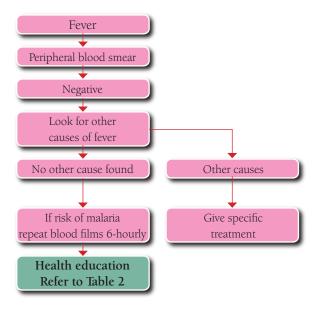
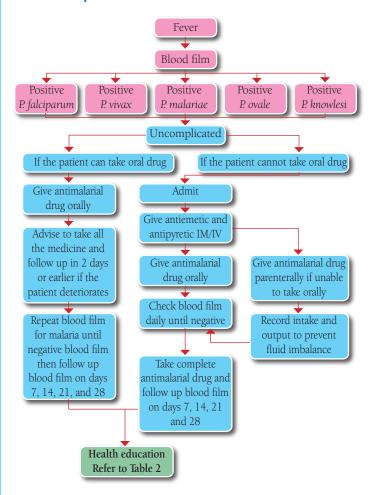
# **Part 3: Algorithms**

## Fever with negative blood film



Algorithm 1 Sequential guideline for patients suspected of having malaria, presenting with fever and negative blood film.

## Fever with positive blood film

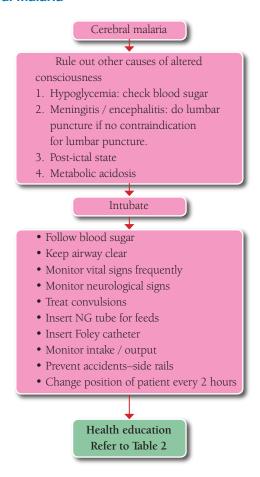


Algorithm 2 Sequential guideline for malaria patient presenting with fever and positive blood film.

#### Severe malaria (WHO criteria) Severe malaria If unable to manage complications of severe malaria, e.g. respiratory and renal failure, then refer to higher facility hospital Before referral Give antimalarial drug IV/IM or suppository, give antipyretic and antiemetic, as needed If reduced consciousness, intubate before transfer During transfer: Give oxygen Maintain airway Have suction available. · Have dextrose available for hypoglycemia · Have anticonvulsant medicine available for seizures Labs\* Have IV line in place - Electrolytes, including · Have replacement IV catheter available Plasma bicarbonate - Complete blood count (CBC) Place Foley catheter before transport - Serum blood sugar - Liver function test At hospital - Blood urea nitrogen (BUN), Admit directly intensive care unit (ICU) without delay creatinine - CXR (chest x-ray) - U/A (urine exam) Place on respirator Repeat blood film - HIV test for acute Do arterial blood gas renal failure patients Do labs\* · Monitor vital signs, neurological signs and fluid intake and output Continue antimalarial drugs Cerebral malaria Acute renal failure DIC\*\* Hypoglycemia Severe anemia Respiratory failure Prevent secondary Hemoglobinuria **Iaundice** Fever bacterial infection

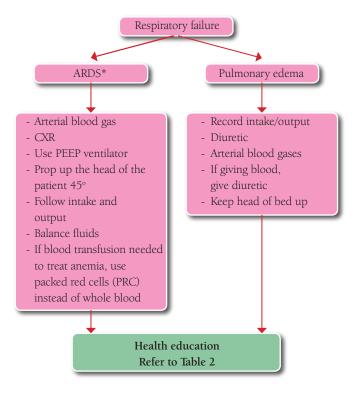
\*\*DIC = Disseminated intravascular coagulation **Algorithm 3** Sequential guideline for management of severe malaria.

### Cerebral malaria



Algorithm 4 Sequential guideline for management of cerebral malaria.

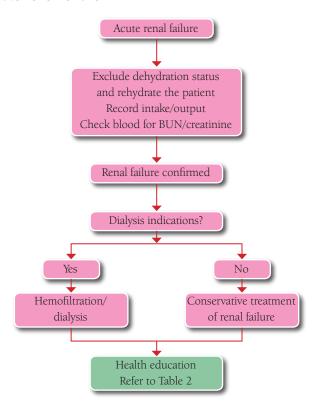
# **Respiratory failure**



\* ARDS = Adult respiratory distress syndrome

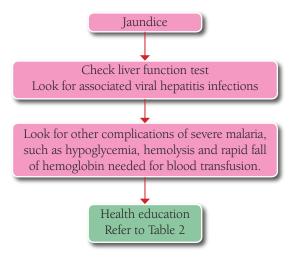
Algorithm 5 Sequential guideline for management of respiratory failure in severe malaria.

### Acute renal failure



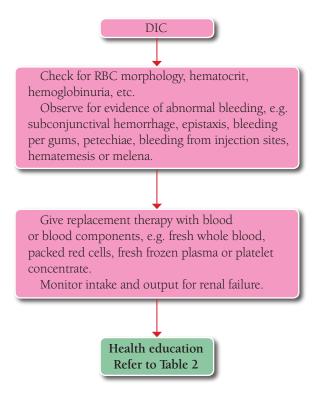
Algorithm 6 Sequential guideline for management of acute renal failure in severe malaria.

### **Jaundice**



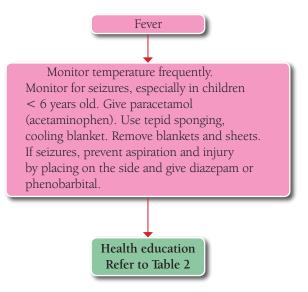
Algorithm 7 Sequential guideline for management of jaundice in severe malaria.

# Disseminated intravascular coagulation (DIC)



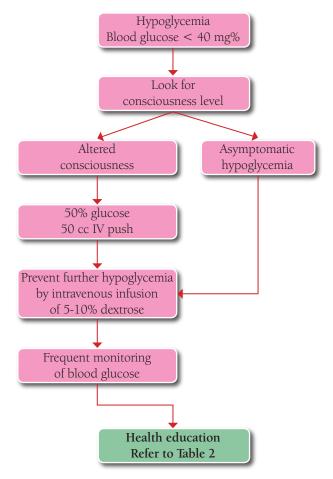
Algorithm 8 Sequential guideline for management of disseminated intravascular coagulation in severe malaria.

### **Fever**



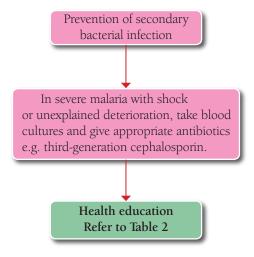
Algorithm 9 Sequential guideline for management of fever in severe malaria.

# Hypoglycemia



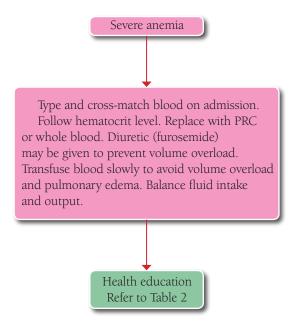
Algorithm 10 Sequential guideline for management of hypoglycemia in severe malaria.

## Prevention of secondary bacterial infection



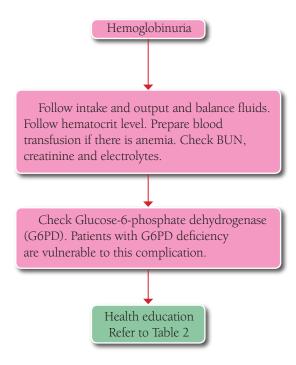
Algorithm 11 Sequential guideline for prevention of secondary bacterial infection in severe malaria.

### Severe anemia



Algorithm 12 Sequential guideline for management of severe anemia in severe malaria.

## Hemoglobinuria



Algorithm 13 Sequential guideline for management of hemoglobinuria in severe malaria.

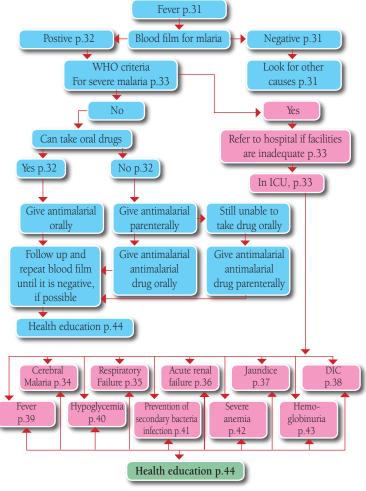
### **Health education**

**Table 2** Health education for treated malaria patients.

### Health education

- ☐ Take medicine until completed.
- ☐ If fever occurs within 2 months after treatment. follow up right away to rule out mixed infection, resistance or recrudescence
- ☐ If the patient traveled to a malaria endemic area and has a fever within 2 weeks to 2 months after travel, be aware of risk of malaria.
- ☐ If the patient has G6PD, educate patient to inform the doctor before taking any medicine.
- Prevention of malaria.
  - Use insecticide-treated bed nets.
  - Use residual insecticide.
  - · Avoid going out at night; use long sleeves and long pants.
  - Use repellent to prevent mosquito bites.

## **Algorithm Index**



**Algorithm 14** Summary of sequential guidelines in the management of severe malaria.