

A Brief Description of African Sleeping Sickness

Ying Yue*

Department of Virology, Tsinghua University, Beijing, China

Sleeping sickness, also known as human African trypanosomiasis is a life-threatening parasitic disease spread by the tsetse fly and caused by two similar parasite strains, *Trypanosoma brucei gambiense* and *Trypanosoma brucei rhodesiense*. Sleeping sickness in its early stages is frequently misdiagnosed. If the parasite is not treated, it will breach the blood-brain barrier and infect the central nervous system, resulting in advanced sleeping sickness. People acquire neuropsychiatric symptoms such as sleep disturbances, disorientation, lethargy, and convulsions during this stage. Sleeping sickness is typically lethal if left untreated. Insect bites induce sleeping sickness: the parasites that cause the illness can be spread by the bite of infected tsetse flies, transmission from mother to child and having sexual contact [1].

At early stage symptoms are Fever and weakness are non-specific symptoms and a person can be infected for months or even years without displaying any significant signs or symptoms of the disease. But at advanced Level if left untreated, neurological and mental symptoms such as confusion, drowsiness, and convulsions can be fatal. Invasive testing is utilized to confirm a positive result from the quick diagnostic tests used for community screening in the diagnosis of sleeping sickness. A microscope is used to confirm the presence of the parasite in any body fluid, most commonly the blood and lymph system. To identify the parasite in spinal fluid, which shows the advanced stage of the disease, painful lumbar punctures are employed. Because it can cure both stages of gambiense sleeping sickness, the new drug fexinidazole has the potential to reduce the frequency of lumbar punctures [2].

Treatments for stage-2 cancer were hazardous or difficult to give prior to 2009. Melarsoprol, an arsenic derivative, was invented in 1949. It is no longer used to treat gambiense sleeping sickness because it kills up to 5% of those who take it, but it is still the only treatment option for advanced rhodesiense sleeping sickness. NECT (Nifurtimox-eflornithine combination therapy) was launched by DNDi and partners in 2009, after leaving it the first new treatment for sleeping sickness in 25 years; nonetheless, it requires specialized hospital administration and trained staff. The European Medicines Agency recommended fexinidazole, an all-oral 10-

day medication that we developed with our collaborators, for treatment of both stages of gambiense sleeping sickness at the end of 2018. In all 13 nations with recent sleeping sickness instances, NECT has been offered free of charge. NECT is provided by the World Health Organization (WHO) thanks to medicine donations from Sanofi and Bayer. Sanofi will give fexinidazole supply starting in 2019 [3].

The World Health Organization has set a goal of eliminating sleeping sickness as a public health issue by 2020. A safe, effective, short-course oral therapy suited for usage in distant settings is needed to sustain present low illness levels and meet the elimination aim. 8.5 million Individuals live in locations that are moderately to extremely dangerous. In 2019, there were fewer than 900 cases of the T.b. gambiense strain, compared to approximately 38,000 in 1998. Historically, devastating epidemics have occurred after periods of disease control [4].

References

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*Address for Correspondence: Ying Yue, Department of Virology, Tsinghua University, Beijing, China, E-mail: ying@yue.ac.cn

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