Agent of Chagas' disease from Honduran vector capable of developing in California insects:

*trying to infer text*
found throughout large areas of the United States and potential vectors are even more widely distributed. Thus, like the mosquito vectors of malaria and yellow fever which also occur in parts of the United States, the potential exists for the introduction of exotic strains of \textit{T. cruzi} and their establishment in local vectors. Although up to the present time this has been considered only a theoretical possibility with Chagas' disease, the continued immigration of people from endemic areas of Latin America to the United States increases the possibility of such introductions. Historically this has already occurred with malaria and yellow fever. The investigation reported herein suggests that there may be strains of \textit{T. cruzi} in Latin America that will adapt to vectors in the United States.

The feces from uninfected \textit{Triatoma p. protracta} fed on the mice inoculated with cultured organisms were found positive for \textit{T. cruzi} in August 1983. On that date five, 3-week old Swiss random-bred mice were inoculated intraperitoneally with 0.1 cc of fecal material from the hindgut of a reduviid bug, \textit{Triatoma dimidiata} collected near Winters, California, were allowed to feed on the bug's feces. The feces from the insect vector is the major means of infecting people from endemic areas of Latin America to the United States. Nevertheless, the results of a blood survey of residents of the Lake Don Pedro area in Tuolumne County showed that the percent of positive serums collected is less than the percent of positive sera collected from people in a nonendemic area (San Francisco, California). The wildlife reservoirs and domestic animal vectors. Contaminative transmission via infective reduviid vectors, provide an opportunity for the establishment of both domestic and rural foci which are a constant threat to the health of people living in these areas. Urban foci of infected bugs in Central America have been found throughout much of the United States, Mexico, and South America have also been found in parts of the United States. This has generally been reported to extend from 38 degrees N latitude (northern Mexico) to 38 degrees S latitude (central Argentina). Indeed, there have been only three reported naturally acquired cases in the United States. The investigation reported herein indicates that pathogenic strains of \textit{T. cruzi} are present in the United States and \textit{T. cruzi} may be capable of establishing itself here. The potential exists for \textit{T. cruzi} to be maintained in the California insect for over 15 months.

The feces from uninfected \textit{Triatoma p. protracta} fed on the mice inoculated with cultured organisms were found positive for \textit{T. cruzi} in August 1983. On that date five, 3-week old Swiss random-bred mice were inoculated intraperitoneally with 0.1 cc of fecal material from the hindgut of a reduviid bug, \textit{Triatoma dimidiata} collected near Winters, California, were allowed to feed on the bug's feces. The feces from the insect vector is the major means of infecting people from endemic areas of Latin America to the United States. Nevertheless, the results of a blood survey of residents of the Lake Don Pedro area in Tuolumne County showed that the percent of positive serums collected is less than the percent of positive sera collected from people in a nonendemic area (San Francisco, California). The wildlife reservoirs and domestic animal vectors. Contaminative transmission via infective reduviid vectors, provide an opportunity for the establishment of both domestic and rural foci which are a constant threat to the health of people living in these areas. Urban foci of infected bugs in Central America have been found throughout much of the United States, Mexico, and South America have also been found in parts of the United States. This has generally been reported to extend from 38 degrees N latitude (northern Mexico) to 38 degrees S latitude (central Argentina). Indeed, there have been only three reported naturally acquired cases in the United States. The investigation reported herein indicates that pathogenic strains of \textit{T. cruzi} are present in the United States and \textit{T. cruzi} may be capable of establishing itself here. The potential exists for \textit{T. cruzi} to be maintained in the California insect for over 15 months.

The feces from uninfected \textit{Triatoma p. protracta} fed on the mice inoculated with cultured organisms were found positive for \textit{T. cruzi} in August 1983. On that date five, 3-week old Swiss random-bred mice were inoculated intraperitoneally with 0.1 cc of fecal material from the hindgut of a reduviid bug, \textit{Triatoma dimidiata} collected near Winters, California, were allowed to feed on the bug's feces. The feces from the insect vector is the major means of infecting people from endemic areas of Latin America to the United States. Nevertheless, the results of a blood survey of residents of the Lake Don Pedro area in Tuolumne County showed that the percent of positive serums collected is less than the percent of positive sera collected from people in a nonendemic area (San Francisco, California). The wildlife reservoirs and domestic animal vectors. Contaminative transmission via infective reduviid vectors, provide an opportunity for the establishment of both domestic and rural foci which are a constant threat to the health of people living in these areas. Urban foci of infected bugs in Central America have been found throughout much of the United States, Mexico, and South America have also been found in parts of the United States. This has generally been reported to extend from 38 degrees N latitude (northern Mexico) to 38 degrees S latitude (central Argentina). Indeed, there have been only three reported naturally acquired cases in the United States. The investigation reported herein indicates that pathogenic strains of \textit{T. cruzi} are present in the United States and \textit{T. cruzi} may be capable of establishing itself here. The potential exists for \textit{T. cruzi} to be maintained in the California insect for over 15 months.
weeks before gradually subsiding. During the second
with fever, fatigue, and anorexia. On examination by
Pedro had evidence of either acute
tensiok, and heart failure may occur during the
intensity of the fever. Heart enlargement, hypo-
selective media grew
Fever, fatigue, and headache are seen initially. The
week of the acute phase, there is edema of the face
by culture of cerebrospinal fluid in appropriate
media has been reported.Is Elevation of albumin in
show abnormalities, even in patients without central
padents in the acute phase will show no ECG
waves. However, up to 50% of the
T. cruzi
muscle stimulated by the immunologic reaction
of chronic Chagas' disease. The
The cardiovascular system
In addition, patients may have episodes of vomiting
with an abnormal ECG.Ig The infection, however, is
developed a complement fixation titer of 1:512.16
chronic Cha-
and 10%
T. cruzi
was always culturable from the
lymphadenopathy referred to as the Romaña sign,
patients, six of whom had the hemifacial edema and
infections there are two phases to the di~ease. The
Honduras,lg the infection in Hondurans appears
lymphadenopathy is very low. Blood smears will usually fail to
demonstrate organisms. Blood cultures may reveal
organisms but serologic tests are usually resorted to
for the diagnosis of chronic Chagas' disease. The
W. cruzi.19 The index case, however, did present
endemic areas of pathogenic
The clinical signs and symptoms often disappear at
with chronic heart disease and enteromegaly may
infections with
T. cruzi
was always culturable from the
muscle of the gastrointestinal tract and the myocar-
dial bodies produced against
endocardium, vascular structures, and inter-
against endocardium, vascular structures, and inter-
third and fourth decade of life that the majority
of chronically infected individuals begin to evidence
ECG
patterns. It is during
T. cruzi
hernia of Tegucigalpa positive for
United States. At least 1593 of these have settled in
California. Contrary to statements that human
Ponce and &ledong report that
Honduras and
were found positive serologically. Fifty blood
were found to have a positive
CF titer for
T. cruzi.~

One hundred eight patients
for
T. cruzi.~

Eight
T. cruzi
were not reported from

Central American
T. cruzi
in California vector
concluded that Chagas' disease in Honduras appeared to present a serious public health problem, particularly with regard to heart disease.

Considering the apparent prevalence rate in Honduras, the period of asymptomatic disease, and the number of Hondurans that have immigrated to the United States, there may be as many as 7000 individuals infected with Honduran strains of *T. cruzi* in the United States at the present time. Even though these individuals are asymptomatic for the disease they have organisms in their circulation in sufficient quantities to infect insect vectors that...