

Nigerian National Antimalaria Treatment guidelines

Pre

- Purpose: To provide guidelines for the treatment of malaria in Pregnant women in Nigeria

Pregnant women

- **Malaria:** An infectious disease caused by plasmodium.
Namely
 - P. Falciparum
 - P. Vivax
 - P. Ovale
 - P. MalariaeIn Nigeria P. Falciparum causes 98% of cases and is most severe; causing the most deaths.
- **Transmission:** occurs by:
 - Anopheles mosquito
 - Blood Transfusion
 - Mother to child in utero transmission.
- **Distribution:** Subtropical and tropical areas of the world but eradicated in certain areas – Europe and America

Definitions

- Uncomplicated Malaria – Fever, no life threatening manifestations.
- Severe Malaria – Fever, presence of *P. Falciparum* asexual parasitemia – no other cause of observed symptoms and presence of life threatening clinical or laboratory features.

Disease Classification

- History – Ask about Age, residence, travel history, fevers, chills.
- Signs –
 - Body temperatures > 37.5 C
 - Enlarged spleen or liver
 - Pallor especially in pregnant women
 - Exclude signs of severe disease.
- Clinical diagnosis:
 - Fever
 - Unexplained pallor
- Laboratory Diagnosis:
 - Standard microscopy
 - Rapid diagnostic tests (RDT)

Assessment and management of uncomplicated malaria

- Objectives –
 - Cure the malaria
 - Prevent further transmission
 - Prevent resistance to drugs.
- Recommendation
 - Artemisinin based combination therapy (ACT)
 - Artemisinin derivative and another effective antimalarial drug. Eg. Recommended in Nigeria is Artemetherol - Lumefantrine

Treatment of uncomplicated malaria

Weight (Age Group)	Number of tablets/dose
5-14kg (6months – 3 yrs)	1 tab twice daily * 3 days
15 – 24 kg (4 – 8 yrs)	2 tabs twice daily * 3 days
25 – 34kg (9 – 14 yrs)	3 tabs twice daily * 3 days
> 35kg (> 14 yrs)	4 tabs twice daily * 3 days

1. Other: Artesunate (4mg/kg) + amodiaquinne (10mg base/kg) daily * 3 days
2. Artesunate (4mg /kg) once daily * 3 days + mefloquine 25mg base/kg. (15mg/kg day 2, 10mg/kg day 3.)
3. Mono therapy is not recommended

Dosage chart for Artemether - Lumefantrine

- Patient advised to return
 - If fever persists for two days after commencement of treatment
 - Immediately if conditions gets worse or develops signs of severe malaria
- On patient return,
 - Check compliance with treatment advise
 - Repeat blood smear
 - Do complete assessment to exclude other possible diseases

Follow up

- **Definition:**

- Presence of P.Falciparum asexual parasitemine
- Fever
- No other causes of symptoms
- Presence of the following
 - Prostration
 - Impaired consciousness
 - Respiratory distress
 - Multiple convulsions
 - Severe anaemia
 - Circulatory collapse (shock)
 - Pulmonary oedema
 - Abnormal bleeding
 - Jaundice
 - Haemoglobinuria
 - Hyper parastemine
 - Renal Failure

Assessment and management of severe malaria

- Objective
 - Save life
 - Prevent recrudescence
 - Avoid minor adverse side effects
- Drug of choice: Parenteral quinine or artemisinin derivative

Anti Malaria treatment in Severe malaria

- Dosage – Quinine dihydrochloride 20mg/kg of salt to a max 1.2 gm (loading dose), diluted in 10ml/kg isotonic fluid by IV infusion over 4 hrs;
- 8 hours later: give 10mg salt to a max of 600mg over 4hrs every 8 hours until patient can take orally.
- Then change to tablets 10mg/kg, 8 hourly to complete a total 7 days Or Give full doze of artemethe – Lumefantrine.

Quinine – IV or IM

- If IV quinine is required for > 48hrs, reduce dose to 5 – 7mg/kg to avoid toxicity. Eg. Reduce dosing frequency to every 12 hrs.
- Do not use loading dose if quinine had been given previous 24hrs.

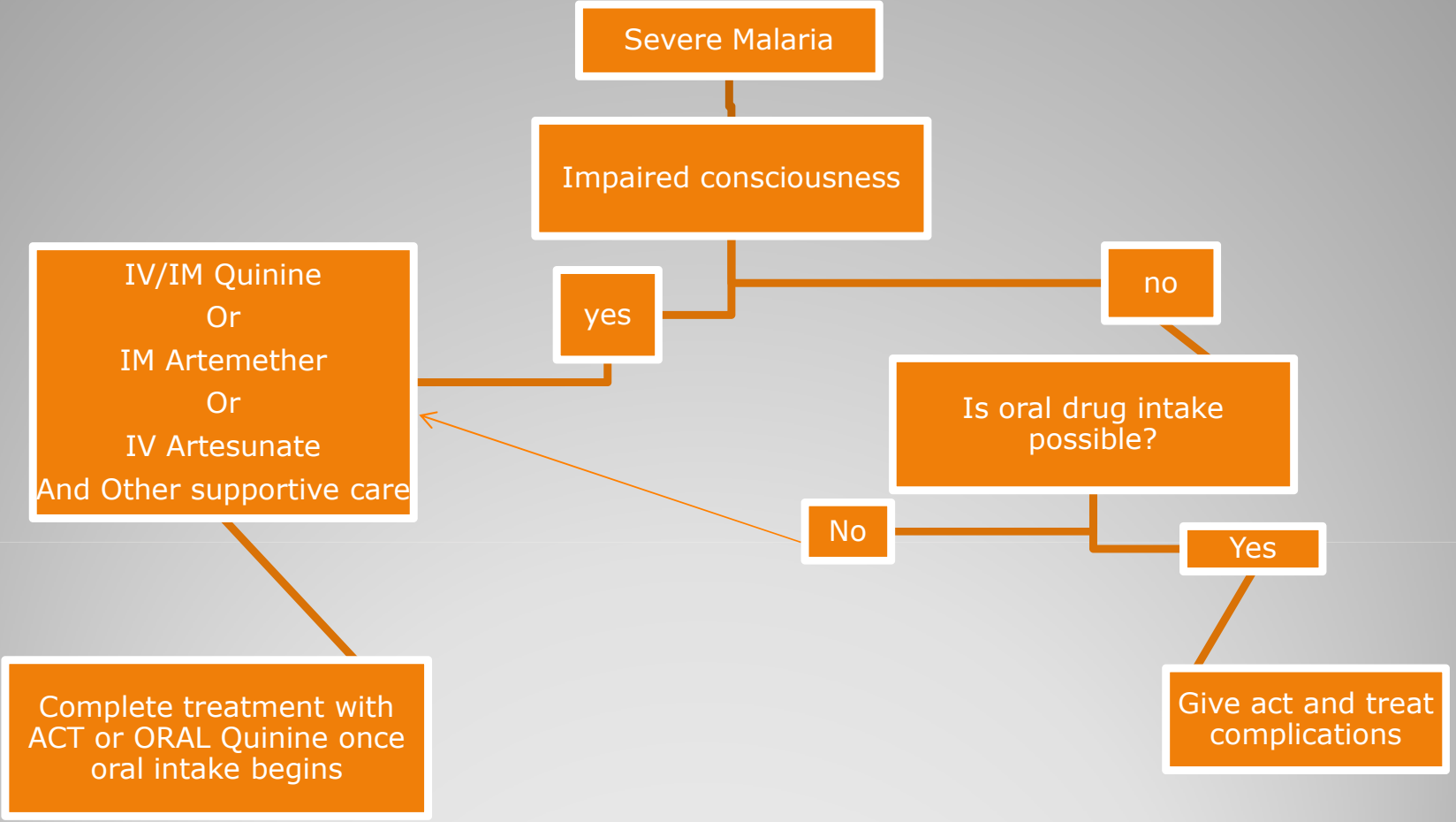
Note

- Quinine dihydrochloride. 20mg/kg salt (loading) dilute to 60 – 100mg/ml IM (divided sites).
- Then 8 hrs after the loading dose, give 10mg/kg 8 hourly until patient starts orally.
- Then quinine tablets 10mg/kg 8 hourly to complete 7 days treatment or give full dose of Artemeter – Lumefantrine.
- Note: Give sterile IM injections into the anterior thigh. DO NOT GIVE AT BUTTOCK.

IM Quinine

- Artesunate:
 - 2.4 mg/kg IV bolus, repeat 1.2mg/kg after 12 hrs.
 - Then 1.2 mg/kg daily for 6 days.
 - *If oral, give full dose of Artemether – Lumefantrine
- Artemether – 3.2 mg/kg loading. Follow by 1.6mg/kg daily for 6 days.
- Once orally capable give full dose Artemether - Lumefantrine

Arthemisinin derivatives in severe malaria alternative to quinine



Treatment algorithm for severe malaria