

particularly among patients receiving quinine. In severely ill patients, hypoglycemia commonly occurs together with metabolic (lactic) acidosis and carries a poor prognosis.

Sepsis Hypoglycemia or gram-negative septicemia should be suspected when the condition of any patient suddenly deteriorates for no obvious reason during antimalarial treatment. In malaria-endemic areas where a high proportion of children are parasitemic, it is usually impossible to distinguish severe malaria from bacterial sepsis with confidence. These children should be treated with both antimalarials and broad-spectrum antibiotics with activity against nontyphoidal *Salmonella* species from the outset. Empirical antibiotics should also be given to adults with >20% parasitemia. Antibiotics should be considered for severely ill patients of any age who are not responding to antimalarial treatment or deteriorate unexpectedly.

Other Complications Patients who develop spontaneous bleeding should be given fresh blood and IV vitamin K. Convulsions should be treated with IV or rectal benzodiazepines and, if necessary, respiratory support. Aspiration pneumonia should be suspected in any unconscious patient with convulsions, particularly with persistent hyperventilation; IV antimicrobial agents and oxygen should be administered, and pulmonary toilet should be undertaken.

GLOBAL CONSIDERATIONS

The goal of global eradication of malaria remains a challenge. Success will require strong leadership, increased national commitment, and substantial international support. The two main tools used to control malaria are insecticide-treated bed nets (ITNs), previously shown to reduce all-cause mortality in African children by 20%, and the ACTs. New drugs are in development. One vaccine (the RTS,S/AS01 vaccine) which, in African children, provided 35–40% protection against falciparum malaria over 4 years of follow-up, has recently been recommended by WHO for widespread roll-out. Challenges to malaria eradication include the widespread distribution of *Anopheles* breeding sites, the enormous number of infected