15 AIDS in the Tropics

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15.1 Introduction

Almost any discussion of AIDS, verbal or written, generates controversy and strange opinions. The disease has been blamed on the colonial powers, “God’s punishment for promiscuity, sexual deviation or intravenous drug usage,” “a genetically altered virus pioneered in a military laboratory”, abnormal human contact with monkeys or apes in Central Africa, the vaccination programs against smallpox, polio and other infections, or some unknown factor in the border trade between Tanzania and Uganda. Some believe that it is being spread by walking in the footsteps of a sick person. Alternatively, AIDS “does not exist” is “an invention of the western media,” is the result of witchcraft, or “is not infectious.” Symptoms may be ascribed to diabetes or dysentery rather than

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to AIDS. The acceptance of the diagnosis can be fatalistic, "Acha inuiwe dawa sind" ("I have no medicine, so let it kill me"), or practical "we have no money" (Chairman of national AIDS committee). Innovative theories regarding AIDS prevention have been suggested: "Women with AIDS should be shot" (a member of parliament), or less final, "anyone with AIDS should be isolated" or banned from school, games, work, and public places or not allowed into the country.

Official responses have often been energetic and occasionally unconventional. At one time it was noted that a Malawian trucker, crossing the border from Mozambique to Zimbabwe, could expect officials to examine his passport, his vehicle's papers, and his genitals. The scientific press is not always more helpful, as is exemplified by a statement in 1986 from the Pasteur Institute in France that "many insects in central Africa are infected with the AIDS virus," to which the Center for Disease Control in the United States replied in 1987, if "mosquitoes are indeed transmitting AIDS, they are being very selective about whom they bite": Only a few percent of AIDS cases are devoid of any identifiable risk factor for transmission.

Researching the literature to establish the incidence of AIDS is equally interesting, particularly looking back over the past 15 years. This illustrates not just the rapid spread of the virus, but the slow process by which people and their governments have come to terms with this epidemic. Many governments denied that there were patients in their countries. Reports, estimates, and authoritative statements abound, and are corrected, amended, and contradicted with great rapidity. The literature is confused and confusing. There is, for example, a report on AIDS in Africa by a medical group from China: however, there are few reports from anyone concerning AIDS in China, and certainly none from an African medical group.

Amidst the plethora of literature on the subject, why a review of AIDS in the tropics? Few doctors anywhere can be unaware of AIDS, yet not all may be aware of how much AIDS varies in its presentations and complications. Most publications on the subject of AIDS have centered around patients in the Western world, often homosexuals or intravenous drug abusers living in urban settings. The vast majority of AIDS patients worldwide do not fit this profile. Over the past 10 years, increasingly numerous reports detailing the presentation of AIDS in the developing countries have appeared, making it clear that the natural history of AIDS differs depending on the microbiologic and nutritional environment, as well as the societal behavior and local customs of the population affected.

In this chapter, the complications of AIDS will be reviewed for various tropical populations. When possible, the reasons for the patterns of illness encountered will be analyzed. In addition, many, if not most of these opportunistic diseases have altogether different clinical and radiologic manifestations when they affect an human immune deficiency virus (HIV)-infected host instead of a normal host. This chapter will emphasize these differences, reviewing the radiographic manifestations of the common opportunistic infections and malignancies as they appear in the AIDS patient. All of this information is needed to produce a geographically and radiologically appropriate differential diagnosis.

In the past, data collection on the frequencies of various complications of AIDS in the tropics has been hampered by the relative lack of diagnostic equipment, laboratories, and sophisticated imaging technology. Even though computed tomography (CT) scanning and magnetic resonance imaging (MRI) are increasingly available in the tropics, few studies are performed on known AIDS patients. A diagnosis of HIV infection frequently ends diagnostic studies and even therapeutic intervention, since scarce resources are assigned instead to patients with potentially curable conditions. The problem of defining complications of AIDS in the tropics has been partially resolved by thorough and carefully performed autopsy studies in the Ivory Coast (Lucas et al. 1994a).

### 15.2 Comparative Statistics: the Relative Scope of the Problem

If numbers alone are the trigger for media attention and medical expenditure, then AIDS is unfairly privileged. The estimated incidence figures for many of the diseases described in this book exceed by many times those of AIDS (Table 15.1). Most of these other diseases can be effectively treated or cured if the resources are available, and their incidence is relatively stable; by contrast AIDS is not curable at present and there has been an exponential increase in the numbers affected.