

the biology of malarial infection and the chemical considerations that have led to the development of the various antimalarial drugs.

Chapter 3 details the properties of the important antimalarial drugs, including methods for their estimation, their fate and physiological disposition in the body, their toxicity, and their effects on the various forms that comprise the life cycle of the malaria parasite. The information is up to date; it includes studies on the recently developed and extremely potent drug pyrimethamine (Daraprim). It is shown how chlorguanil and perhaps pyrimethamine represent an important chemotherapeutic advance because, in addition to curing acute attacks by affecting the asexual blood forms, they are lethal to the preerythrocytic forms of certain plasmodia and are therefore true causal prophylactics. In addition, these compounds exert a unique sterilizing effect on the sexual forms in blood (gametocytes), making them noninfectious to mosquitoes.

Chapter 4 describes the phenomenon of acquired drug resistance, which is rare for quinine, quinacrine, and chloroquine but which threatens to compromise the potential advantages of proguanil and pyrimethamine. Various theories concerning the development of resistance to these drugs are presented.

Chapter 5 outlines the clinical usages of the compounds. This valuable chapter presents the major principles and objectives of malarial therapy—prophylaxis, treatment of acute attack, and radical cure—and describes the role of each drug in therapy.

This volume is recommended for the physician rather than for the pharmacologist or biochemist because its emphasis is on the effect of drugs on the malaria parasite in its various forms rather than on basic pharmacological or biochemical considerations.

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