

Department of Transfusion Medicine and Immunoematology

Activities

Transfusion medicine is a multidisciplinary area concerned with the proper use of blood and blood components in the treatment of human diseases. The Department of Transfusion Medicine at this Institute has facility to provide blood transfusion services, to train medical and para-medical personnel in related areas and to function as an apical medical and research department in the state in this field. A resolve for total dependence on voluntary blood donation and routine preparation of blood components are principal hallmarks of the department. According to the principles of Good Manufacturing Practices (GMP) strict adherence to quality control at all phases of donor selection, donor room procedures, screening and processing of blood, and serological procedures for grouping and typing of blood are followed. The facility is licensed by the Drugs Controller of India.

Faculty

Dr. B. Abhishekh	Assistant Professor
Dr. Prathiba. K	Assistant Surgeon
Dr. Deepa.S.Anand	Assistant Surgeon

Blood donation timings at Kidwai Memorial Institute of Oncology

Monday – Saturday(except official holidays)	9.00 AM to 3.00PM

Contact No: 26094082,26094083

Why should you donate blood?

Blood center at KMIO needs at least 50 blood donors every day to meet the transfusion needs of patients at this hospital. With increase in population and incidence of cancer the need for blood is ever increasing. Majority of Patients in our hospital are from outside Bangalore and many a times from out of the state and hence find it difficult to arrange donors when the onus lies on them. There is no substitute for blood. Only blood donors can help maintain an adequate supply of blood to save the lives of those who need it. When you donate blood, you give a second chance at life to someone unknown to you. One does not know who will need blood transfusion tomorrow, it could be you or your friend or dear one. Less than 1% of the eligible Indian population donates blood every year this is far less than average rate of 5% in the Western world. When you donate blood, you become part of an exceptional group that is dedicated to alleviate the human suffering.

There are number of ways you can support the blood center's commitment to saving lives. You can donate blood yourself and get the thrilling experience of saving someone's life, or relate your experience to your friends / colleagues and motivate them to become regular blood donors like yourself. You can also organize a [blood donation camp](#), either in the center itself or in the city.

You are only a few steps away from saving a life. Donate blood today

Who can donate blood?

A blood donor must be aged 18 years or older but less than 60 years weigh at least 50 Kg have a hemoglobin level of 12.5 g/dl not have donated blood in the last 12 weeks.

Who cannot donate blood?

Persons who either currently have or have had one of the following in the past are not eligible to donate blood.

Cancer
Abnormal bleeding tendency
AIDS or symptoms of AIDS such as unexplained weight loss, night sweats, swollen glands, long standing diarrhea
Seizures
Hepatitis B or C (past history of Jaundice)
Sexually transmitted diseases such as syphilis, AIDS

In order to maintain blood safety, the following groups of persons must refrain from donating blood

Men and women who have a positive test for HIV
Men and women have had sex with multiple partners
Men who have sex with men
Men and women who have injected themselves with intoxicating drugs

Blood donation procedure

Blood donation is a simple procedure. It consists of 5 steps.

1. Registration and Counselling: Your personal details such as name, age, address etc will be recorded and you will be given a questionnaire to assess your present and past health status.
2. Medical Examination: A doctor will ask you certain questions about your medical history to ascertain that you are fit to donate blood and examine you. Your weight, blood pressure and pulse will be recorded. Only fit and healthy individuals are accepted as donors.
3. Hemoglobin test and Blood Grouping : Your blood hemoglobin level will be checked to ensure that you are not suffering from anemia and can safely donate a unit of blood and blood grouping for ABO and Rh D.
4. Donation of blood: Your blood will be withdrawn with the help of a sterile and disposable kit after cleaning your arm with an antiseptic solution. All together, the process takes only 8 to 10 minutes.
5. Refreshment: After donation of blood, you will be advised to rest for 5 to 10 minutes before you resume your routine activities. During this period, you will be served with some light refreshments.

See. How simple the entire process is!

Is there any danger in donating blood?

There is virtually no danger. Only sterile and disposable needles are used to collect blood. There is absolutely no chance of catching any infectious disease by donating blood.

What if you want to organize a voluntary blood donation camp?

To organize a blood donation camp, please contact the Blood Bank with an official letter requesting for organization of camp addressed to the Director, KMIO. You will need to arrange a hall /big rooms with toilet facilities, good ventilation and lighting. You will also need to arrange for few tables with chairs. Their number will depend on the number of expected donors. We will take care of the rest of the details.

Donor Apheresis

What is apheresis?

Blood has several components, including red blood cells, platelets and plasma. Donor apheresis is a special type of blood donation in which a specific component, viz. platelets, granulocytes (white cells) plasma or plasma is withdrawn from the donor using a special equipment called as cell separator; the remaining components are returned to the donor's blood circulation. This procedure takes about 2 hrs during which time the donor is constantly monitored by trained medical personnel.

What is the advantage of Apheresis?

Platelet concentrate prepared from one unit of whole blood contains very few platelets. Six to ten such whole-blood derived platelets would be required to supply enough platelets for one patient. However, platelets donated during one apheresis session by one donor are sufficient for one transfusion, thus reducing the chance of transfusion transmitted infections. Patients with cancer or leukemia or patients with blood disorders benefit immensely from such plateletapheresis. The donor benefits too since there is no loss of red cells. One can donate apheresis components more frequently than whole blood donation.

How Can I Become An Apheresis Donor?

Any healthy person who meets the criteria for whole blood donation is eligible for apheresis donation. Please contact the Transfusion medicine Center, KMIO for further information.

Facilities Available:

Blood Processing Laboratory: Tests for determining the ABO group & Rh type, detecting unexpected antibodies to red cell antigens, confirmation of Rh negative status & Du testing, resolving ABO discrepancies, cross match etc.

Blood	Component	Laboratory
Blood is a precious human resource. To maximize its utility, every unit of blood is separated into various components, such as packed red cells, fresh frozen plasma, platelets, cryoprecipitate and cryo-deficient plasma, etc. Buffy coat reduced red cell and platelets are also produced. The component separation program is supported by National AIDS Control Organization.		

Transfusion Transmitted Infection Screening Laboratory: Provision of safe blood is of utmost priority. Every unit of blood & component is screened for HbsAg, anti-HIV 1&2, anti-HCV, syphilis and malaria.

Immunoematology Laboratory: Autoimmune hemolytic anemia workup and Tests for cold antibodies are done when necessary. Detecting unexpected antibodies to red cell antigens, confirmation of Rh negative status & Du testing, resolving ABO discrepancies, cross match etc.

Gamma Irradiation

Transfusion-associated graft-versus-host disease (TA-GvHD) is a rare but highly lethal complication resulting from engraftment, proliferation and immunologic attack of recipient tissues by transfused donor T lymphocytes. To prevent this dreaded complication, all cellular blood components should be gamma irradiated. In the department of Transfusion Medicine at KMIO, blood is irradiated using Cesium-137 in a self-contained gamma irradiator. A dose of 2500 rad is delivered to eliminate all lymphocytes from cellular components.

Therapeutic Phlebotomy

We provide therapeutic Phlebotomy to patients with Polycythemia and other hyperviscosity syndromes

Technical Staff

Sri. Venkatesh Murthy
Sri. G.Krishnamurthy
Sri. R. Ashwath Reddy
Smt.Amrutha .R.K
Sri. M.Rathan Kumar
Sri. Adishes Murthy

Chief Medical Lab Technologist
Senior Medical Lab Technologist
Junior Medical Lab Technologist
Junior Medical Lab Technologist
Junior Medical Lab Technologist
Junior Medical Lab Technologist

Nursing Staff

Smt. Janet Andrade
Smt. B.K.Shanthi

Clerical staff

Ramu.L

Second division Clerk

Medical Education

Involved in regular teaching of DNB, Fellows,DM/MCh,BSc MLT trainees who are posted to the department on rotation.

Engaged in research activities with PhD students from various departments and institutions

Ongoing Research Activities:

1. Evaluation of the antimicrobial efficacy of hand washing on skin disinfection procedure in voluntary blood donors
2. Genotyping of Hepatitis C in blood donors and chronic hepatitis patients

Future Plans

Stem cell harvesting and processing

To start Fellowship in Transfusion Medicine, BSc in Blood Bank Technology