HUMAN T-LYMPHOTROPIC VIRUS TYPE I: NEW RISK FOR CHILEAN POPULATION

To the Editor:

Human T-lymphotropic virus type I (HTLV-I), a human retrovirus, has been etiologically associated with adult T-cell leukemia (ATL) and with a demyelinating neurologic disorder termed tropical spastic paraparesis (TSP) or HTLV-I-associated myelopathy (HAM), and has raised concern that spread of this virus by blood transfusion may result in disease among recipients.1

HTLV-I is highly endemic in Japan and the Caribbean where different prevalence rates have been reported in donors or in the general population.4-5

In 1989, Cartier et al reported in a large group of Chilean patients with slowly progressive spastic paraparesis of unknown etiology, the presence of antibodies to HTLV-I in serum and cerebrospinal fluid. This was the first report of HTLV-I in a population from a temperate climate region.6 We evaluated the seroprevalence of HTLV-I antibodies in 954 healthy blood donors in Santiago, Chile. Donor samples were tested by two different methods, Serodia HTLV-I Passive Particle Agglutination Test (Tokyo, Japan) and Abbott HTLV-I EIA (Chicago, IL). The reactive samples were studied by two different methods, Serodia HTLV-I Passive Particle Agglutination Test (Tokyo, Japan) and Abbott HTLV-I EIA (Chicago, IL). The reactive samples were studied by Western blot Dupont in the national reference AIDS laboratory at the Public Health Institute in Santiago. Our results were further analyzed by Western blot and radio immunoprecipitation assay in the HTLV-I Research and Development Department, Abbott Laboratories, and confirmed (Table 1).

Table 1. Confirmatory Results From Screening Reactive Samples

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Confirmed</th>
<th>Indeterminate</th>
<th>Negative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott (+)</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Serodia (+)</td>
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<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Abbott</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>16</td>
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</tbody>
</table>

Considering only positive confirmatory results, the seroprevalence rate was 0.73%. Studies are in progress to discover the real seroprevalence rate considering the seven indeterminate cases. All samples were negative for hepatitis B surface antigen (HBsAg), human immunodeficiency virus (HIV), syphilis, and Chagas' disease.

Our data show an unexpected high HTLV-I seroprevalence in a healthy blood donor population. Therefore, it becomes crucial in a widespread screening program in the overall Chilean population to make a decision as to whether the search of HTLV-I antibodies should be considered as a pretransfusional routine test, as is done with HIV.

PATRICIA VASQUEZ
Hospital Salvador Blood Bank
Santiago, Chile
GERARDO SANCHEZ
CLAUDIA VOLANTE
LILIAN VERA
EUGENIO RAMIREZ
GUIDO SOTO
National Reference AIDS Laboratory
Public Health Institute
Santiago, Chile
HELEN LEE
HTLV-I Research and Development Department
Abbott Laboratories
Chicago, IL

REFERENCES

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P Vasquez, G Sanchez, C Volante, L Vera, E Ramirez, G Soto and H Lee