BOOK REVIEW

Taenia Solium Cysticercosis: From Basic to Clinical Science

The earliest recorded references to tapeworms date to nearly 2000 BC. Protean manifestations of the human-pork tapeworm have vexed medical science most of those four thousand years. Remarkably, the life cycle of the tapeworm was not understood until scarcely more than a century ago, and well into the 20th century the very clinical entity of human cysticercosis was controversial, frankly disregarded by many prominent authorities. Even now, with praziquantel and albendazole, effective cysticidal drugs, there remain controversies about treatment. With only 25 years of gradual success in immunologic investigations, laboratory diagnosis still has only limited utility, and in many parts of the world, the prevalence of asymptomatic infection is unknown. For a disease affecting millions of patients in all continents except Antarctica (and possibly Australia) this is the first comprehensive reference monograph. As the editors and several contributors point out, in a world with ever-increasing immigration and international travel, the distribution and epidemiology will continue to be more prevalent and complicated.

At various times, Osler said that to understand medicine one need only to know syphilis, tuberculosis, or typhoid. Taenia solium would probably be an even better subject. Although there is only one chapter exclusively devoted to history, throughout most of the chapters, especially the epidemiologic ones, the history of the disease and pertinent research is a constant and compelling subplot. Although this is a multi-authored definitive reference, it is in fact also a very interesting book to read.

Particularly strong chapters deal with molecular determinants of host-parasite interactions, mitochondrial DNA of the organism, and five chapters dealing with immunology and spectroscopic studies. The epidemiology section has 10 chapters starting with an overview of global distribution of T. solium cysticercosis, then specific chapters about Africa, Mexico, Central America, Brazil, Peru, Asia, the United States, and the disease in pigs. I suspect the 15 chapters about clinical aspects will attract more readers and periodic reference use. Although the past decade has seen more attention to cysticercosis than the previous century, there is no similar work that is as comprehensive or accessible.

For public policy decisions, and planning of future investigations, clearly the final section of the book, “Taeniasis-Cysticercosis—Therapy and Prevention,” is most important. This disease should be preventable, and should be eradicable. However, a chapter by Gonzalez on control of porcine cysticercosis, which demonstrates several effective chemotherapeutic solutions to the infection, also explains the challenges involved. C. A. W. Evans’ chapter on human and porcine vaccination argues that eradication through vaccination is theoretically possible, and summarizes a number of trials. Although he concludes the trials are promising, the efficacy of vaccines in both people and pigs have not yet demonstrated any effect on numbers of cysts in exposed persons or animals.

This is a useful and authoritative reference, and it is easily read. It will be required for workers in tropical medicine, parasitic disease, and especially those who deal with tapeworm. I strongly recommend it for all students of preventive medicine, infectious disease, veterinary medicine, epidemiology, neurology, and history of medicine. The chapters are well organized, the editing maintains consistency of style and focus, and the illustrations and graphs are well displayed and always appropriate.

Terrence Riley, MD
Baylor College of Medicine
Houston, TX 77030
Telephone: 713-873-3497
E-mail: triley@bcm.tmc.edu