AFRICAN TRYPANOSOMIASIS

Patient Information Fact Sheet

>What is sleeping sickness?

African trypanosomiasis (also known as sleeping sickness) is a parasitic disease spread by the bite of an infected tsetse fly. According to the World Health Organization, the disease is found in 36 sub-Saharan countries. The disease can develop in a single village or an entire region. Within an infected area, the intensity of the disease can vary from one village to the next.

>What are the symptoms of sleeping sickness?

The first symptoms are seen at the site of the bite where a painful nodule can develop. Fever, headache, joint pains, itching, enlarged lymph nodes, daytime drowsiness, weakness, sweating, and rash may also be noted. If left untreated, the disease will progress to cause body wasting, sleep disturbance, and eventually death.

>How do you contract and diagnose sleeping sickness?

Sleeping sickness is primarily transmitted by the bite of an infected tsetse fly. These flies are often found in game parks, and are about the size of a house fly. Tsetse flies are attracted to moving vehicles and will often follow safari trucks. They bite during the day time.

The disease is very rare in the United States and is found only in those who have traveled to or lived in parts of Africa. The incubation period is usually 3 days to a few weeks for the strain found in eastern and southern Africa, and several months to years in west and central Africa.

If you have returned from Africa and exhibit any of the symptoms noted above, you can talk to your doctor about having blood or spinal fluid tests performed. You may be referred to an infectious disease specialist.

The best prevention is to keep the flies away by closing windows in houses and safari vehicles when possible. Wear long-sleeved shirts and pants in neutral colors because the tsetse flies are attracted to bright and dark colors; avoid bushes as well. Kill any flies that enter with a 'knock down' fly spray. Repellents offer limited protection.

>How is sleeping sickness treated?

Drug treatments are available based on the parasite subspecies and disease stage. First-line drugs for both first and second stages are highly effective. **Pentamidine** (Nebupent, Pentam), delivered into a vein or muscle, is used to treat first stage *T. b. gambiense* infection. Minor adverse effects include hypoglycemia, injection site pain, diarrhea, nausea and vomiting.

Suramin is used to treat first stage *T. b. rhodesiense* infection. Some adverse effects include rash, kidney toxicity, and peripheral neuropathy (nerve damage that causes a tingling or burning in your hands and feet).



Effornithine (intravenous infusion) is used to treat second stage *T. b. gambiense* infection. Although highly effective, adverse effects include bone marrow suppression (which can reduce your immunity), gastrointestinal symptoms, and seizures. A combination treatment of nifurtimox and effornithine has been introduced as well.

Melarsoprol, an organoarsenic compound, is the only drug available for treating second stage *T. b. rhodesiense* infection. **Prednisolone** (a corticosteroid) is administered with melarsoprol to reduce the risk of life-threatening encephalopathy. Other associated adverse effects include skin reactions, gastrointestinal upset, and peripheral neuropathy. Patients should undergo a spinal tap every 6 months (or sooner, if symptoms return) for 2 years after treatment to detect a relapse should it occur.

>Further information

MASTA Travel Health: www.masta-travel-health.com.

Centers for Disease Control and Prevention: www.cdc.gov/parasites/sleepingsickness/health_professionals/index.html#tx

World Health Organization: www.who.int/mediacentre/factsheets/fs259/en/

Date reviewed: May 2013

