Table 1. Ig classes and titers of anti-Wr*  

<table>
<thead>
<tr>
<th>IgM titer*</th>
<th>0</th>
<th>2</th>
<th>4</th>
<th>8</th>
<th>16</th>
<th>32</th>
<th>64</th>
<th>128</th>
<th>256</th>
</tr>
</thead>
<tbody>
<tr>
<td>IgG titer*</td>
<td>2*</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* Determined by using dithiothreitol-treated sera and anti-IgG by indirect antiglobulin test at 37°C in V-well microplates; 0.5 percent red cell suspensions were used.
† Determined by direct agglutination (of dithiothreitol-sensitive sera) at room temperature in V-well plates; 0.2 percent red cell suspensions were used.
‡ Numbers indicate sera having the appropriate titer.

On proper terminology

To the Editor:

Those who review articles submitted for publication undoubtedly are aware of the editorial process that is undertaken to ensure, to the greatest extent possible, that 1) the presented data are believable; 2) the conclusions are valid; 3) the data have not been substantially reported previously; 4) the topic will be of interest to readers; and 5) the article is both grammatically and stylistically correct. TRANSFUSION has an editorial board that sets the policies of the journal with respect to the required format for manuscript submission as well as the review process and matters of style. An edict on acceptable blood group terminology, with which all papers submitted must comply, has been issued and is referenced in the Guidelines to Authors that appear in the first issue of each volume. It behooves authors to submit manuscripts that conform to these policies, to increase the likelihood that the paper will be accepted and to prevent delay in publication. It is the responsibility of the reviewers to reject submissions that do not merit publication for whatever reason(s), including, in my opinion, poor grammar and nonconformity of style. The final review for grammar and style is the responsibility of the editorial staff. Failure to fulfill that responsibility was apparently to blame for inclusion of the following sentence in the recent article by Smith et al.2 that appeared in TRANSFUSION:

Anti-E was present homozygously on all of the reacting cells; it was also present on some nonreacting cells, but only heterozygously (a fact that could have accounted for the nonreactivity).

That this sentence was ever written is a shame. That it was published is worse! Nonetheless, readers with some training in immunohematology can probably deduce what the authors were attempting to convey. My interpretation is that the anti-E exhibited dosage; that is, it reacted with all E+e- red cells (from individuals presumed to be homozygous for the E gene) and reacted weakly or not at all with E+e+ red cells (from E heterozygotes). However, adding to the confusion is the authors' claim that the antibody was present on some nonreacting E+e+ red cells. Since tests with such cells were nonreactive, what laboratory observation led them to that conclusion?

A common error among blood bankers is to refer to red cells derived from heterozygotes as heterogeneous red cells, and likewise with red cells from homozygotes. However, zygosity is not a property of cells, let alone antibodies, as Smith et al.2 would have us believe. Rather, the use of the adjectives heterogeneous and homozygous should be restricted to description of the genetic constitution of a being or organism.1

The intent of the article by Smith et al.2 is to educate medical technologists on the vagaries of interpreting the results of antibody identification tests. However, effective education requires proper use of the English language and, between the covers of each issue of this journal, proper use of serologic terminology clearly, the editorial board and staff of TRANSFUSION need to be reminded of the established policies. If such are to be ignored, perhaps this letter deserves an answer to that effect. If the policies are to remain, more diligence than such are to be ignored, perhaps this letter deserves an answer to that effect. If the policies are to remain, more diligence than is currently exercised will be required of those who review and edit submitted manuscripts.

We are told that people who live in glass houses should not throw stones. I will be the first to admit that scientific writing is an art that does not come easily and that, without doubt, articles that have been submitted have been improved by editorial changes. I am also reminded of an article I once reviewed that contained a sentence beginning "Red cells homozygous for clinically significant antigens is..." Surely, everyone knows that the last word should be are!

W. JOHN JUDD, FIMLS, MIBiol
University of Michigan
University Hospitals, UH-2G32
1500 East Medical Center Drive
Ann Arbor, MI 48109-0054

References

Human T-lymphotropic virus type I infection among blood donors in the Solomon Islands

To the Editor:

We recently demonstrated an overall seroprevalence of human T-lymphotropic virus type I (HTLV-I) infection of 2.2 percent among hospitalized patients from widely separated regions in the Solomon Islands and have identified a case of HTLV-I myeloneuropathy in a lifelong resident of Guadalcanal. In addition, we have isolated highly divergent molecular variants of HTLV-I from Melanesian Solomon Islanders. These findings establish unequivocally that HTLV-I is endemic in Melanesia. We have now conducted a preliminary serologic survey to determine the prevalence of HTLV-I infection among healthy blood donors in the Solomon Islands.

Sera were collected in 1988 from 435 healthy Melanesians (370 men and 65 women) who donated blood at the Central Hospital, a 250-bed facility that serves as the primary referral center in the Solomon Islands. Of the 175 donors whose ages were known, the range was 15 to 59 years; 157 donors were from 15 to 29 years old. The ages for the remaining 260 donors were not known to us. Hepatitis B virus surface antigen was found in 81 (18.6%) donors. All sera were stored at -20°C until shipment on dry ice to Bethesda, MD, where they remained frozen at -70°C until testing. Sera were screened for IgG antibodies against HTLV-I by the indirect immunofluorescence antibody (IFA) technique, using SI-1 cells, a T-cell line persistently infected with an HTLV-I variant from a Solomons Islander, and an uninfected T-cell line (MOLT-3). Sera from 4 donors deemed positive by IFA and from 7 randomly selected IFA-negative individuals were tested by HTLV-I Western immunoblot (DuPont, Wilmington, DE), as described previously. HTLV-I seropositivity was based on reactivity to HTLV-I gag-encoded proteins p19 and p24 and the external envelope glycoprotein gp46 and/or transmembrane protein gp21. As determined by IFA and verified by strict Western immunoblot criteria, 3 blood donors (a 28-year-old woman and 2 young men) were seropositive for HTLV-I, for overall seroprevalence of 0.7 percent (3/435). One of the IFA-positive donors and 2 of the 7 IFA-negative donors had indeterminate Western blots (reactive only to gag proteins), and the remaining 5 IFA-negative donors had negative blots (no bands). The 0.7 percent prevalence of HTLV-I infection among blood donors in the Solomon Islands, as compared to the 2.2 percent incidence in hospital patients, probably reflects the younger age and better health status of this group. Although the prevalence of 0.7 percent appears low, it is 30 times the approximately 0.02 percent prevalence found among blood donors in the United States.

Screening of whole blood donations for HTLV-I is not currently practiced in the Solomon Islands. Providing a blood supply devoid of all common transfusion-acquired viral pathogens is not always realistic for health ministries in the Third World, which are faced with already small, and now dwindling, budgets. Difficult choices must be made between detecting viruses that are prevalent and deadly (e.g., hepatitis B virus) and detecting those that are prevalent but not particularly virulent (e.g., HTLV-I). Although the number of donors tested was too small to calculate the risk of transfusion-acquired HTLV-I infection, any estimated risk would have to be lower than the risk of acquiring hepatitis B virus, because of the markedly higher prevalence of hepatitis B virus among blood donors.

Richard Yanagihara, MD, MPH
Colleen Hefner, BA
Laboratory of Central Nervous System Studies
National Institute of Neurological Disorders and Stroke
National Institutes of Health
Building 36, Room 5B-21
Bethesda, MD 20892
Andrew B. Ajdukiewicz, MD
Ministry of Health and Medical Services
Central Hospital
Honiara, Solomon Islands

References