NORTH WESTERN REGIONAL HEALTH AUTHORITY

NATIONAL BLOOD TRANSFUSION SERVICE

With the Compliments of Dr. H.H. Gunson, Director

Regional Transfusion Centre
Roby Street
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Mr. A. Williams,

HHG/LM

3rd July, 1984

Dr. A. Smithies,
Room 1025A,
Department of Health and Social Security,
Hannibal House,
Elephant and Castle,
LONDON,
SE1 6TE.

Dear Alison,

I enclose two memoranda for discussion. One on the organisation of the Blood Transfusion Service and the other on the responsibilities of health authorities in the field of blood transfusion in the U.K. I send you these as a basis for our discussion on 7th August, 1984.

With kind regards.

Yours sincerely,

GRO-C

H.H. GUNSON,
Director

Enc.

c.c. Mr. A. Williams - D.H.S.S.

STAGE I. Following successful development of the test, donor serum samples would be sent from the N.W. Thames Regional Transfusion Centre to the Middlesex Hospital where the performance of the test will be proved and evaluated.

STAGE II. The performance of the test will be transferred to the N.W. Thames R.T.C. and experience gained on its use.

At this stage, the tests will be retrospective and donations which are found to be positive may well have been used prior to the knowledge of the result of the test. This approach can be defended ethically without problem and is entirely justifiable at this stage.

STAGE III. Donations will be tested at the Manchester R.T.C. and the Bristol R.T.C. while tests will continue at N.W. Thames R.T.C. The combination of these three regions should give a broad view of the country as a whole, viz; London, a N.W. Industrial area and a largely rural community.

At this stage, donations will be tested prior to issue and plasma will be saved from the donation and donors will be followed up. In Manchester, if donors found positive have given blood within the previous 8-9 months, a previous sample of serum stored frozen will be available for testing. If this should prove positive then identification of patients receiving the products will be made and follow-up pursued.

At the R.T.C.'s, we agreed that we could absorb this work without additional funding since the major effort in the study will be carried out by Robin Weiss and Richard Tedder. Positive samples from the R.T.C.'s will be sent to Richard Tedder for confirmation and he will receive additional samples when the donor is interviewed. His work is to be supported by the MRC.

Of course we will not know whether routine application of this test is justified until the results of the study have been assessed. However, it is important that the implications for routine screening should be considered early, since it will be important that if the results are satisfactory there should not be an undue delay before this takes place.

There will be some developmental work to be performed to improve the reagents for the test, but production of the antigen will be required and this may be possible in collaboration with Industry or possibly at CAM-R at Porton. When the reagents are available it will be necessary to make test kits. It would be an advantage for the NBTS if this was in the format of the BPL RIA test for HBsAg and this concept is being considered by Richard Tedder at present. We briefly discussed the possible role of the C.B.L.A. in the preparation of the test kits and whilst this is an option which may be available, there are others, such as collaboration with Industry, which will have to be considered. Within the financial arrangements entered into, I think it is important that the contributions made by Robin Weiss and Richard Tedder should be recognised.

I have written at length about the possibilities of developing the test in the U.K., since the alternative will be to purchase kits from an American company such as Abbot Laboratories. I dread to think what the cost to the NHS will be under these circumstances.

Other considerations will have to be made also. To carry out such routine screening I should think that every R.T.C. will require additional staff and equipment, and some will require additional space.

Contd./over

It will, therefore, require a major decision to proceed to routine screening, particularly when the incidence of positive reactors will probably be very low. Pressures will come from various sources and I doubt that it will be possible to resist them when dealing with a condition which carries a potentially fatal outcome.

If you are agreeable, I think that this topic should be placed on the agenda for our meeting on 7th August.

Sorry for the length of this letter but I thought it best to set it down in detail since it will give you the opportunity to consider these matters before we have the chance to discuss them.

With kind regards.

Yours sincerely,

GRO-C

H.H. GUNSON,
Director

c.c. Dr. D. Tyrrell
Dr. R. Tedder
Dr. T. Wallington
Dr. M. Contreras
Dr. D.B.L. McClelland
Mr. A. Williams - D.H.S.S.

Document for Discussion

ORGANISATION OF THE BLOOD TRANSFUSION SERVICE

1) In England, Wales and Northern Ireland, the responsibility for management of the Transfusion Service is held by Regional Health Authorities. In some instances certain functions of management are delegated to District Health Authorities, e.g. Brentwood.

2) The functions of Regional Transfusion Centres (RTC's) can be summarised as follows:

2.1 Functions performed by all RTC's

(i) Recruitment of blood donors, collection of units of whole blood.

(ii) Preparation of blood labile products, e.g. platelet concentrates, cryoprecipitate leucocyte-poor blood, snap-frozen plasma.

(iii) Harvesting of fresh (and stored) plasma for fractionation of plasma products at B.P.L.

(iv) Collection of hyperimmune specific antibody plasma for the preparation of specific immunoglobulins from units of whole blood and/or by plasmapheresis.

(v) Collection of high-titre blood group antibody plasma for the preparation of blood grouping reagents at B.G.R.L.

(vi) Blood grouping, antibody testing and disease screening (HBsAg, VDRL, TPHA) on collected blood.

(vii) Storage under appropriate conditions and issuing of blood and blood products to District Hospitals within the region.

2.2 Functions performed to a greater or lesser degree in RTC's

(i) Ante-natal blood group serology.

(ii) Quantitation of blood group antibodies by automated techniques.

(iii) Cross-matching (very little on a routine basis but more often for difficult cases).

(iv) To act as a Regional reference centre for the hospitals in case of transfusion problems, e.g. incompatible crossmatches, investigation of transfusion reactions, consultant advise on medical problems.

(v) Preparation of blood grouping and antiglobulin reagents.

(vi) Histocompatibility testing for the purpose of renal and bone-marrow transplantation, creation of panels of tissue-typed donors, screening for potent anti-HLA typing reagents.

(vii) Screening of donor blood for antibodies to specific diseases, e.g. HBsAg, C.M.V.

(viii) The provision of an immunology service for the diagnosis of such conditions as immunoglobulin abnormalities, complement abnormalities.

(ix) Therapeutic plasmapheresis.

(x) Leucapheresis for platelets and granulocytes.

(xi) Screening of donor bloods for rare cell antigens.

3) The regional organisation of the Service, and in particular, with regional financing, means that the primary aim is to provide a service for the region only. This means that difficulties can be experienced in one region because of the special conditions applying, e.g. platelet supplies to the London Teaching hospitals whilst other regional centres could, with planning, provide an excess over their regional needs. Whilst in emergencies RTC's will help each other out, there is little long-term co-operation in the rationalisation of blood collection and preparation of labile products between regions, although this occurs sporadically.

4) Certain RTC's have assumed responsibilities for the major production of certain products, e.g. anti-tetanus specific plasma from N.W. Thames and Bristol, anti-D plasma from Brentwood, Bristol, Lancaster and Leeds, anti-CMV plasma from Leeds and Oxford. However, such arrangements are ad hoc and little account is taken of the overall national need when planning such functions.