Treatment of Human Immunodeficiency Virus–Related Thrombocytopenia with Intravenous Anti-Rhesus D Immunoglobulin

Str — The recent paper by Glatt and Anand [1] provides an excellent, comprehensive review of the natural history and treatment options with regard to HIV-related thrombocytopenia. We wish to discuss the efficacy of therapy with intravenous anti-rhesus D (Rh(D)) immunoglobulin in this setting. Glatt and Anand state that the drawbacks to intravenous anti-Rh(D) include lack of experience with its use in patients with HIV-related thrombocytopenia and the fact that it is in short supply. In fact, data exist for the use of anti-Rho(D) and weekly maintenance therapy. Among these patients, the mean platelet count during maintenance therapy was 11.6 x 10^9/L, with no apparent clinical hemolysis.

Oksenhendler et al. [4] described 14 HIV-infected patients (each of whom had a baseline platelet count of <20 x 10^9/L) who were treated with low doses of anti-Rh(D) and weekly maintenance therapy. Among these patients, the mean platelet count during maintenance therapy was 68.4 x 10^9/L, with no apparent clinical hemolysis.

We now have had experience with 65 patients (including the 17 patients previously described by Bussel et al.) with all Walter Reed classes of HIV infection and secondary immune thrombocytopenic purpura (ITP) who were treated with intravenous human Rh(D) immune globulin (WinRho SD). Eleven children and 52 adults with platelet counts of ≤30 x 10^9/L or active bleeding and a mean baseline platelet count of 23.7 x 10^9/L were treated with WinRho SD at an average dose of 44.1 μg/kg. Forty-four of 59 patients had platelet count increases of ≥20 x 10^9/L, with an overall mean peak platelet count of 81.7 x 10^9/L and a mean duration of response of 32.1 days. When patients’ responses to WinRho SD were compared based on concomitant administration of zidovudine, no significant differences in response rates were observed. The mean maximum decrease in hemoglobin levels was 1.22 g/dL. These data were submitted as part of the product licensing application for WinRho SD, which was licensed by the U.S. Food and Drug Administration in March 1995 for the treatment of children with acute or chronic ITP, adults with chronic ITP, and children and adults with ITP secondary to HIV infection.

WinRho SD has been available in the United States since May 1995. It is prepared by anion exchange chromatography of plasma obtained from Rh-negative donors sensitized with Rh-positive RBCs and can be administered intravenously or intramuscularly; it is solvent-detergent treated to prevent viral contamination. NABI (Rockville, MD) and Cangene Corporation (Winnipeg, Manitoba, Canada) are prepared to supply quantities sufficient to treat the estimated 50,000–100,000 patients who annually develop primary ITP and HIV-associated ITP and who may be candidates for anti-Rh(D) therapy; we believe that anti-Rh(D) therapy is a useful and established addition to the range of treatment options for patients with ITP.

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References