

Chagas Disease: No Longer Exotic

This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

Chagas disease, spelled c-h-a-g-a-s and pronounced shaw-gus, is caused by the parasite *Trypanosoma cruzi*. It is most commonly spread by infected bugs called triatomines, but it can also be spread through blood transfusion, organ transplantation, congenitally, and through lab accidents. In Latin American countries, the triatomines are known by other names, including “kissing bug,” “benchuca,” “vinchuca,” or “barbeiro.”

The disease is endemic in many areas of Mexico and Central and South America. People living in the U.S. who migrated from these areas may be infected. It’s estimated that there are 300,000 or more infected Latin Americans in the U.S., most of whom are not aware that they’re infected. Although there are triatomines in the U.S., vectorborne cases of Chagas disease have rarely been documented. Measures are now in place to screen the U.S. blood supply for Chagas, and CDC has begun a widespread effort to increase awareness and to help ensure that individuals who test positive are appropriately evaluated and treated. It may be reassuring for patients to know that contact with CDC for testing and consultation regarding treatment has no effect on immigration status.

In Latin America, triatomines thrive in poorly constructed and usually rural housing conditions, where they live within mud walls and thatched roofs. At night, they emerge from their hiding places to feed and then defecate on people. Transmission occurs when parasites in the bug feces enter a wound or penetrate a mucous membrane, such as the eye. Acute infection, which is often asymptomatic or characterized by mild illness, lasts an average of four to eight weeks. The infection then becomes chronic and people typically remain asymptomatic for years or even decades.

Approximately 20 to 40 percent of chronically infected people eventually develop clinical disease, typically with cardiac and occasionally with gastrointestinal manifestations. Chagas can be life threatening in both the early and late stages of the infection. In chronic infections, cardiac disease usually begins with conduction abnormalities, such as right bundle branch block and/or left anterior fascicular block, which may be followed years later by dilated cardiomyopathy. Later, cardiac disease is sometimes accompanied by apical aneurysm and thrombus formation, and patients may be at an increased risk for strokes. Even in people with asymptomatic disease, a clinical evaluation is necessary.

In patients who become immunocompromised, Chagas disease can reactivate as a febrile syndrome that may be accompanied by skin lesions, myocarditis, or meningoencephalitis. Two drugs, nifurtimox and benznidazole, are the worldwide standards for antiparasitic treatment. These drugs are not approved in the U.S., but are available from CDC for use under investigational protocols for compassionate treatment.

A detailed patient history, including the level of patient familiarity with the insect and living conditions in his or her country of origin, as well as blood transfusion and organ transplant history, will help in determining persons who may possibly be infected. Diagnosis and treatment

guidelines in English, along with photographs of the bug, can be found online at www.cdc.gov/chagas. They can be found in Spanish at www.cdc.gov/chagas/es.

Through your state health department, you can request blood sample testing for Chagas disease. If you have questions about the disease, diagnosis, or treatment, or you need a clinical consult with medical personnel, contact CDC's Division of Parasitic Diseases directly at 770-488-7775. You can also email them at chagas@cdc.gov.

For more information, please visit the Chagas Disease webpage at www.cdc.gov/chagas and click "Resources for Health Professionals." Fact sheets for medical providers and patients are available, as well as links to other resources.

For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.