

# Para Summary made by Dr Abdallah Shehata

Sleeping Sickness (African Trypanosoma)	
Causative agent	Trypanosoma brucei <b>gambiense</b> (chronic), Trypanosoma brucei <b>rhodesiense</b> (acute)
Geographical distribution	Sub-Saharan Africa
Morphology	<b>Polymorphic trypomastigote</b> (long slender, intermediate, short stumpy); flagellated with <b>undulating membrane</b>
Habitat	Blood, lymph nodes, spleen, liver, bone marrow (early); CNS (late)
Infective stage	<b>Metacyclic trypomastigote</b> (in Glossina fly saliva)
Diagnostic stage	<b>Trypomastigotes</b> in blood, lymph, CSF
Definitive host	Human
Intermediate host	<b>Glossina</b> (tsetse fly)
Reservoir host	Animals: antelopes, pigs, goats, dogs
Mode of infection	<b>Tsetse fly bite, blood transfusion, organ transplant, congenital</b>
Pathogenicity	<b>Invasion of lymphatics and CNS</b> causing inflammation, ischemia, and neuronal degeneration
Clinical features	<b>Chancre</b> → fever, lymphadenopathy ( <b>Winterbottom's sign</b> ), hepatosplenomegaly → CNS symptoms (mental apathy, tremors, coma)
Most common presentation (C/P)	<b>Enlarged lymph nodes</b> , irregular fever, headache, <b>somnolence</b>
Most common complications	<b>Meningoencephalitis</b> , coma, secondary infections like pneumonia
Treatment	<b>Early: Suramin, Pentamidine; Late: Melarsoprol; supportive care for anemia, dehydration</b>

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Onchocerciasis (River Blindness)	
Causative agent	<b>Onchocerca volvulus</b>
Geographical distribution	Africa, parts of Latin America and Yemen (endemic near fast-flowing rivers)
Morphology	Adult worms in nodules; microfilariae in skin and eyes
Habitat	Adult: <b>subcutaneous nodules</b> ; Microfilariae: <b>skin and eye tissues</b>
Infective stage	<b>Filariform larva (from Simulium fly)</b>
Diagnostic stage	<b>Microfilariae in skin snip or conjunctival biopsy</b>
Definitive host	<b>Human</b>
Intermediate host	<b>Simulium (blackfly)</b>
Mode of infection	<b>Bite of Simulium fly introducing infective larvae</b>
Pathogenicity	<b>Hypersensitivity and mechanical damage by microfilariae</b>
Clinical features	<b>Dermatitis</b> , pruritus, pigment changes, <b>nodules</b> ; <b>Eye: conjunctivitis, keratitis, uveitis, blindness</b>
Most common presentation (C/P)	<b>Painless nodules</b> , itchy dermatitis, <b>conjunctivitis</b> with <b>photophobia</b>
Most common complications	<b>River blindness</b> ( <u>optic atrophy, uveitis, retinal damage</u> )
Treatment	<b>Ivermectin (microfilariae), Doxycycline (adult worms), Surgical nodule removal</b>