the manufacturers’ instructions. The results were interpreted as being seropositive if the optical density (OD) value of the sample was more than that of the cut-off value. Only seropositive cases were tested for IgG antibodies against CMV and HSV. CMV IgG was tested by using the ELFA (Enzyme linked fluorescent assay) technique and the HSV IgG was tested by using the ELISA technique.

All seropositive cases were in the age group of 22-30 years and were asymptomatic. Seropositivity for CMV and HSV in BOH cases is shown in the table. The difference in seropositivity of CMV between BOH and control cases was statistically significant ($P < 0.05$) and for HSV was statistically insignificant ($P > 0.05$). These findings were consistent with earlier studies.[1,2,4] Out of seven CMV seropositive cases, three cases were positive for both IgG and IgM and the remaining two were positive for IgM only. Out of five HSV IgM seropositive cases, three were positive for IgG and IgM and the remaining two were positive for IgM only. IgG seropositivity has also been demonstrated in a previous study.[2] The present study demonstrates the association of these infections with various obstetric losses which is comparable to the observations by other authors.[2,4] Fetal outcome was studied in seropositive cases.

Table: Seroprevalence of IgM antibodies against CMV and HSV in pregnant women with bad obstetric history

<table>
<thead>
<tr>
<th>Obstetric history</th>
<th>Number of women tested</th>
<th>No. (%) of CMV IgM</th>
<th>No. (%) of HSV IgM</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOH</td>
<td>150</td>
<td>7 (4.67)</td>
<td>5 (3.33)</td>
</tr>
<tr>
<td>Recurrent abortions</td>
<td>150</td>
<td>3 (2.00)</td>
<td>4 (2.67)</td>
</tr>
<tr>
<td>Congenital malformation</td>
<td>14</td>
<td>2 (14.28)</td>
<td>-</td>
</tr>
<tr>
<td>Intrauterine death (IUD)</td>
<td>13</td>
<td>1 (7.69)</td>
<td>-</td>
</tr>
<tr>
<td>Preterm delivery</td>
<td>12</td>
<td>1 (8.33)</td>
<td>1 (8.33)</td>
</tr>
</tbody>
</table>

Thus, it is concluded that CMV and HSV infections are responsible for some obstetrical losses. Unfortunately, there is no vaccine for prevention and there is no way to prevent fetuses from becoming infected once the mother acquires the infection. It is suggested that women in the reproductive age group should be screened for CMV and HSV infections especially in a developing country like India along with preexisting antenatal screening for HIV and syphilis.

References


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Seroprevalence of HIV, Hepatitis C and Hepatitis B in Multitransfused Thalassemics

Dear editor,

In recent years, there has been increased public concern about the safety of blood transfusion with respect to transfusion-transmitted infections. Human immunodeficiency, Hepatitis B and Hepatitis C viruses are transmissible by blood transfusion and are associated with important clinical diseases. Blood units are screened with assays of steadily increasing sensitivity due to availability of antibodies against Hepatitis B surface antigen (HBsAg) since 1971,[1] against HIV since 1989 and against Hepatitis C virus since 2001.[2]

This study includes 126 multitransfused thalassemia cases (82 males and 44 females) attending LTMG Hospital, Mumbai, over a period of 18 months (January 2002 to June 2003). Patients were in the age group of ten months to
22 years with a mean of 6.7 years with no other risk factors. Blood was collected and serum samples were screened for HBsAg by the enzyme linked immunosorbent assay (ELISA) method (Hepanostika kit). A third generation ELISA kit was used to screen for the antibody to HCV. ELISA and Rapid tests were used to detect antibody to HIV as per national AIDS control organisation (NACO) guidelines. In the present study of 126 multitransfused thalassemia cases, seroprevalence of the antiHIV and antiHCV antibodies and of HBsAg was 3.97, 43.65 and 2.38%, respectively. In thalassemia cases receiving more than 50 transfusions, seroprevalence of the antiHIV and antiHCV antibodies and of the HBsAg was 5.43, 57.6 and 2.38%, respectively (Table).

Blood screening using the viral antigen and nucleic acid amplification tests (NAT) can reduce the window period of HIV, Hepatitis B virus and Hepatitis C virus infections substantially.[3] Estimates of the risk of blood-borne infections are essential for monitoring the safety of blood supply and the impact of new screening tests. Blood transfusion, a life saving modality, can be made safer by the introduction of the NAT for screening of blood units for HIV, Hepatitis B and Hepatitis C viruses and it can be made cost-effective by pooling samples.[4]

References

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Leptospirosis Laboratory, Madras Medical College: Review of Our Experience (2004-2006)

Dear editor,

The Leptospira laboratory in Madras Medical College at Chennai was established in 1994. We have already published our experience during the period 1995-1997.[1] In this article, we discuss our experience during the period 2004-2006, with the samples received from public hospitals in Chennai. There has been a dramatic increase in the numbers of both samples and of positive cases, probably because of increased awareness of the illness (Table 1). These samples were from patients suffering from fever. During 2006, 2765 positive cases were reported from public sector hospitals. The data of numbers of samples and positive samples from city hospitals are shown in table 2. Government Stanley Hospital (GSH) caters to patients from North Chennai while Government Royapettah Hospital (GRH) caters to patients from south Chennai. Government General Hospital (GGH) and Kilpauk Medical College and Hospital (KMC) cater to patients from central Chennai and the surrounding areas. The Institute of Child Health (ICH) caters to children from all areas.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of samples</th>
<th>Positives (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>6512</td>
<td>963 (14.7%)</td>
</tr>
<tr>
<td>2005</td>
<td>6909</td>
<td>1724 (24.9%)</td>
</tr>
<tr>
<td>2006</td>
<td>8537</td>
<td>2765 (32.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>21,958</td>
<td>5452 (24.8%)</td>
</tr>
</tbody>
</table>

Table 1: Year wise distribution of leptospirosis in Chennai (2004-6)