IMMUNOMODULATION

New Frontiers and Advances

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PREFACE

On May 14-16, 1982, a group of scientists met in Viareggio, Italy to present ideas, and exchange relevant data on current approaches on immunomodulators. We felt that the embodiment of the substance of that international symposium into this volume will be beneficial in keeping both clinicians and basic scientists abreast of the latest exciting developments in this rapidly accelerating field. We hope that the publication of this series of papers by an international panel of experts will enhance the nature of future investigative studies with such entities.

Under the rubric of immunology, it is obvious that such a term as "immunomodulation" could be construed as being all encompassing. However, it is intriguing that the immune modulators touched on in these sessions can be subcategorized into about five broad groups. Almost all substances, excepting those entities that are immunologically inert, will have some modulating effects on immunity. From the coarse adjustment of antibody feedback inhibition upon cellular immunity to the subtle finesse envisioned in Jerne's idiotypic network and suppressor T cells, immunomodulators attempt to either magnify or diminish those responses that are normally elicited by antigen. The broad groups - thymic hormones, D.L.E., Interferon, drugs, and the use of bacterial products appear to be at the forefront of much of the pioneering work on immunomodulation. It should be stated that since so many entities can and do interact positively or negatively with the immunological apparatus, this volume must of necessity confine itself to those about which experimentation has defined at least some of the immunologic laboratory parameters - and to those which show particular promise for fruitful immune manipulation or intervention in the future.

There are two papers which deal with the interaction of DLE or transfer factor upon the immune system, and one with immune RNA. Five entries discuss the effects of thymic hormones or extracts in restoring immunological capacity or in modulating the T lymphocyte.

Seven of the presentations deal with new and/or promising drugs, or a new prophylaxis of an old drug (Levamisole, Cyclosporin-A, Cyclophosphamide, Isoprinosine, Methisoprinol, glucocorticoids) that should be pertinent in controlling and dissecting the immunological repertoire. Three discourses deal with new relevancies in the interferon arena, and two papers deal with bacterial antigens as immunomodulators and use of bacterial products in clinical cancer trials.

We hope that the approach of this volume will aid in the assimilation of some of the major aspects of immunomodulation. In order to intelligently immunomodulate, one must understand the basic mechanisms of immune reactivity as regards cell subpopulations, receptors, lymphokines, and their interactions.

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