BOOK REVIEWS


Tuberculosis is an ancient disease. Skeletal remains demonstrating bony lesions typical of tuberculous have been found in the Nile Valley dating to approximately 3,000 BC. The disease remains the number one global killer among infectious diseases today. In The Bioarchaeology of Tuberculosis: A Global View on a Reemerging Disease, distinguished physical anthropologists and archaeologists Charlotte A. Roberts and Jane E. Buikstra have provided a scholarly and extremely valuable review of the archeology of this ancient disease. Without belittling the contribution this review makes, however, it must also be acknowledged that the book has some major shortcomings.

Roberts and Buikstra have presented their work in six chapters. In fact, the book divides itself into three two-chapter sections. The first two chapters present the etiology and pathogenesis of tuberculosis. The third and fourth chapters consider the archeology of tuberculosis in the Old World and the Americas. The final chapters discuss the management of tuberculosis, focusing largely on the history of sanatorium care. Each of these three sections deserves separate consideration, for they are very different in scope, content, and quality.

In introducing tuberculosis, the authors devote two chapters to a consideration of the etiology and pathogenesis of tuberculosis from both a medical and a sociological point of view. There is much of interest reviewed in these two chapters. However, the authors do not clearly separate the roles of pathogenic microorganisms, native and acquired host resistance, and societal factors. The result is both confusing and misinforming. While I recognize the important contributions that are made by psychosocial, socioeconomic, and environmental issues to the natural history of tuberculosis, they are not causes of the disease. Some examples of confusing, misleading, or inaccurate presentations may make the problems of this part of the book more apparent. On pages 5 and 6 we read, “Pulmonary tuberculosis developing in the first five years following primary infection is called primary tuberculosis; pulmonary tuberculosis diagnosed more than five years after the primary infection is classified as secondary or post-primary tuberculosis... The primary and post-primary nature of the disease means that a person with tuberculosis may not reveal any signs or feel any symptoms.” Reference is given to a review of bovine and human tuberculosis. This statement is simply not in accord with widely accepted definitions of primary and post-primary tuberculosis.

Again on page 5, we are told that tuberculosis patients go through “periods of euphoria with increased appetite.” Susan Sontag is cited here. While Sontag was an interesting writer and her book on tuberculosis and cancer attracted much comment, she is not an authority on this disease. The theory of a “spes phthisica,” which this statement seems to evoke, has long since been rejected by most scholars interested in the natural history of tuberculosis.

On page 20 we are told that “The signs and symptoms of tuberculosis are many. Coughing (often blood stained), difficulty in breathing, weakness and lethargy, loss of appetite and weight, hoarseness and loss of voice pitch control, chills, night sweats, irritability, pallor, female amenorrhea and male impotence, fever (and flushing of the cheeks), and chest pain are the main ones (emphasis added).” This is a catalog of symptoms that do occur in persons ill with tuberculosis, but some of these manifestations are rare or occur only in persons with uncommon forms of the disease. A list of this sort badly needs further explanation. On pages 52 and 53, the relationship between body build and tuberculosis is discussed, citing both Esmond Long’s 1941 paper and Hippocrates as sources. The naval recruit study of Lydia Edwards and her coworkers is also cited. The Edwards study, in fact, is important and bears on this poorly understood aspect of the pathogenesis of tuberculosis. To link it noncritically with Hippocrates and Long is sloppy scholarship. A student of anthropology wanting to learn about the etiology and pathogenesis of tuberculosis would do well to skip these two chapters and consult any standard text of medicine.

The middle two chapters of this book redeem it from its shaky start. The archeology of tuberculosis has had a troubled past, often mired in disagreements over the relative roles of bovine and human species of tubercle bacilli. While considering some of this problem, the authors do not become bogged down in it as they present an exceptionally lucid chronicle of tuberculosis both in the Old World and in the Western Hemisphere. Physical evidence from skeletal remains is presented carefully along with a cautious consideration of depictions of skeletal (largely spinal) deformities in prehistoric art that may represent tuberculosis. The authors are to be commended for including a discussion of the recent contributions of molecular biology to understanding the origins of tuberculosis, especially in the Americas. It is a pity that restriction fragment length polymorphism analysis with the IS6110 sequence does not distinguish between Mycobacterium tuberculosis and M. bovis; perhaps future studies will include spoligotyping, which does, or will be based on more species-specific insertion sequences.

Chapter 5 begins with several pages that are redundant of material discussed earlier and then devotes some 35 pages to the history of the treatment of tuberculosis. This discussion begins with remedies from classical Greek and Roman times and moves quickly to the sanatorium era of open air and rest. This subject is well covered and generally both accurate and complete. It does not, however, add much to many other published accounts. Surprisingly, the authors do not consider modern chemotherapy and
its profound impact on the management and outcome of tuberculosis. The final chapter is brief and serves as an epilogue in which the authors reflect on the history of tuberculosis and its current status as a global health problem.

What place does this book deserve on the shelves of a library or in the personal collection of one interested in the early history of tuberculosis? Certainly it belongs in both. However, its main value is as a review of the archeology of prehistoric tuberculosis, the area of great expertise of the authors.

THOMAS M. DANIEL, MD
Center for Global Health and Diseases
Case Western Reserve University School of Medicine
Cleveland, OH 44106
E-mail: tmd5@cwru.edu