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CHAPTER 2

Monkeys and Malaria

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Malaria is one of the world's most devastating diseases. Its intermittent fevers have been recognized since the beginning of recorded history. Because the parasites which cause malaria are very small it was not possible to detect these pathogens until after the invention of the microscope. In fact the first description of the parasite was just over 90 years ago (Laveran, 1880). Four species of malaria in man are recognized now, the first three being described during the late 1800's and the fourth and last in 1922, viz., *Plasmodium vivax, P. falciparum, P. malariae,* and *P. ovale.*

About five years after the finding of the human malaria parasites, birds were found also to be infected with malaria. But it was not until 1898 that malaria was seen in monkeys (Koch, 1898; Kossel, 1899). It seems odd that bird malarias were found before the monkey malarias and that there was a lapse of 18 years from the discovery of the human parasite until they were found in these lower primates, animals which are recognized to have many similarities to man.

One of the earliest known attempts to transmit human malaria from man to nonhuman primates was by Koch (1900). He injected malarious blood apparently containing *P. vivax* and *P. falciparum* into orangutans and gibbons. The negative results led that famous scientist to conclude that manlike apes are not susceptible to human malaria, but that it should not be taken for granted that other animals farther from man could not harbor the human malaria parasites. Although we now know that he was partially wrong in his conclusion that human malaria will not grow