BOOK REVIEW

Jesse L. Goodman, David T. Dennis, Daniel E. Sonnenshine, editors
Tick-Borne Diseases of Humans

The editors are affiliated with the University of Minnesota, the Colorado State University and the Old Dominion University. The list of contributors contains a group of 41 scientists, mostly from USA, also from France, Slovakia, United Kingdom, and from South Africa. As declared in the preface by the editors, this book assembles in one place a comprehensive discussion of the tick-borne diseases that affect humans. The editors aimed in the present work to address a state-of-the-art information on disease epidemiology, transmission and ecology; clinical and laboratory findings; diagnosis; and treatment and prevention. Each contributor has specialized knowledge, and many have pioneered the discovery and understanding of tick-borne diseases, including their causative agents and ticks that spread them. Ticks and humans are increasingly in contact, as people both spread into new environments and travel more for work or pleasure. Some important tick-borne infections and their causative agents, such as Lyme borreliosis, have been recognized only recently. Most tick-borne infections of humans afflict domestic and wild animals and thus can be important in agriculture and veterinary medicine. Tick-borne diseases are extremely diverse, both biologically as well as clinically. They cause diseases that can be of acute onset and rapidly fatal, or multisystemic and chronic. Symptoms are often nonspecific, making recognition and appropriate treatment challenging.

The present volume is arranged into three major sections, each of which can be used independently or in concert with remaining two sections. There are 21 chapters, provided with pioneering as well as with topical literature. Each chapter embraces about 200 quotations.

Section I (chapters 1 through 17) provides insights into the ticks, their interactions with hosts, and the diseases they transmit. Discussed are tick-borne infections in an overview, the biology of tick vectors of human disease, different kinds of hosts for human pathogens, management of ticks and tick-borne diseases, clinical approach to the patient with a possible tick-borne illness, the human reaction to tick, and tick systematics and identification.

Section II (chapters 8 through 20) is concerned with specific diseases. Described are: Colorado tick fever and related 

Cultivirus infections, tick-borne encephalitis, Crimean-Congo haemorrhagic fever, Lyme borreliosis, tularemia, human granulocytic anaplasmosis, human monocytotropic ehrlichiosis, other causes of tick-borne ehrlichioses, including 

Ehrlichia ewingii, relapsing fever and Rocky Mountain spotted fever and other spotted fever group rickettsioses, Mediterranean spotted fever and other tick-borne rickettsioses, Q fever, and human babesiosis.

Section III (chapter 21) presents clinical and pathologic atlas of tick-borne diseases, and geographic distributions of tick-borne diseases and their vectors.

The textual part is extensively illustrated by a wealth of figures composed of line drawings, schemes, photographs, transmission and scanning electron micrographs depicting internal anatomy and dorsal and ventral morphology of ixodid and argasid ticks, ultrastructural findings, devices for application acaricide agents, life cycles, schematic representation of attachment variants in hard ticks, phylogenetic relationship of bacteria associated with ticks, miscellaneous laboratory procedures, diagrams, geographic distribution maps, etc. Moreover, there are numerous tabular reviews summarizing major clinical and laboratory characteristics of tick-borne diseases, tick species implicated in human toxicosis and paralysis syndromes, reviews of tick species and their relation to infections and disease symptoms and syndromes, etc. Colour atlases offer maps demonstrating geographic distributions of various tick species, histological pictures, cutaneous and other clinical signs, and more.

Written by experts with specialized field knowledge, Tick-Borne Diseases of Humans presents a most exhaustive update handbook useful to students, clinical professionals and laboratory investigators in the fields of human and veterinary medicine, public health, medical entomology, acarology, and ecology.

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