

treat if a full course of appropriate treatment has been given. Phagocytosed malarial pigment seen inside peripheral-blood monocytes may provide a clue to recent infection if malaria parasites are not detectable. After parasite clearance, this intraphagocytic malarial pigment is often evident for several days in peripheral-blood films or for longer in bone marrow aspirates or smears of fluid expressed after intradermal puncture.

Molecular diagnosis by polymerase chain reaction (PCR) amplification of parasite nucleic acid is more sensitive than microscopy or rapid diagnostic tests for detecting malaria parasites and defining malarial species. While currently impractical in the standard clinical setting, PCR is used in reference centers in endemic areas. In epidemiologic surveys, ultrasensitive PCR detection has proved very useful in identifying asymptomatic infections as control and eradication programs drive parasite prevalences down to very low levels. Serologic diagnosis with either indirect fluorescent antibody or enzyme-linked immunosorbent assays is useful for screening of prospective blood donors and may prove useful as a measure of transmission intensity in future epidemiologic studies. Serology has no place in the diagnosis of acute illness.

■ LABORATORY FINDINGS IN ACUTE MALARIA

Normochromic, normocytic anemia is usual. The leukocyte count is generally normal, although it may be raised in very severe infections. There is slight monocytosis, lymphopenia, and eosinopenia, with reactive lymphocytosis and eosinophilia in the weeks after acute infection. The platelet count is usually reduced to $\sim 10^5/\mu\text{L}$. The erythrocyte sedimentation rate, plasma viscosity, and levels of C-reactive protein and other acute-phase proteins are elevated. Severe infections may be accompanied by prolonged prothrombin and partial thromboplastin times and by more severe thrombocytopenia. Antithrombin III levels are reduced even in mild infection. In uncomplicated malaria, plasma concentrations of electrolytes, blood urea nitrogen (BUN), and creatinine are usually normal. Findings in severe malaria may include metabolic acidosis, with low plasma concentrations of glucose, sodium, bicarbonate, phosphate, and