Low Prevalence of Hepatitis B and C Markers in a Non-Amazonian Indigenous Population

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In Brazil, there is a high prevalence of markers of infection with the hepatitis B virus among groups living in the Western Amazon. Neighboring countries and indigenous peoples should also be included in that context [1-6].

There are virtually no data available on the prevalence of viral hepatitis markers among indigenous groups living outside the Amazon region or about parenterally transmitted hepatitis.

Figueiredo et al. [7] reported the prevalence of HBV and HCV markers among the native Xacriabá people living in the northern part of the State of Minas Gerais; they found 0.5%, 2.9%, 62.5, and 0.5% for HBsAg, anti-HBc, anti-HBs and anti-HCV, respectively. This group is just as acculturated as the Terena and has a long history of contact with modern Brazilian society.

To assess this situation, a sero-epidemiological study was conducted in August 1999, involving 312 Amerindians from the Buriti, Córrego do Meio and Água Azul reservations, located in the municipalities of Sidrolândia and Dois Irmãos do Buriti, 100km from Campo Grande, the state capital of Mato Grosso do Sul (Brazil). The samples were randomly selected, and family groups were included.

This study included all age groups, from children under 1 year to individuals older than 65. Each age group was stratified according to gender (Table 1).

The material was collected, centrifuged, and separated into varying aliquots. Tests for anti-HBc, anti-HBs and anti-HCV markers were conducted at the Oswaldo Cruz Foundation (Fiocruz-RJ) National Viral Hepatitis Center. There were small differences in the number of tests for each marker due to limitations in the quantity of material.

None of the samples were positive for HBsAg or anti-HCV. Anti-HBc gave positive results in 2.2% of the samples and anti-HBs in 13.6%. The high percentage found for anti-HBs positivity could be a result of immunity that was artificially acquired through vaccination.

We found very low positivity rates for the above markers in this population. There are discrepancies between our data and findings previously reported for the same region. Aguiar et al. [8] found prevalence rates of 0.7%, 9.4% and 2.5% for HBsAg, anti-HBc and anti-HCV, respectively among first-time donors in Campo Grande. In a study of people of African descent living 65 km from Campo Grande and 40 km from the municipality of Jaraguari (Mato Grosso do Sul), Castro [9] found rates of 9% and 43% for HBsAg and anti-HBc, respectively.

These variations in prevalence need to be better explained; it may be necessary to use an approach involving other components. Authors such as Brabin et al. [10], Passos et al. [11], and Coimbra et al. [12] have suggested that other variables can influence HBV prevalence rates, which would mean that a simple epidemiological model of this disease is not realistic.

It is sometimes necessary to take into account peculiarities of certain population groups in which different values, norms and cultural standards may be involved in health/illness processes [13].
Table 1. Breakdown of the Amerindian population from the Buriti, Córrego do Meio and Água Azul reservations tested for viral hepatitis in August 1999, divided by age group and gender

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. (%)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>0-4</td>
<td>10 (41.7)</td>
<td>14 (58.3)</td>
</tr>
<tr>
<td>5-9</td>
<td>29 (49.1)</td>
<td>30 (50.9)</td>
</tr>
<tr>
<td>10-19</td>
<td>44 (46.3)</td>
<td>51 (53.7)</td>
</tr>
<tr>
<td>20-44</td>
<td>23 (31.9)</td>
<td>49 (68.1)</td>
</tr>
<tr>
<td>45-64</td>
<td>18 (47.3)</td>
<td>20 (52.7)</td>
</tr>
<tr>
<td>65</td>
<td>13 (54.2)</td>
<td>11 (45.8)</td>
</tr>
<tr>
<td>Total</td>
<td>137</td>
<td>175</td>
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References