Diagnostic and Management Algorithm of Malaria due to *Plasmodium Falciparum*

1. Obtain thick and thin blood smears
2. Is the blood smear positive?
   - Yes
     - Evaluate severity of the disease
     - Severe Malaria and/or patient is unable to take oral medication
       - Intravenous Quinidine PLUS doxycycline or clindamycin
       - Admit to the ICU
     - Chloroquine sensitive regions (Refer to tables/cdc.gov)
       - Chloroquine
       - Hydroxychloroquine
   - NO
     - Non- falciparum species
       - Determine plasmodium species
     - Uncomplicated Malaria
       - Determine region of malaria acquisition
       - Chloroquine and/or Mefloquine resistant regions
         - Quinine PLUS doxycycline or clindamycin
         - Artemether-lumefantrine
     - Plasmodium falciparum or not yet identified species
       - Admit to the hospital
       - Repeat blood smears Q 8 hours until parasitic clearance in severe disease and Q 12 hours in mild disease
       - Check CBC, chem, LFTs, LDH every 6 hours for first 12 hours or until clinically stable

3. If patient has a positive blood smear or high suspicious for malaria PLUS ≥1 of these symptoms = SEVERE MALARIA
   - Impaired Consciousness/coma
   - Hemoglobin <7 (consider hemoconcentration)
   - Renal failure
   - Pulmonary edema
   - Acute respiratory distress syndrome
   - Hypotension
   - Disseminated intravascular coagulation
   - Spontaneous bleeding
   - Acidosis (severe disease with HCO3 < 15)
   - Hemoglobinuria
   - Jaundice
   - Repeated generalized convulsions
   - Parasitemia ≥5%

4. Repeat blood smears X 3 Q 12 or Q24 hours
   - If negative, consider different diagnosis
   - If positive, follow algorithm

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