

# MALARIA



## OVERVIEW

VECTOR: ANOPHELES MOSQUITO

SPECIES: PLASMODIUM SPECIES

- P FALCIPARUM (COMMON AND SEVERE)
- P OVALE/VIVAX (LATENT PHASE)
- P MALARIAE, P KNOWLESI (LESS COMMON)

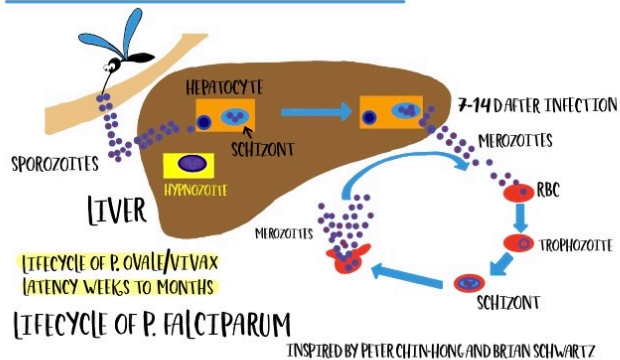
INCUBATION: 12-14 DAYS

RECURRENCE: DAYS-YEARS

## EPIDEMIOLOGY

WIDESPREAD IN THE TROPICS + SUBTROPICS 

## PATHOGENESIS



## UNCOMPLICATED MALARIA

FEVER (MALARIA PAROXYSMS) + EXPOSURE TO ENDEMIC REGIONS  
INFLUENZA-LIKE SYMPTOMS (MALAISE, HA, MYALGIAS, N/V)  
SPLENOMEGALY

### COMMON LAB FINDINGS

ANEMIA, THROMBOCYTOPENIA  
ELEVATED TRANSAMINASES  
MILD COAGULOPATHY  
ELEVATED BUN AND CR  
PARASITEMIA OF < 5%

## SEVERE MALARIA

ACUTE MALARIA + SIGNS OF ORGAN DYSFUNCTION:  
IMPAIRED CONSCIOUSNESS, SEIZURES  
ARDS  
JAUNDICE, ABNORMAL BLEEDING  
SHOCK

### COMMON LAB FINDINGS

SEVERE HEMOLYTIC ANEMIA  
ELEVATED TRANSAMINASES  
COAGULOPATHY  
ELEVATED BUN AND CR  
HYPOGLYCEMIA  
METABOLIC ACIDOSIS (HIGH LACTATE, LOW BICARB)  
PARASITEMIA OF > 5%

ASYMPTOMATIC: ADULTS IN ENDEMIC AREAS

## DX

LIGHT MICROSCOPY

- THICK SMEAR (SENSITIVITY)
- THIN SMEAR (SPECIES, DEGREE OF PARASITEMIA)

RAPID DIAGNOSTIC TESTS (RDT) (NOTE: NOT ALL RDT'S SENSITIVE FOR ALL PLASMODIUM SPECIES)

## DDX

SEE 'FEVER IN A RETURNING TRAVELER' SCHEMA

- DENGUE FEVER
- CHIKUNGUNYA
- TYPHOID FEVER

## TX

UNCOMPLICATED: ARTEMISININ-BASED COMBOTHERAPY (ACT)

SEVERE: ARTESUNATE FOLLOWED BY ACT

P OVALE/VIVAX: PRIMAQUINE OR TAFENOQUINE (CHECK G6PD BEFORE)

## PREVENTION

VECTOR CONTROL (COMMUNITY)

-  BED NETS (INSECTICIDE TREATED)
-  INDOOR SPRAYING OF INSECTICIDE

INSECT AVOIDANCE (INDIVIDUAL)

- INSECT REPELLANT 
- CHEMOPROPHYLAXIS 