Lymphatic Filariasis

Tropical Medicine: Science and Practice

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Lymphatic Filariasis

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Preface

The dramatic advances made in the approach to the diagnosis and treatment of the lymphatic filariases, in our understanding of the molecular nature of the parasites that cause the diseases, and in the pathogenetic and epidemiological principles that underlie them, has allowed us to contemplate methods of control that may eliminate lymphatic filariasis as a public health concern early in the next millennium. Indeed, the past two decades have witnessed a tremendous shift in emphasis in the study of lymphatic filarial infections away from a singular view of pathogenesis and towards one that has integrated the tools of modern epidemiology, immunology, infectious diseases, molecular biology, and, perhaps most importantly, field-based clinical studies.

With the relative ease of international travel and the marked population shifts, filarial infections are no longer solely the domain of those living near or in the tropics. The recognition of these 'shrinking' geographical boundaries has likely provided the impetus for the present series dedicated to the understanding of tropical diseases. This volume, thus, examines the basic biology and clinical expression of the lymphatic-dwelling filarial parasites and aims to detail the underlying pathogenetic mechanisms of infection along with the epidemiology, diagnosis, treatment and prevention of these often devastating vector-borne diseases. Drawing from the collective experience of the authors, an experience that spans six continents and untold numbers of years, this volume is intended to provide a comprehensive examination of human lymphatic filariasis with emphasis not only on that which is known but also on that which remains the subject of controversy.

I am grateful for the invitation extended to my colleagues and me by the series' editors Drs. Geoffrey Pasvol and Stephen Hoffman and for the production support provided by Imperial College Press. I would very much like to thank Drs. Franklin Neva and Eric Ottesen who, each in his

own way and style, provided me with an environment at the National Institutes of Health that allowed for scientific growth and the acquisition of clinical skills in tropical medicine. I would also like to acknowledge the many colleagues and friends who have shared their knowledge with me and have made the study of filarial infections incredibly collegial. Finally, I would most like to thank the members of my family — Alex and Sarah Nutman, and Ruth Karron — who, despite the inevitable sacrifices of personal time, supported me in my endeavor to edit this book.

Thomas B. Nutman, M.D.
April 1999

Contents

Preface	v
Chapter 1. Lymphatic Filariasis: A Historical Perspective <i>T.V. Rajan</i>	1
Chapter 2. Lymphatic-dwelling Filariae <i>Alan L. Scott</i>	5
Chapter 3. The Population Dynamics and Epidemiology of Lymphatic Filariasis <i>Edwin Michael</i>	41
Chapter 4. Resistance to Infection with Lymphatic-dwelling Filarial Parasites <i>James W. Kazura</i>	83
Chapter 5. The Clinical Manifestations of Lymphatic Filariasis <i>V. Kumaraswami</i>	103
Chapter 6. Diagnosis of Lymphatic Filarial Infections <i>James McCarthy</i>	127
Chapter 7. Treatment of Lymphatic Filariasis <i>David G. Addiss and Gerusa Dreyer</i>	151
Chapter 8. Towards Eliminating Lymphatic Filariasis <i>Eric A. Ottesen</i>	201

Chapter 9.	Immunology of Lymphatic Filariasis: Current Controversies <i>Rick M. Maizels, Judith E. Allen and Maria Yazdanbakhsh</i>	217
Chapter 10.	Worms and Microorganisms Can Cause Lymphatic Disease in Residents of Filariasis-endemic Areas <i>Gerusa Dreyer and Willy F. Piessens</i>	245
Index		265