RECURRENT ACUTE HEPATITIS FOLLOWING THE USE OF ANTIHEMOPHILIC FACTOR CONCENTRATES. C.L. Tombrello-Zubiri, F.R. Nicksie and A.U. Flatsky. Veterans Administration Hospital, Newington, Connecticut, University of Connecticut School of Medicine, Farmington, Connecticut, and the Hartford Hospital, Hartford, Connecticut, U.S.A.

A patient with Hemophilia A experienced 5 well-documented episodes of acute icteric hepatitis within five to ten days following 5 separate infusions of concentrates of antihemophilic factor over a 3 year period. We were unable to demonstrate either consistent in vitro lymphocyte transformation or in vivo antibody formation in response to a variety of concentrates of antihemophilic factor. Nevertheless, although the mechanism remains unclear, it is likely that these episodes represented an immune response of the patient's hepatocytes to protein(s) contained in the antihemophilic concentrates. Further studies to define the exact mechanism of hepatocellular injury in this case are in progress. Meanwhile, this communication is to our knowledge, the first reported case of probable "immune complex" hepatitis as a regular complication of replacement therapy in hemophilia. This unusual complication must be considered in the differential diagnosis of post-transfusion liver dysfunction.


A survey of Canadian and British physicians actively treating hemophiliacs was undertaken to assess whether the difference in the two countries' health care delivery systems influenced their attitudes to prophylactic therapy. Questionnaires defining prophylactic therapy and relating its use to a number of activities were sent to directors of hemophilia treatment centers representing geographic coverage in both countries. 47 replies were received (10/6 Canadian and 37/40 British). 50% of the United Kingdom (UK) physicians used prophylactic therapy on occasion as compared to 92% of Canadian physicians. However, only 20% UK physicians versus 80% Canadian used it on a routine basis for selected patients. 435 British physicians compared to 50% Canadian gave prophylaxis prior to certain athletic or social events. The mean dose of Factor VIII or IX given by Canadian physicians was higher and individual doses unclear; it is likely that these episodes were more frequent. The increased acceptability of this form of therapy in Canada may be related to easier availability of Factor concentrates and a more flexible health care system.


The Pennsylvania Hemophilia Program was initiated in March 1973, with the establishment of 9 Hemophilia Centers throughout the state. From an initial enrollment of 150, the number of patients has grown to 669 as of October 1976. Of these, 491 have Hemophilia A and 91 have Hemophilia B, a prevalence rate of 4.3 and 0.76 per 100,000, respectively in the total state population of some 11,880,000. A total of 210 patients (32%) with Hemophilia A or B are on home therapy program.

Two hundred fifty-five patients with Hemophilia A (52%) have severe disease, of whom 160 (63%) are on home therapy. Thirty-six patients with Hemophilia B (40%) have severe disease, of whom 22 (61%) are on home therapy. The remaining patients are treated in-center as necessary. Thirty-seven patients (7.5%) with Hemophilia A have inhibitors to Factor VIII, while only 1 of 91 patients with Hemophilia B has an inhibitor to Factor IX. Total Factor VIII and Factor IX usage for hemophiliacs in the past year was 15,040,000 and 1,282,000 biological units, respectively. At current prices, this represents $1.5 million for Factor VIII and approximately $150,000 for Factor IX.

The average annual use of Factor VIII in severe Hemophilia A, including surgery, was 44,300 units/patient for patients on home therapy and 32,000 units/patient for patients on Center therapy. These figures are roughly comparable when corrected for patient age (IAI of home therapy patients but 28% of Center therapy patients under the age of 10). These observations suggest that the actual prevalence rates of Hemophilia A and B are lower than previously quoted, that more patients with milder disease exist than expected and that home and Center therapy require equal product usage.