Comparative Investigation of Factor VIII:C in Factor VIII Concentrates and Haemophilia A Patients by Two-Stage and One-Stage Assay Methods

H.

Beeser

Institute of Experimental Haematology and Blood Transfusion, University of Bonn, FRG

H. Beeser, Institute of Experimental Haematology, and Blood Transfusion, University of Bonn, Bonn (FRG)

For well-known clinical and economic reasons, true factor VIII clotting activity in haemophilia A patients and factor VIII concentrates is very important for adequate treatment. Unfortunately, interlaboratory comparability of the results of factor VIII assays is much affected by the use of different assay methods and reagents with apparently different sensitivity to factor VIII:C in the reaction sequence.

We simultaneously investigated the behaviour of factor VIII:C activity in haemophilia A patients before and after factor VIII substitution (recovery, half-disappearance time, half-live time) and in factor VIII concentrates by a two-stage and two one-stage methods simultaneously.

There is a distinct variation between the results of the three methods. This is especially true for the behaviour of factor VIII infused in the circulation.