

THE ROYAL FREE HOSPITAL

RESEARCH INVOLVING INVESTIGATIONS ON HUMAN SUBJECTS.

Department Haemophilia Centre (Department of Haematology)

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TITLE: HEAT-TREATED HUMAN FACTOR VIII AND POLYELECTROLYTE-FRACTIONATED PORCINE FACTOR VIII IN THE PREVENTION OR MODIFICATION OF FACTOR VIII-TRANSMITTED HEPATITIS IN HAEMOPHIL

OBJECT: To assess whether heat-treated human factor VIII concentrate or PE-fractionated porcine factor VIII concentrate are less likely to transmit hepatitis than routinely used human factor VIII concentrates.

BACKGROUND: The incidence of acute non-A, non-B hepatitis after a first exposure to routine us human factor VIII concentrates (either NHS or commercial) approaches 100%. Therefore, all concentrates probably carry infective transmissible agents. Of particular concern is the high risk of chronic hepatitis following an acute attack.

A major effort is being made by several commercial fractionators to render concentrates non-infective by various procedures. We have been offered two human commercial heat-treated products (US origin) for clinical assessment. Both have been granted clinical trials exempt (CTX) by the DHSS. These products are:

Travenol Hemofil T : CTX 0116/0137A
Armour Factorate Heat Treated : CTX 0231/0038A

Additionally, we use an as yet unlicensed highly purified porcine factor VIII concentrate (Hyate:C, Speywood) on a named-patient basis to treat patients with 'resistance' to human factor VIII. Because of the source of this material, it is most unlikely to carry hepatitis and we should like to assess the product in patients without 'resistance'.

DETAILS OF PROCEDURE: Patients treated with one of these products will be those who have never previously received factor VIII concentrate, and need to be treated with concentrate to prevent or stop bleeding. The most likely groups of patients are (a) newly diagnosed infants with severe haemophilia; and (b) mildly affected adults who require surgery or sustain major trauma. The choice of product in an individual patient will depend on clinic circumstances and product availability.

In accord with current routine clinical practice, blood samples will be obtained before treatment, and then at 1 - 8 week intervals (decreasing frequency) for up to 52 weeks after treatment. The end point of the study will be a change in hepatic chemistry indicative of acute non-A, non-B hepatitis, or the absence of such changes during the follow-up period.

