# Investigation and treatment of suspected malaria

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Based on St. George's Hospital ID team guideline, **UK malaria treatment guideline** and **WHO malaria treatment guideline**.

## Background

- Neonates and babies <5kg should all be discussed with paediatric ID
- For endemic countries see: **https://www.cdc.gov/malaria/travelers/about_maps.html**

**Important contacts**

**St George's Paediatric ID:** 020 8672 1255 (bleep via switch)

**STRS:** 020 7188 5000

## Management - See page 2 for management pathway

### Intravenous Antimalarial Therapy

1) Intravenous artesunate for 24 hours
   - 3mg/kg for children < 20kg
   - 2.4mg/kg for children > 20kg

Give at least 3 doses at 0, 12 and 24 hours.
(If IV artesunate is not immediately available substitute with IV Quinine)

After 24 hrs IV artesunate, change to an oral combined artesunate formulation (***Riamet).***

If unable to tolerate oral medication or too unwell, continue with OD IV artesunate for up to 5 days

**NB a course of IV artesunate should always be followed by a full course of combined artesunate formulation (Riamet).**

### Chloroquine/Primaquine

1) Chloroquine 10mg/kg PO, followed by 5mg/kg dose 6 hours later, followed by 5mg/kg OD for 2 days.

**IF >6m old and not G6PD deficient**:
2) Primaquine: 0.25mg/kg PO (Ovale) or 0.5mg/kg (vivax) for 14 days

### Co-artem (Riamet)

6 doses required at the following time intervals:
0, 8, 24, 36, 48 and 60 hours

Doses:
5-14kg: 1 tablet
15-24kg: 2 tablets
25-34kg: 3 tablets
>35kg: 4 tablets
Give with fat containing foods e.g. milk (increases bioavailability)

**Follow up:**

1) Patients should normally be followed up at 2 weeks following discharge, with FBC, malaria film and malaria prevention advice.
2) Further follow up at clinician's discretion.

ROYAL ALEXANDRA CHILDREN'S HOSPITAL

Paediatric Clinical Practice Guideline

Brighton and Sussex University Hospitals NHS Trust

## Management pathway

If any concerns contact Dr Fidler or Paediatric ID at St George's (see contacts)

All patients from SE Asia and Oceania should be admitted and d/w PID

≥1 feature = treat as severe/complicated Malaria
- Impaired Consciousness
- Prostration (unable sit or stand without assistance)
- Convulsions
- Metabolic acidosis (pH <7.3)
- Hypoglycaemia (BSL <3)
- Hb <8
- Renal impairment or haemoglobinuria
- Jaundice (bili >50)
- Pulmonary oedema
- Abnormal spontaneous bleeding
- Signs of shock
- Parasitaemia >2%
- Sickle cell

FEVER +/- other non-specific symptoms (headache, malaise, nausea, vomiting, diarrhoea, abdominal pain)
+
Returning from malaria endemic country in last 8 months

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Investigation to include:

All: Thick and thin films and rapid antigen test, Blood culture, FBC, U&E, LFT, Clotting, CRP, G&S, G6PD, Glucose, Blood gas, sickle status, save serum, urine dip

Consider: Urine MC&S, LP, Stool culture, Viral throat swabs, CXR

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Malaria confirmed?

**Yes**

- **Falciparum**
  - **Uncomplicated**
    1. Start oral Riamet
    2. Admit to level 9
    - Repeat FBC and parasite load after 24hrs
    - Discharge if Hb stable and no increase in parasitaemia
    - Complete co-artem course
    - F/u in 2 weeks
  - **Complicated / unwell / not tolerating oral tx** (also applies to Non-Falciparum)
    1. Address ABCs
    2. Start IV antimalarial therapy asap
    3. Start I.V. Ceftriaxone (or cefotaxime if < 3 months)
    4. Contact Paediatric ID at St Georges and STRS
    5. Admit to HDU or STRS retrieval
- **Non-Falciparum**
  - **Uncomplicated** → Travel from SE Asia or Oceania?
    - Yes:
      1. Admit to Level 9
      2. Discuss treatment with Paediatric ID
    - No:
      1. Start Chloroquine.
      2. If tolerated, consider discharge
      - Review on level 7 following day
      - Repeat FBC and parasite load
      - Start Primaquine if NOT G6PD deficient and >6m
      - If G6PD deficient or <6m d/w Paediatric ID

**No**

- Look for other causes of fever including other imported diseases
- Consider repeat thick/thin film in 12hrs (3 clear films within 48hrs exclude malaria)

**Observations**

All admitted patients should have at least 24hrs of:
- Hourly neuro-observations
- 4 hourly blood sugars (2hourly if on quinine)
- 6hourly FBC, U&E, blood gas if haemolysing
- Daily malaria film