

TREATMENT GUIDELINE

- Drug Schedule for treatment of Malaria under NVBDCP.
- Treatment of P.vivax cases:
- Chloroquine: 25mg/kg body weight divided over three days i.e. 10mg/kg on day 1, 10mg/kg on day 2nd and 5mg/kg on day 3rd.
- Primaquine: 0.25mg/kg body weight daily for 14 days.

Age-wise dosage schedule for treatment of P. vivax cases				
Age (in years)	Tab. Chloroquine			Tab. Primaquine* (2.5 mg base)
	Day-1	Day-2	Day-3	Day – 1 to Day - 14
< 1	½	1/2	¼	0
1 - 4	1	1	½	1
5 - 8	2	2	1	2
9 - 14	3	3	1½	4
15 & above	4	4	2	6

Primaquine is contraindicated in infants. Pregnant women and individuals with G&PD deficiency. 14 day regimen of Primaquine should be given under supervision

Treatment of uncomplicated P. falciparum cases:

- **Artemisinin based Combination therapy (ACT)***
 - Artesunate 4 mg/kg body weight daily for 3 days
- Plus
- Sulphadoxine (25 mg/kg body weight) – Pyrimethamine (1.25 mg/kg body weight) on first day.
- And
- Primaquine 0.75 mg/Kg body weight on day 2

Caution:-

- Act is not to be given in 1st trimester of pregnancy.
- SP is not to be given to child of age under 5 month and s/he should be treated with Alternate ACT.

The Programme has introduced five different age-group specific Combi Blister packs for SP-ACT. The age group wise dose schedule for the same and the colour of each combipack is given as follows:
Age-wise dosage schedule for treatment of P. falciparum cases:

Age Group (Years)	1st day		2nd day		3rd day
	AS	SP	AS	SP	AS
0-1 Pink Blister	1 (25 mg)	1 (250 mg+12.5mg)	1 (25 mg)	NIL	1 (25 mg)
1-4 Yellow Blister	1 (50 mg)	1 (500+25 mg each)	1 (50 mg)	1 (7.5 mg)	1 (50 mg)
5-8 Green Blister	1 (100 mg)	1 (750+37.5 mg each)	1 (100 mg)	2 (7.5 mg base each)	1 (100 mg)
9-14 Red Blister	1 (150 mg)	2 (500 mg+ 25 mg each)	1 (150 mg)	4 (7.5 mg base each)	1 (150 mg)
15 & above white Blister	1 (200 mg)	2 (750+37.5 mg each)	1 (200 mg)	6 (7.5 mg base each)	1 (150 mg)

- Caution:
- ACT is not to be given in pregnancy.
- SP is not to be given to child of age under 5 month and s/he should be treated with Alternate ACT.

Treatment of uncomplicated P.falciparum cases in pregnancy

1st trimester: Quinine salt 10 mg/kg 3 times daily for 7 days.

Note: Quinine may induce hypoglycemia; pregnant women should not start taking quinine on an empty stomach and should eat regularly, while on quinine treatment.

2nd and 3rd trimester: ACT as per dosage given above.

Treatment of mixed infections (P.vivax+P.falciparum) cases.

All mixed infections should be treated with full course of ACT and Primaquine 0.25 mg per kg body weight daily for 14 days.

Treatment of severe malaria cases.

Severe malaria is an emergency and treatment should be given as per severity and associated complications which can best be decided by the training physician. The guideline for specific antimalarial therapy is as follows:

- **Artesunate:** 2.4 mg/kg body weight IV or IM given on admission (time=0h); then at 12 h and 24 h and then once a day.

(or)

- **Artemether:** 3.2 mg/kg body weight IM given on admission and then 1.6 mg/kg body weight per day.

(or)

- **Arteether:** 150 mg IM daily for 3 days in adults only (not recommended for children).

(or)

- **Quinine:** 20 mg/kg body weight on admission (IV infusion or divided IM injection) followed by maintenance dose of 10 mg/kg body weight 8 hourly. The infusion rate should not exceed 5 mg salt/kg body weight per hour.

Treatment of severe malaria cases.

Severe malaria is an emergency and treatment should be given as per severity and associated complications which can best be decided by the training physician. The guideline for specific antimalarial therapy is as follows:

- **Artesunate:** 2.4 mg/kg body weight IV or IM given on admission (time=0h); then at 12 h and 24 h and then once a day.

(or)

- **Artemether:** 3.2 mg/kg body weight IM given on admission and then 1.6 mg/kg body weight per day.

(or)

- **Arteether:** 150 mg IM daily for 3 days in adults only (not recommended for children).

(or)

- **Quinine:** 20 mg/kg body weight on admission (IV infusion or divided IM injection) followed by maintenance dose of 10 mg/kg body weight 8 hourly. The infusion rate should not exceed 5 mg salt/kg body weight per hour.

(loading dose of Quinine i.e. 20 mg/kg body weight on admission may not be given if the patient has already received quinine or if the clinician fee is in appropriate).

Note: The parental treatment in severe malaria cases should be given for minimum of 24 hours once started (irrespective of the patient's ability to tolerate oral medication earlier than 24 hours).

After parenteral artemisinin therapy , patients will receive a full course of oral ACT for 3 days. Those patients who received parenteral Quinine therapy should receive:

- Oral Quinine 10 mg/kg body weight three times a day for 7 days (including the days when parenteral Quinine was administered) plu Doxycycline 3 mg/kg body weight once a day or Clindamycin 10 mg/kg body weight 12 –hourly for 7 days (Doxycycline is contraindicated in pregnant women and children under 8 year of age).

(or)

- ACT as described.

Chemoprophylaxis.

Chemoprophylaxis should be administered only in selective groups in high *P.falciparum* endemic areas. Use of personal protection measure including Insecticide treated bed nets (ITN)/Long Lasting Insecticidal Nets (LLIN) should be encouraged for pregnant women and other vulnerable population including travellers for longer stay. However, for longer stay of military and para-military forces in high Pf endemic areas, the practice of chemoprophylaxis should be followed wherever appropriate e.g. troops on night patrol duty and decisions of their Medical Administration Authority should be followed.

Short term chemoprophylaxis (upto 6 weeks)

Doxycycline: 100 mg once daily for adult and 1.5 mg/kg once daily for children (contraindicated in children below 8 years). The drug should be started 2 days before travel and continued for 4 weeks after leaving the malarious area.

Note: It is not recommended for pregnant women and children less than 8 years.

Chemoprophylaxis for longer stay (more than 6 weeks)

Mefloquine: 250 mg weekly for adults and should be administered two weeks before, during and four weeks after exposure.

Note: Mefloquine is contraindicated in individuals with history of convulsions, neuropsychiatric problem and cardiac conditions. Therefore, necessary precautions should be taken and all should undergo screening before prescription of the drug.