* and her team published a number of interesting papers in recent years in this field, which are not quoted by Barile.
The study of leukemias obviously poses a number of problems which are common to immunology. The present volume is recommended for thorough study.
P. Kallós, Helsingborg
Advances in Immunology. Vol. 5. Ed. by F. J. Dixon, Jr. and J. H. Humphrey. Academic Press, New York/London 1966. 445 pp., illustr. Price: $ 16.00. The fifth volume maintains the well established high standard of this series. Boyden discusses the role of ‘natural’ antibodies in the immune response. His review is, as his papers always are, thorough and very stimulating. Sela reviews his important immunological studies with synthetic polypeptides and the pertinent literature. His review contains much hitherto unpublished material and will certainly guide future research in this growing field. In a complete and critical review Paterson discusses all aspects of experimental allergic encephalomyelitis as a model for auto-immune diseases. In his very interesting and thorough review of tissue specific antigens Dumonde too enlightens many problems concerning the auto-immune state. Paterson’s and Dumonde’s reviews, with their complete coverage of the pertinent literature, are of great value for research workers and clinicians as well. Pope’s contribution on the immunology of insulin is very stimulating too. He thoroughly discusses the production and nature of antibodies to insulin in man and animals, their importance for resistance to insulin on the one hand and for its immunoassay on the other. This contribution too is therefore of clinical interest.
This volume does not need any recommendation. It is a must for all workers in our field. P. Kallós, Helsingborg