EDITORIAL

Human African *Trypanosomiasis*: A Neglected Disease

Human African *Trypanosomiasis* (HAT) or 'Sleeping Sickness' is a zoonotic disease endemic to 36 Sub-Saharan, African Countries. It is caused by infection due to *Trypanosoma brucei rhodesiense* and is spread by Glossina, the tsetse fly.

Sleeping sickness causing *Trypanosoma spp* are haemolymphatic flagellates that secondarily invade the central nervous system (CNS). It is therefore characterized by recurrent fever and CNS manifestations. Major changes in the immune system occur during the cause of infection that results in lymphadenopathy, splenomegaly, *hypergammaglobulinemia* and *hepatomegaly.*

However, immune mechanisms cannot eliminate all parasites due to parasite surface antigen variation (variant surface antigen) and soluble factors actively on the synthesis of immune factors. They also disrupt normal antigen stimulated *T cells* activation and proliferation as well as *cytokine chemokine* production by *lymphocytes* and *macrophages.*

The pathophysiology of the CNS disease remains obscure. Presentation is also widely varied from change in sleep patter (sleep/wake cycle becomes reversed); neuropsychiatric manifestations such as *hallucinations delirium*, anxiety, emotional lability, attention deficit, aggression mania, confusion. Others include motor: weakness, abnormal muscle tone, gait disturbance, tremor, speech disturbance, sensory and neurologic signs and symptoms. Sometimes patients may present with endocrine abnormalities such as adrenal deficiency, thyroid dysfunction and hypogonodism. Cardiac involvement *(myocardity)* can occur in more severe cases.

Drug treatment from African *Trypanosomiasis* is possible but test is not test for cure. Drug treatment depends on disease stage. Pentamidine, Suramin and Fexinidazole are used for stage 1 and Melarsoprol and Nifurtimox- Eflornithine combination reserved for stage 2 (CNS disease).

There is no test for cure after treatment and patients must be followed up for about 24 months for possible disease recurrence.

The current medicines have significant adverse reactions and should be given under supervision. More effective, less toxic, medications are urgently needed for treatment of HAT. Studies are also needed to determine mechanisms of disease in stage 2 and endocrine organ involvement. More effective parasite control methods are also urgently needed.

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African Journal Of Health Sciences