



HEMATOPOIETIC & LYMPHATIC 545TEM

-HAYAT BATCH-

SUBJECT: Micro Mid Summary

LEC NO.: 2

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HEMATOPOIETIC & LYMPHATIC SYSTEM

عيط واشرب قموة واستمر بالسعب

Plasmodium 2, Malaria (lec 2)

Morphology

life Cycle

Epidentelogy

1 red nuclear chromatin

- 2 blue cytoplasm
- 3 **brownish**-black malarial pigment, or **hemozoin**











I The sexual cycle begins when a female Anopheles mosquito ingests gametocytes from a human blood then fertilization occurs forming occyst then sporozoites are released 2 The asexual cycle occurs in the human, Sporozoites from the mosquito's salivary glands are injected into the human then producing merozoites

3 The **erythrocytic phase** starts with the attachment of merozoite to a receptor on the RBC surface then producing multinucleated schizont then infected erythrocytes rupture,

Most common P.vivax uncommon P.malarie dangerous P.falciparum rare P.ovale

disease manifestations are moderated by the development of immunity

Pathogenesis

Clinical Presentations

Immunity, diagnosis,

Prevention

Fever: hallmark of malaria (fever is irregular and periodic) fever occurs

48 hours but (P. malariae, 72-hour)

- 2. Anemia becz of: parasitized erythrocytes are phagocytosed, U of marrow function, enlarging spleen
- 3 Circulatory Changes: vasodilatation leads to hypotension
- 4 Thrombocytopenia: becz of splenic pooling
- 5 Acute transient glomerulonephritis
 in falciparum malaria and progressive renal
 disease in chronic P. malariae malaria

incubation period 2 weeks, clinical manifestations vary with the species but include chills, fever, splenomegaly, and anemia note that hallmark of disease is the malarial paroxysm that starts with cold stage (20 to 60 mins) then hot stage (3 to 8 hrs) then wet stage (decrease) In falciparum malaria, capillary blockage may occur, and also they may have cerebral malaria. Jaundice

and acute renal failure are common

Treatment rest on two factors
I infecting **species** of Plasmodium
2 **immune** status of the patient

Falciparum malaria is lethal in nonimmune. At The complete treatment of malaria requires the destruction of the erythrocytic schizont, the hepatic schizont, & the erythrocytic gametocyte Drugs

Chloroquine ... quinine/quinidin ... Primaquine