2004 Dr. Rashmi Tondon, India

REPORT

I stayed in the United Kingdom for 3 months, first two months at Cambridge and the last month at Bristol.

At Cambridge I worked in the Platelet Immunology Reference Laboratory (PIRL).

During this period I received training in the following techniques:

- Platelet Immunofluorescence Test (PIFT), using flow cytometry to detect the presence of platelet associated immunoglobulin (PAIg)
- Monoclonal Antibody Immobilization of Platelet Antigen Assay (MAIPA), which is a specific test for the detection of platelet antibodies and,
- Molecular typing for human platelet antigens using both PCR and TaqMan technologies, which is especially useful for typing HPA-1a status for the diagnosis and management of Neonatal Alloimmune Thrombocytopenia (NAIT).

This part of my stay at Cambridge was very useful as we in my Department of Transfusion Medicine at SGPGIMS, Lucknow are heading towards establishing a platelet immunology laboratory.

Besides this, I learnt to investigate cases of Heparin Induced Thrombocytopenia (HIT) by using ELISA technique, which will be implemented soon in my department.

I had the opportunity to perform these techniques as well as receiving tutorials on the following subjects:

- Glycoprotein quantification
- Platelet cryopreservation
- Component donation
- HPA product matching and
- Various case discussions.

My stay at the National Blood Services (NBS), Bristol was from 3.04.06 to28.04.06 which included two weeks stay at National Granulocyte Immunology Laboratory and another two weeks at Histocompatibility and immunogenetics department.

At the National Granulocyte Immunology Laboratory, I learnt:

- Granulocyte immunofluorescence test (GIFT)
- Lymphocyte immunofluorescence test (LIFT)
- Granulocyte chemiluminescence test and,
- Monoclonal antibody immobilization of granulocyte antigens (MAIGA)

for the detection of granulocyte specific antibodies.

At the Histocompatibility and Immunogenetics laboratory (H&I labs), I learnt:

- HLA typing using PCR-SSP and PCR-SSOP
- Provision of HLA matched platelets to the patients of platelet refractoriness
- Antibody detection by Luminex and Lymphocytotoxicity assay (LCT)
- Lymphocyte cross matching using flow cytometry
- Investigation of transfusion related acute lung injury(TRALI)
- Search procedures and selection of suitable unrelated haematopoietic stem cell(HSCT) donors and
- Post transplant monitoring of HSCT cases.

I am extremely grateful to the World Pathology Foundation for giving me the opportunity to learn such varied and useful new techniques which shall be of a great help to a developing country like ours. Very soon we would be implementing the Platelet Serology Laboratory in our department at SGPGIMS, Lucknow which would be beneficial to a large population of north India, especially for the diagnosis and management of cases of NAIT which go unrecognized.

I am thankful to all those who have contributed towards my visit.

Rashmi Tondon

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