

MEDICAL AUDIT VISIT - YORKSHIRE RTC
Friday 14th February 1992

Visiting Team: **Dr. Marcela Contreras**
 Dr. Derwood Pamphilon

The audit took the form of a discussion with the consultant medical staff and two associate specialists as a group.

Those involved were:

Dr. Angela Robinson	-	Medical Director/General Manager
Dr. P. Flanagan	-	Deputy Medical Director/Consultant Haematologist
Dr. H. Gooi	-	Consultant Immunologist
Dr. Alison Townley	-	Associate Specialist
Dr. Libby Williams	-	Associate Specialist

Dr. G. Dovey, Staff Grade Physician, was not present during discussions, neither was Dr. S. Rawlinson, Senior Registrar, who is shortly to be seconded for further general haematological experience. A new Consultant Haematologist is to be appointed soon and a second Staff Physician post has been applied for.

1 General Medical Activities

1.1 Medical staff meetings in the RTC

There is a monthly consultants' meeting and the Clinical Division comprising senior medical and nursing staff, together with the QA Manager, also meet monthly. Informal meetings between consultant medical staff and associate specialists occur on a daily basis.

1.2 Hospital Transfusion Committees

Two hospital transfusion committees have been established amongst the 14 hospitals served. These are at the largest hospitals served by the Centre, accounting for approximately 30% of its services. They meet 3 monthly and the consultant haematologist from the Centre is invited to all meetings. Indeed it was a feeling at the Centre that consultant RTC medical staff should play an enabling role in the establishment of such committees.

The committee at one hospital is multi-disciplinary and meetings were thought to be helpful. The other committee is about to hold its inaugural meeting along the same principles. The agenda for the established committee has primarily addressed terms of reference and

maximal order blood schedules for surgical procedures. The audit of BTS activities has been included in the terms of reference.

1.3 Regional Transfusion Committee.

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The Regional Director of Public Health has been approached about establishing a regional transfusion committee, but he does not feel such a committee is necessary and that audit of the Transfusion Service is more appropriately undertaken at Hospital level through their current audit committees or through hospital transfusion committees.

Two meetings a year are held with haemophilia directors, haematologists in charge of blood banks and scientists.

Quarterly meetings are held of the Yorkshire Bone Marrow Transplant Group in which both the Consultant Immunologist and the Consultant Haematologists are active members.

1.5 Internal Medical Audit

Formal internal audit of medical practice is not carried out and it is intended that the Clinical Division meetings will be used for some form of audit in future.

The associate specialists receive written reports from donor sessions on a daily basis. They review decisions taken on whether or not to bleed donors and the rate of failed venepunctures and bruising.

The computer system provides facilities to audit medical activity at donor sessions on an individual basis. This has enabled comparative assessments on donor deferrals, failed venepunctures, etc. It also enables a comparison of the performance of RGNs and clinical assistants at donor sessions with the possibility of educating poor performers.

Apheresis procedures are reviewed by Dr. Townley and Dr. Robinson and action taken as necessary.

Reports from sessional medical officers reviewed by the associate specialists are then passed for further review to the QA Manager. There is a major incident reporting system for appraisal and follow-up. A Complaints File is held by the Director. All donor complaints are reviewed by consultant medical staff and serious complaints are specifically referred to the Medical Director. Follow-up is always arranged where appropriate. The consultant haematologist takes a specific interest in QA and is involved in the

review of reports of internal audit undertaken in the laboratories or at mobile or fixed sessions.

Meetings with sessional MOs are held at the RTC twice a year.

1.6

Participation in NEQAS

The antenatal serology, reference serology and donor testing laboratories all participate independently in the blood group serology scheme. The tissue typing laboratory participates in the HLA NEQAS and the pilot DNA RFLP scheme. The Centre also participates in the NEQAS for lymphocyte markers in HIV, in the platelet serology workshops and in the anti-D quantitation scheme. Results of routine haematology provided to the RTC by the adjacent Seacroft Hospital are reviewed by a member of the consultant staff who has access to their NEQAS records. Technical staff undertake the NEQAS exercises but all reports are reviewed by consultant medical staff and passed on to the technical staff.

- 1.7 The RTC is recognised for training of senior registrars. A new annual training course has been established for registrars who will sit the new MRCPPath exam. One of the senior registrar posts is dedicated to training in transfusion medicine. One consultant co-ordinates the training programmes but all consultant medical staff are involved in training.

1.8 Research and Development activities

The consultant immunologist is the senior doctor most involved in Research and Development. He is involved in a study of prevention of alloimmunisation using filtered blood and platelets and in a trial of immunotherapy in infertility. Studies on HLA and disease association are also carried out at the RTC. The Centre is one of the major participants in the multi-centre low-dose anti-D trial and these activities are co-ordinated by the consultant haematologist. In addition, senior registrars in training are assigned projects by the Medical Director. The associate specialist responsible for donor apheresis conducts developmental projects in conjunction with the director. Developmental work on CMV-negative components is being done by the director and associate specialist.

1.9 On-call service

A comprehensive 24-hour, 7 day per week on-call service is operated and covers all aspects of immunohaematology and transfusion. All senior medical staff participate in the on-call service. Consultants

also do first on-call. The consultant immunologist is on-call for transplantation work.

2. Medical Activities Concerning Donor Selection

- 2.1 All sessional medical officers and nurses are trained by the associate specialists under the supervision of the Deputy Director. One principally supervises apheresis donation and the other, mobile blood donation. Particular attention is paid to the care and selection of donors and training in venepuncture. RGNs undergo an exhaustive training programme for their extended medical role. This is conducted solely by the Deputy Director and associate specialists. It is only after formal medical assessment that RGNs are allowed to do sessions on their own.
- 2.2 Updated information for MO/sessional nurses is provided via training programmes and a QA manual entitled "Procedures for the collection of whole blood donations". This is available at every session and in the possession of all MOs/sessional nurses. It is updated on an annual basis.
- 2.3/ Proper conduct at sessions is monitored via the review of written
- 2.4 returns from sessions and by verbal reports through the Session Officers (includes session RGNs and MOs).

Apheresis activities

- 2.5 At present there are 4 apheresis clinics, one in Leeds, one in Bradford. The hospital sited cell separator unit is shortly to be amalgamated with the headquarters donor suite to become the Clinical Blood Transfusion Unit (CBTU). Doctors are always in charge of apheresis. The Medical Director is the consultant in charge of apheresis; day-to-day management is undertaken by the Associate Specialist who visits the Leeds & Bradford clinics monthly and undertakes sessions in the CBTU 2/3 times per week. All procedures are performed in accordance with standard operating procedures or detailed machine protocols. Senior nursing staff assist with the venepunctures but not with the selection of donors for apheresis. Medical and nursing staff at apheresis sessions are required to be aware of manufacturers' instructions as well as machine protocols and standard operating procedures. Abnormal laboratory findings on apheresis donors are followed up by medical staff.
- 2.6 See 1.5

Adverse effects after donations

- 2.7 The associate specialists follow-up donors who have an adverse effect following donation. Any serious adverse effects are referred to consultant medical staff in hospitals (e.g. vascular surgeons) and will usually be discussed with the Medical Director (see above).

Donor counselling

- 2.8 One associate specialist has overall responsibility for the counselling of donors positive on HIV antibody testing. This is arranged at a local hospital. Together with the consultant haematologist she is also responsible for the counselling of donors found positive for markers of Hepatitis C who are then referred to a liver specialist. Donors positive for HBsAg are counselled by the Deputy Director who also arranges to counsel plasma donors who have persistently elevated (above 100) ALT values. Only consultant medical staff and the associate specialists counsel donors.
- 2.9 Look-back programmes would be carried out for past HIV positive donations as necessary by the Deputy Director via the consultant haematologist in charge of the blood bank in the appropriate hospital.

3. Medical activities concerning diagnosis and treatment of patients

- 3.1 Advice on transfusion medicine, immunohaematology and immunology is given by the consultant medical staff and associate specialists.

The consultant immunologist is responsible for providing HLA-matched platelets from a panel of 500 HLA-typed donors and assessing their efficacy in conjunction with clinical teams by monitoring platelet increments and correlating these results in a lymphocytotoxic crossmatch when necessary.

The Centre is the Regional Tissue Typing Laboratory and is responsible for organ matching for bone marrow, kidney, liver, heart, heart/lung and corneas. Large numbers of families are typed every week. The Centre is also a tertiary referral centre for Immunology and is active in cellular immunology and typing of lymphocyte markers for HIV.

The Yorkshire RTC is a regional tertiary referral centre for therapeutic apheresis including plasma exchange, leucodepletion and erythrocyte exchange in sickle cell disease. This is undertaken in fixed apheresis facilities at the RTC and, in addition, a mobile facility visits hospitals within the region. In some cases the instigation of

therapeutic procedures will occur as a result of investigations carried out in the RTC laboratories.

Until very recently, the Director and Deputy Director were in charge of the Haematology Laboratory providing for the Regional Paediatric Oncology Unit.

- 3.2 Therapeutic plasma exchange - see above.
- 3.3 Training is provided for the MRCP course, for anaesthetists and for nursing staff on renal and obstetric units.

4. Medical activities concerning laboratory functions at the RTC

- 4.1 Reports with clinically significant results or changes requiring prompt intervention at the hospital are seen by a consultant who will also telephone them to the hospital.
- 4.2 Medical staff are only involved in selection of donations if, for example, they fall into an "MO hold" category.
- 4.3 Recall of products is undertaken by the QA Manager in consultation with the Medical Director and consultant haematologist. Product recall would be undertaken with reference to quality specifications.
- 4.4 A predeposit autologous programme is being developed by the Consultant Haematologist: i) from volunteer bone marrow donors and ii) from surgical patients. It is hoped that this will soon be extended and an evaluation in conjunction with the Department of Vascular Surgery in patients requiring aortic grafts is undertaken.

A computer programme is in place to ensure non-crossover of autologous donations. The whole autologous transfusion programme is currently undertaken by the consultant haematologist and considered as an educational tool to make clinicians aware of the risks of homologous transfusion.

5 OTHER MEDICAL ACTIVITIES

MRCPPath examinations and other higher degrees.

Review of papers for and editing of medical journals.

Training of scientific and technical staff on medical matters.

British Bone Marrow and Platelet Donor Panel.

Bone marrow processing.

Formal teaching sessions.

Chairing NBTS Apheresis Working Party.

Collation of national NBTS apheresis data.

Lectures at scientific meetings.

The auditors wish to thank the medical staff for the help that they received during this visit. The meeting was constructive and a measure of the important role undertaken by all medical staff in the RTC could be readily defined.

We also wish to thank Dr. Angela Robinson for her hospitality during this visit.

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