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Promoting Voluntary Blood Donation

APHERESIS

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Introduction:

Apheresis refers to the process of taking the blood outside the body (extracorporeal) and separating one or more than one component of blood and returning the remaining blood into an individual using a machine called cell separator. The term Apheresis is derived from the Greek word "aphaeresis", which means "taking away".

History of Apheresis

Plasmapheresis was originally described by John Abel and Leonard Rowntree of Johns Hopkins Hospital in 1913. Apheresis technique was first developed by Dr José A. Grifols Lucas during 1950-51. He found that this technique allowed donors to donate more frequently without compromising their health. Michael Rubinstein was the first person to use plasmapheresis for therapeutic purpose to treat an immune-related disorder at the old Cedars of Lebanon Hospital in Los Angeles in 1959. The apheresis machine was invented by American medical technologist Herb Cullis in 1972.

Principle of Apheresis:

The cellular constituents of blood are separated on the principle of centrifugation based on the difference in the specific gravity of the components. Within the centrifugation process, three variables can be adjusted to selectively remove the desired component. This includes the centrifugation speed, time and the bowl diameter.

Separation factor is the combination of centrifugal acceleration (g) and centrifugation time (dwelling time) which determines the degree of cell separation. It is also called the Packing Factor.

The centrifugation method can be divided into two basic categories:

Continuous flow centrifugation:

refers to the continuous nature of centrifugation, which was historically enabled by requiring two venipunctures, so that one port is for inflow and the other for return of blood after separation of the needed component. Newer systems use a double lumen system enabling single venipuncture. The main advantage of this system is the low extracorporeal volume (blood volume outside the body during the procedure). This is particularly beneficial in young and elderly patients.

Intermittent flow centrifugation:

in this, the centrifugation works in cycles, taking blood, centrifuging it, separating out the needed component and returning the unused parts to the donor in a bolus. This type of procedure requires only a single venipuncture site, but the extracorporeal volume is very high.

Table 1: Comparison between continuous and intermittent flow centrifugation system

Continuous flow centrifugation	Intermittent flow centrifugation
Processing and separation of blood occurs in a continuous way.	Blood is processed in batches; in volumes tolerated by the subject.
After the tubing is primed, the separation chamber does not become empty till the end of the process.	Each time the separation of blood is completed, the separation chamber becomes empty to allow for next process to begin
Smaller extracorporeal volume	Larger extracorporeal volume.
In patients with low blood volume, priming of	Smaller sized separation chamber with tubings
the tubing set is performed to reduce the extracorporeal blood volume.	available for use in pediatric patients.
Haemonetics: PCS-2, MCS+ 8150 and 9000 (figure 2), Cymbal Therakos UVAR-XTS	TerumoBCT: COBE Spectra, Trima, Trima Accel, Spectra Optia (Figure 3) Fenwal (Fresenius Kabi): Amicus, Alyx. Fresenius Kabi: AS 104, Com.Tec

Other methods involve Filtration and combination of centrifugation and filtration.

In filtration, the blood is pumped through a membrane with pores which allows plasma and low molecular weight substances to pass through while retaining the larger blood cellular elements. Pore diameter for plasma separation is 0.2 to 0.6 m. Apheresis machine based on membrane filtration are Prisma Flex (Gambro - Baxter), NxStage and BBraun

Table 2: Comparison between filtration and centrifugation-based apheresis

	Filtration based	Centrifugation based
Availability	Limited availablity	Available worldwide
Uses	Limited to plasma exchange	Used for cytapheresis and plasma apheresis
Efficiency of Plasma Removal	Low Efficiency (30%)	High Efficiency (60 – 65%)
Blood Flow	150 ml/min	10 – 100 ml/min

Third principle is based on cell size. This process is called Elutriation, which uses centrifugal force against a continuously increasing fluid flow to separate cells based on size and to a lesser extent on density. It is used primarily to isolate monocytes from peripheral blood mononuclear concentrates. Elutra system from Terumo BCT is an automated closed system based on the principle of elutriation.

What are the different applications (types) of Apheresis?

The procedure may be done on the patient, when it is called therapeutic apheresis or on the healthy donor (donor apheresis) to obtain individual components (red cells, platelets or plasma) to treat or meet transfusion requirement of patients.

Therapeutic apheresis:

used to remove the pathological (disease causing) constituent in blood. The procedure may require to be done frequently to bring the implicated constituent below the pathological levels.

1) Therapeutic plasma exchange (TPE):

used for removal of pathological large-molecular-weight substances such as harmful antibodies from the plasma. Femoral or jugular access is used to allow adequate blood flow. Typically, 30-40 mL/kg of plasma (1-1.5 plasma volumes) is removed at each procedure and replaced either with isotonic 4.5 or 5.0% human albumin solution or 25-50% of replacement volume with 0.9% saline. Exchange with fresh frozen plasma (FFP) is reserved for the replacement of ADAMTS13 in thrombotic thrombocytopenic purpura or to replace clotting factors. A one plasma volume exchange removes about 66% of an intravascular constituent and a two-plasma volume exchange approximately 85%. The frequency of the procedure and the volume removed at each procedure depends upon the indication, patient characteristics and laboratory values. TPE is normally combined with disease modifying treatment, such as immunosup-

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pressive drugs, for the underlying condition. The American Society for Apheresis (ASFA) publishes evidence-based guidelines for therapeutic apheresis.

2) Low Density Lipoprotein (LDL) apheresis - removal of LDL cholesterol in patients with familial hypercholesterolemia. This is done using Double Filtration or Cascade Plasmapheresis. First filter separates plasma from whole blood and second filter removes the specific plasma component.
Heparin-induced Extracorporeal LDL Precipitation (HELP): Plasma is removed by membrane filtration. Acidified Heparin is added to plasma, causing a selective precipitation of LDL cholesterol. This is removed by filtration and plasma is returned to the patient after being ultra-filtered and dialyzed.

3) Photopheresis - used to treat graft-versus-host disease, cutaneous T-cell lymphoma, and rejection in heart transplantation. The whole blood is centrifuged to remove selectively the buffy coat, which is treated with Methoxsalen and exposed to UVA light and the treated buffy coat is returned back to the patient.

4) Immunoadsorption: with Staphylococcal protein A-agarose column for removal of allo- and autoantibodies (in autoimmune diseases, transplant rejection, hemophilia) by directing the collected plasma through protein A-agarose columns. Protein A is a cell wall component of Staphylococcus aureus which binds to the Fc region of immunoglobulins.

5) Leukocytapheresis - removal of malignant white blood cells in leukemic patients with hyper-leucocytosis causing stasis and ischemic damage.

6) Erythrocytapheresis - removal of diseased erythrocytes in sickle cell crisis or plasmodium falciparum malaria with very high parasitemia.

7) Thrombocytapheresis - removal of platelets in patients with severe symptomatic thrombocytosis.

Donor Apheresis: Blood is collected from a healthy donor, separated into its components, needed component removed and the remaining blood returned to the donor. Advantage includes more frequent collections and reduced donor exposure for the recipient.

1) Plasmapheresis -similar to the plasma exchange done in patients, here the plasma is separated and removed without the use of replacement solution by restricting the removed volume to 15% of total plasma volume. Standards for donating plasma are set by national regulatory agencies such as U.S. Food and Drug Administration (FDA), the European Union, and by the Plasma Protein Therapeutics Association (or PPTA) which audits and accredits collection facilities. The collected plasma is promptly frozen at lower than -20 °C and is shipped for fractionation to obtain specific products like albumin and immunoglobulins, to be used as medications for human use. Sometimes the plasma so obtained may be used in patients undergoing liver transplantation to reduce the donor exposure.

2) Erythrocytapheresis - individuals undergoing double volume RBC collection are required to have a higher haematocrit and a higher weight and height as compared to whole blood donations.

3) Plateletpheresis - one unit of platelet collected by apheresis is equivalent to six to ten units of random donor platelet concentrates. The interval between two consecutive platelet apheresis should be at least 2 days, with no more than two apheresis in a week and not more than 24 times in a rolling 12-month period. If the remaining blood cannot be transfused back to the donor due to any reason, he should undergo apheresis only after 90 days. Between a whole blood donation and plateletpheresis, a minimum interval of 28 days should be followed. The donor should have a minimum weight of 50 kg (Indian guidelines) and should not be on any anti platelet drugs.

4) Leukapheresis - is the removal of leucocytes for transfusion into patients with severe neutropenia with sepsis not responding to treatment. There is limited data to suggest the benefit of granulocyte infusion. Collected granulocytes should be irradiated and transfused within 24 hours at 20 to 24 °C.
In addition to single components, FDA has laid guidelines for multicomponent collection as well (single unit RBC and plasma or single unit RBC and platelet, or single unit RBC, plasma and platelet)

5) Peripheral blood stem cell collection - Stem cells may be collected from the bone marrow, cord blood or peripheral blood. Advantage of peripheral blood stem cell collection is it is easy to perform and multiple collections if needed can be performed. For this, the stem cells are mobilised into peripheral circulation with the help of growth factors, which causes a transient bone pain in the donor, due to marrow expansion. The CD34 marker is used to quantify the stem cells collected. The optimum dose of CD34 positive cells is 2-5X106/kg body weight of the recipient.

How is apheresis performed?

Venous access: to support sustained flow rates of 50-100 ml/min requires insertion of large bore venous catheters. The catheter may be placed in peripheral circulation such as antecubital fossa or central circulation such as femoral/subclavian or jugular (femoral line carries risk of infection if inserted for long duration) or in Arteriovenous shunt/fistula.
Number of lines: intermittent flow devices requires only a single line for draw and return, while continuous flow devices required separate lines for draw and return, but now possible using a single venous access with double lumen catheter.

Replacement Fluid: The primary function of the replacement fluid is to maintain intravascular volume in case of large extracorporeal volume or in patients with low blood volume. In addition, it helps in restoration of important plasma proteins such as ADAMTS-13 (in case of TTP), maintenance of colloid osmotic pressure with albumin and maintenance of electrolyte balance with 0.9% normal saline. Replacement fluid is used in therapeutic apheresis.
Anticoagulation: anticoagulant of choice is acid citrate dextrose (ACD). It acts by chelating ionized calcium and blocks calcium-dependent coagulation cascade. Liver metabolises citrate almost immediately. Individuals can experience transient hypocalcemia during the return phase of the apheresis procedure.

What are the complications of Apheresis procedure?

Complications are rare due to apheresis, but can occur in therapeutic or donor apheresis.

1) Hypotension - light-headedness and tachycardia, rare in donor apheresis. Corrected by foot end elevation, improving the fluid balance and bolus infusion of colloid and crystalloids in severe situations.

2) Vasovagal reactions- bradycardia with feeling of apprehension, nausea, pallor, sweating. Can be managed with reassurance and foot end elevation.

3) Citrate toxicity -perioral tingling, numbness, paraesthesia, tetany. Pre-evaluate the liver function status. Usually self-resolving; calcium infusion can be started.

4) Allergic reactions to the replacement fluids used.

5) Thrombocytopenia and loss of clotting factors associated with plasma exchange.

6) Complications related to vascular access such as hematoma, infection.

Conclusion: The field of apheresis technology continues to evolve at such a rate that future transfusion requirement of patients requiring multiple transfusions may solely be collected by apheresis, and newer innovations in apheresis techniques will revolutionize the future transfusion and therapeutic practices.

TERUMO PENPOL CELEBRATED INTERNATIONAL WOMEN'S DAY IN ASSOCIATION WITH THE KTU, NSS UNIT OF LBS INSTITUTE OF TECHNOLOGY AND KSACS ON 8 MARCH

Terumo Penpol in association with the KTU, NSS unit LBS institute of Technology and KSACS celebrated the international women's day at LBS institute of Technology.

Dr. Usha Titus IAS, Principal Secretary, Dept of Higher Education, Govt. of Kerala, inaugurated the event in the presence of Mr. C Padmakumar, Chairman and Managing Director, Terumo Penpol and Dr. Vrinda V Nair, Research Dean, KTU.

Inaugurating the event Dr. Usha Titus narrated folklores depicting the importance of having an inclusive society where every stake holder has significant roles to play. Speaking highly about Terumo Penpol, she quoted it as one of the best companies in South Asia; and Engineering students must enhance their skills by doing internships and trainings from reputed organizations like Terumo Penpol. She also spoke about the essence of women, the different women leaders who had their inputs in shaping the world. The need to adapt and evolve at a time when employability of women in India is declining. According to her, more the working women, more the employability opportunities in the society; women when venturing into the Labor diaspora would attribute more employability spaces for the society especially kindergartens, restaurants etc.

The thoughtful speech was widely accepted by the audience because of its sheer honesty and thought-provoking inputs.

Delivering the key note address, TERUMO PENPOL, Chairman and Managing Director C Padmakumar offered internship opportunities to students of LBS and spoke about the importance of blood donation.

The Presidential Address was delivered by Dr. Anitha Kumari, Principal in charge, LBSITW, followed by the special address by Dr. Vrinda V Nair, Research Dean, KTU.

The felicitation was conveyed by Dr. Joy Varghese; he spoke highly about Terumo Penpol and its support in the voluntary blood donation sphere.

The inauguration ended with the vote of thanks by Mrs. Reshmi Madhavan, Joint Director KSACS.

Following whicha series of awareness sessionwas planned, the first one by Amar Fettle on the topic "Healthy Women for Blood Donation"

and another by Dr. Indu V Nair on the topic "Stronger women build stronger nations"

The event also had fun activities such as magic show and treasure hunt. A Blood Donation Camp was also organized.

More than 200 students from colleges across Trivandrum participated in the event.

Inauguration and Inaugural Address-
Dr. Usha Titus, IAS
Principal Secretary, Higher Education Department

Key Note Address
C Padmakumar
Chairman and Managing Director, TERUMO PENPOL

Presidential Address
Dr. Vrinda V Nair
Dean Research, KTU

Felicitation
Dr.Joy Varghese
NSS Program Coordinator, KTU

Vote of Thanks
Reshmi Madhavan
Joint Director,KSACS

TERUMO PENPOL CELEBRATED WORLD HEALTH DAY IN ASSOCIATION WITH KERALA TECHNICAL UNIVERSITY AND MUSLIM ASSOCIATION COLLEGE OF ENGINEERING

The World Health Day was celebrated with a string of programs planned over a period of two days, it included a mixed gender football tournament followed by cultural activities and awareness sessions at Manaveeyam Vedhi. The program was co-organized by Muslim Association of College of Engineering and Manaveeyam Theruvidom Cultural Collective.

On the 6th of April, a mixed gender football tournament, that focused on the issue of gender parity, garnered a great amount of participation from the colleges. Heera College of Engineering defeated Muslim Association College of Engineering in the final to win the championship. Followed with this a formal function clubbed with an awareness session on health and wellness. The chief guest for the event was the KTU registrar.

A blood donation camp was organized on Sunday (April 7th) at Manaveeyam Vedhi, with a sound participation from students of MACE and the general public. Cultural programs were organized on the same day after 5 pm. The formal function was inaugurated by Dr. Vinod Vysakhi, Vice Chairman, Vyloppilly Samskruthi Bhavan, the program switnessed the multifaceted talents of NSS volunteers the public participated by singing and dancing. A team of folk song artists were invited to perform which got tremendous traction with the crowd.

A colorful event that touched issues of varied degrees such as Gender parity, health awareness, blood donation with a dose of fun stood out for its immaculate organizing, dedication and social commitment.







FLASH MOB

A Flash Mob was organized as part of the promotional activities of the World Health Day celebrations.



GENDER PARITY FOOTBALL MATCH

As part of the World Health Day celebrations, a five's Mixed Gender Football Tournament for college students was organized by Terumo Penpol and Muslim Association of College of Engineering in collaboration with Manaveeyom Theruvidom Cultural Collective.

The tournament was held on the sixth of April at Central Stadium between 9:30am - 1:00pm. By organizing this tournament, the organizers focused on the concept of gender parity.

The event caters to the social causes such as Voluntary Blood Donation, gender parity and health care.


The Winner is Heera College of Engineering and Technology Runner up is Muslim Association College of Engineering.

QUIZ FOR GENERAL PUBLIC

Every year coinciding with World Health Day that falls on April 7, Terumo Penpol organize a general quiz competition pertaining to blood donation, where people had to download the published questions and sent in to TPPL to participate; this year TPPL have abolished that system and has introduced a google form which is much simpler and user friendly.

A week-long online quiz contest was organized as part of World Health Day that ended on April 7th. TPPL had shared the link with the public. The quiz had a set of 15 questions pertaining to blood transfusion and donation.

TPPL had received 65 responses of which 17 of them achieved full credit.

The winners are

- Smitha K
- Jayeshmon K J
- Prinsu Jacob
- Arun T B
- Krishnan H

The winners will be recognized during the World Blood Donor Day Celebrations.

TERUMO PENPOL SUPPORTED RIDE FOR BLOOD

Two young women Sajna Ali and Tuna Bastin are on the course of creating history by going on a road trip around India on a span of 20 days covering the 20 major cities and 10,000 KMS. The ride named as, "Ride 4 Blood" is not just limited to leisure, they are using this platform to create awareness.

The objective of the ride would be to promote Voluntary Blood Donation, spreading the concept of Vision 2020 across India, bringing accountability among various stakeholders and public and mobilizing people and organizations that cater to the blood donation field, this would be a huge impetus to BLODCON 2019 (All India Blood Conference) event happening at Bangalore on the mid October. With the blood shortage reaching high levels, this trip also focusses on the need to promote voluntary blood donation across India.

They have embarked on a scooter expedition from Thiruvananthapuram to Amritsar and back to Thiruvananthapuram, covering 20 cities en route, to spread the message of voluntary blood donation.

Tuna Bastin, an Investigation Officer with Star Health Insurance, and Sajna Ali, a volunteer of Tejus, a blood donation forum, began their expedition "Ride 4 Blood" from Thiruvananthapuram on April 21 . Tuna Bastin and Sajna Ali usually start their journey at 4 a.m. covering a minimum of 350 km a day. They wind up at 6 p.m. creating awareness among the locals and college students at their respective destinations.

The team would be halting at different locations to speak about the importance of blood donation, covering the gravity of the problem and the benefits of blood donation. They would also urge the women folk to come out and donate blood as the count of female donors are paltry and requires attention.

The road trip is solely funded by Terumo Penpol an organization that shows immense credibility in the blood donation sphere by contributing consistently in promoting blood donation right from the inception. It is an organization that engages the public and student community into blood donation.

PROFILE

TUNA BASTIN

I am Tuna Bastin residing at Ernakulam, working as an investigation officer with Star health Insurance company Ltd since last 10 years. I am very much interested in driving and travelling is my passion and this job of mine is just the one I wanted. I kicked off my riding adventure at the age of 13 and I can proudly say that I have been on my own to many places enjoying the breeze, flowing with the wind and absorbing nature to the fullest. To be the first lady rider to complete the world highest motorable road 'khardung la' in a scooter starting from Kochi on September 2018, was an achievement that would always top my golden list of dreams. Moreover, I was accompanied by the Traveller Sajna Ali and together we covered 9109 Km embracing 12 states in a span of 29 days. This experience later lead to realization that i can travel a lot more in future, deep dive and enjoy wanderlust without compromising any personal responsibilities and commitments. I am a simple human being who believes that good behaviour and good action is a good prayer.

Sajna Ali

I was born to Ali Koya and Mariya in an orthodoxically middle class Muslim family in North Kerala. My father was a truck driver who unknowingly sew the first seeds of travelling inside me by taking me to short trips in the younger days of my life, it was fascination slowly growing into attraction and eventually becoming an addiction. Age was always a factor in any girls life and mine was no different as the more I grew, the lesser I got to travel with my father. This motivated me to find my own ways to cherish my passion, I embarked my first solo trip to Odisha, a place where the language and the land was completely new to me, though this was just the beginning of a series of trips.

My clutch with the solo trips opened various avenues, it got me new friends,









travel freaks and more than anything it inspired many people. This diverse group helped us in forming a collective known as Appooppanthaadi. It began with a team of 8 ladies with the first trip to Thenmala; the collective has now completed 155 trips all over India with participation from over 1500 women.

My experiences and journeys badly needed a shed down, it helped me liberate and free myself, thus starting my travelogues and blogs. I started broadcasting my travel videos through my YouTube channel. Meanwhile I published my first fiction "When the Sunsets". I quit my eleven-year-old software job in 2017 and started to focus entirely on my trips and social commitments. I am closely associated with NGO's such as Tejus and Helping Hands organization.

You can reach me in www.instagram.com/sajnaali.

RIDING IS IN THEIR 'BLOOD'

Travel junkies Tuna Bastin and Sajna Ali buckle up for 'Ride 4 Blood', a cross-country trip on scooter to promote voluntary blood donation

The last time this dynamic duo packed their bags for a long-distance trip together, they decided to go with the flow. The odyssey from Kochi to Kashmir on a scooter last year sounded deliciously daunting but setting out without a strict plan only made the idea even more exhilarating. "That was a phenomenal learning experience. Now, we are a tag team," says Sajna Ali over phone from Kozhikode.

Her riding partner, Tuna Bastin, concurs. "We stuck together through all the ups and downs. We now know how much distance we can cover a day, when to slow down and when to step on the gas," she says.

The pair, in their early 30s, is gearing up again for "a joyride for a humane cause." Come April 21, the two will hop on to Tuna's TVS Ntorq for 'Ride 4 Blood' to spread the message of promoting safe voluntary blood donation. The trip aims to cover 20 destinations in 20 days, clocking over 10,000 km. With Technopark as the starting point, the duo would be taking an anti-clockwise route around the country, touching some major cities such as Chennai, Kolkata, Lucknow, Varanasi, Jaipur, Pune and Bengaluru before coming full circle on May 12, if all goes according to the plan. The event has been organised by Tejus, a non-profit blood donation forum, in association with Terumo Penpol, Kerala Blood Donors Society and Federation of Indian Blood Donors Organisations, under the Vision 2020 programme.

While Tuna is the "designated rider", Sajna, who rides pillion, will be the documenter. Sajna, a Tejus volunteer, says they expect the journey to be "easier" this time as arrangements for food and accommodation are not a worry. "That's a big positive. We are better prepared, both mentally and physically. We know our strengths and limitations, and have learnt to manage with what we have," says Sajna, a vlogger and founder of women's travel group Appooppanthadi. Lightening the luggage is key but no compromises will be made on mandatory riding gears. An additional luggage carrier attached to the scooter hand-rest will be of much aid.

However, with the summer on, Tuna says the biggest challenge will be beating the heat and staying in optimal health throughout. Keeping this in mind, the organisers says the rides are being planned with sufficient breaks and rests, especially during the hottest parts of the day. "Each day, the ride commences at around 4 am to cover maximum distance before heat sets in and is scheduled to wind up by 4 pm or 5 pm. The rest of the day will be dedicated to awareness programmes at the respective destination. There won't be any night rides," says Brijesh PI, a co-founder of Tejus and an organiser.

Tuna says the duo will try to stick to the schedule as much as possible. "Riding gears, which include helmet and jackets, will actually crank up body heat but they are unavoidable. We plan to soak our headbands and also, if needed, spray water on jackets. I have tried that before and found it quite effective," points out Tuna, an Ernakulam native working with a health insurance company. The duo will appropriately cut down on food intake to "avoid feeling drowsy" but staying well hydrated is paramount.

Though no retinue will be in tow in order to allow for an "unobstructed passage", their journey can be followed at www.ride4blood.inthat'll be updated constantly. Sajna says she will also be vlogging the trip whenever possible.

Time to hit the road!

'Ride 4 Blood' is slated to be flagged off from Technopark at 11 am on April 21.

Source : The Hindu

THIS COUPLE CONDUCTED BLOOD DONATION CAMP ON THEIR WEDDING, 35 PEOPLE PARTICIPATED

These days, most of the weddings we see are grand and lavish. Having a big fat Indian wedding with fancy decorations and gifts has become a trend these days. However, this young couple from West Bengal's West Midnapore district has set an example for millions by deciding to conduct a blood donation camp in their wedding.

On February 8, 2018, 31-year-old Sandip Roy and 25-year-old Sreela Mondal got married. Both wanted to make their wedding memorable, and decided to conduct a blood donation camp on the day keeping in mind the shortage of blood in West Bengal. The guests present at the wedding participated in the organised blood donation camp.

Sandip said that he had often heard of shortage of blood during the summer season. When the wedding date was fixed, he immediately thought of holding a blood donation camp at his wedding. He even sought advice from his friends and family who happily agreed with his decision.

There was a separate tent for blood donation with a banner which said 'Donate blood to make Sandip's wedding memorable'. Around 35 people donated blood during the wedding, to which Kolkata's blood donation activist and founder of Medical Bank, Ashish, said that it was a huge step in the positive direction. Ashish is grateful to the couple for taking this decision, and hopes that it will inspire others to donate blood as well.

One rarely hears of someone organising a blood donation camp on their wedding. Previously, Suvendu Kumar Pratap and his wife Suchitra had conducted a blood donation camp in their wedding back in 2013. In 2017, Ujjain's Gunjan Jain and his wife had donated their blood to a Thalassemia patient right before the wedding.

HAPPY WEDDING DAY FOR ANEESH & ARYA - THE COUPLE CONDUCTED BLOOD DONATION CAMP ON THEIR WEDDING

'രക്ത'ബന്ധമുള്ള മാംഗല്യം

സ്വന്തം ലേഖകൻ

കിളിമാനൂർ

വിവാഹദിനത്തിൽ കതിർമണ്ഡപത്തിന് പുറത്ത് രക്തദാന ക്യാമ്പിന്റെ വേദിയൊരുക്കി രക്തദാനത്തിന്റെ മഹത്ത്വം പകർന്ന് നവദമ്പതികൾ. പോത്തൻകോട് സ്വദേശിയും എത്തൂർ ക്യാമ്പിലെ സിവിൽ പൊലീസ് ഓഫീസറുമായ അനീഷ് എം എസ്, വാമനപുരം ആനാകുടി സ്വദേശിനി ആര്യ എസ് കരുൺ എന്നിവരുടെ വിവാഹമാണ് രക്തദാനത്തിന്റെ പുത്തൻമാതൃക തീർത്തത്.

കിളിമാനൂരിന് സമീപം കാരേറ്റ് ആർകെവി ഓഡിറ്റോറിയത്തിലായിരുന്നു രക്തദാന ക്യാമ്പുകൊണ്ട് വ്യത്യസ്തമായ വിവാഹം നടന്നത്. ബ്ലഡ് ഡോണേഴ്സ് കേരളയുടെ കോ ഓർഡിനേറ്ററായ അനീഷ് രക്തദാനത്തിലൂടെ ആയിരക്കണക്കിൻ നാളുകൾ പുതുജീവിതം നൽകിയ ബ്ലഡ് ഡോണേഴ്സ് കേരളയുടെ സജീവ അംഗവുമാണ്. തന്റെ വിവാഹവും മാതൃകാപരമാകണമെന്ന ആഗ്രഹമാണ് വിവാഹവേദിയിലെന്നെ രക്തദാന ക്യാമ്പാക്കി മാറ്റാൻ അനീഷിന് പ്രേരണയായത്.

സിറ്റിസൺ ഇന്ത്യ ഹ്യൂമേഷന്റെ മൊബൈൽ ബ്ലഡ് ബാങ്കും തിരുവനന്തപുരം ജനറൽ ആശുപത്രിയുടെ മെഡിക്കൽ സംഘവുമാണ് ക്യാമ്പിന് നേതൃത്വം നൽകിയത്. വിവാഹത്തിനെത്തിയവർക്ക് ബ്ലഡ് ബാങ്കിന്റെ സജ്ജമാക്കിയിരുന്ന യൂണിറ്റ് വിവാഹം കണ്ട് ആര്യ സംഗതി മനസ്സിലായില്ല.

എന്നാൽ, പതിയെ അതിഥികളായി എത്തിയവർ പലരും രക്തം നൽകാൻ തയ്യാറായി. വാക്കിൻ എടുത്തതിനാൽ വിവാഹവിനത്തിൽ രക്തം ദാനം ചെയ്യാൻ കഴിയാത്തതിന്റെ വിഷമം മാത്രമാണ് വിവാഹശേഷവും നുണ്ടായിരുന്നത്.

ഒരേ സമയം നാലുപേർക്ക് രക്തം ദാനം ചെയ്യാനും പരമാവധി രക്തം ശേഖരിക്കാനുള്ള സൗകര്യവും മൊബൈൽ ബ്ലഡ് ബാങ്കിലുണ്ടായിരുന്നു. നിരവധി യാളുകൾ രക്തദാനം ചെയ്ത് നവദമ്പതികളുടെ വിവാഹധന്യമാക്കി. ഡിവൈഎഫ്ഐ സംസ്ഥാന സെക്രട്ടറി എ എ റഹീം, ആറ്റിങ്ങൽ പാർലമെന്റ് മണ്ഡലം എൽഡിഎഫ് സ്ഥാനാർഥി എ സമ്പത്ത്, പിന്നണിഗായകൻ പന്തളം ബാലൻ, ബ്ലഡ് ഡോണേഴ്സ് കേരള സംസ്ഥാന, ജില്ലാ ഭാരവാഹികൾ തുടങ്ങി നൂറുകണക്കിനാളുകൾ വിവാഹത്തിൽ സംബന്ധിച്ചു.

Here, wedding venue to turn into a blood donation camp

Times News Network

Thiruvananthapuram

Setting an example for all youths who follow the trend of the 'big fat Mallu weddings', a police officer in the capital city has come up with a unique idea to celebrate his wedding ceremony by hosting a blood donation camp at the venue.

Groom Aneesh M S, a resident of Karoor in Pothencode, and bride Arya S Karun, a native of Anakudy in Vamanapuram, will enter wedlock on Sunday at Karette in the presence of dear and near ones. Aneesh who is deployed as a civil police officer with Special Armed Police camp in Peroorkkada is an active member of blood Donors Kerala, a charitable society, which was established 2014.

"People are often afraid about donating blood. Even though blood donation is a noble cause, some myths and lack of awareness always deter people from donating blood. I used to donate blood in every three months and decided to make people aware of its significance. It is obvious that at least 1,000 guests will show up for the wedding ceremony. Thus I decided to organize a camp which will help convey a message to people that time, place and circumstances do not stop anyone from saving lives, "Said Aneesh.

Aneesh has booked a mobile blood bank van, which is equipped with blood storage facility, where four people could donate blood at a time. "People who wish to donate their blood can make use of the camp which will start after 10 30 am. But I am sad that I won't be able to participate in the camp on my big day as I am taking rabies vaccination, " Said aneesh.

THE LOWDOWN ON BLOOD TRANSFUSIONS

What is it?

A young pregnant woman in a government hospital at a rural centre in south Tamil Nadu's Madurai district made an explosive revelation mid-December. Expecting her second child, she heard from doctors, after she was admitted following a bout of sickness, that she had tested positive for HIV.

Later, as the story unravelled, in full media glare, it turns out she had acquired the virus after a blood transfusion in a district hospital following a diagnosis of anaemia. This opened up a Pandora's box, and fear and distrust pervaded the community. Besides flagging the issue of the availability of safe blood in the State, it set in motion a sequence of events, mostly tragic, introspection, and some corrective action.

How did it come about?

The story did not end, or even begin, there. The blood donor, who had donated as a replacement donor when a pregnant relative required a transfusion, only discovered his HIV positive status after a test for a job interview. He rushed back to the hospital, laden with guilt, to inform authorities. By then, his blood had been transfused to the pregnant woman, and she had tested positive. His blood donation history retrospectively exposed chinks in the blood donation and transfusion cycle in at least two instances. He had already donated blood in 2016, but his blood was discarded after he tested positive for HIV. However, though the HIV law mandates that the patient be informed with counselling about his/her status, in this case the donor remained in the dark. In the second instance, when he donated his blood in November last year, two years after the first, the lab failed to test and/or detect his infection, which was clearly not in the 'window period' where the virus may avoid detection. The donor was distraught, and attempted suicide, and died in hospital later.

A few days later, another pregnant woman claimed she had been transfused with HIV-infected blood at Kilpauk Medical College and Hospital in Chennai. While her claim has been contested stoutly, the two incidents have, nevertheless, rocked the State that once won plaudits for its prevention of transmission programmes.

What is the process of donation?

There is a chain of approved processes to be followed in blood donation, aimed at quality control and negating the possibility of transmitting infections. Every qualified donor is put through a basic clinical evaluation (blood pressure and pulse). If normal, a sample of the blood donated is tested for HIV, Hepatitis B and C, sexually transmitted diseases and malaria. Meanwhile, the donated blood is stored separately in an 'unscreened refrigerator.' If the sample clears these tests, or if the tests turn negative, the blood will then be moved to the 'screened refrigerator.' If it tests positive for any of the infections, another sample from the same blood bag is tested again. If positive, the bag is discarded. The HIV Act mandates that the blood bank inform the positive donor, besides referring to the appropriate department for further treatment. When a requirement crops up, the blood bank does a grouping to confirm that the group is the same, does a cross-match with the recipient and releases it to the ward.

What next?

The Madras High Court has sought a report from the Health Department. The National and State Human Rights Commissions have taken suo motu cognisance of the issue and asked for the State's response. The need, however, is to build confidence in the community that the most exacting standards are followed in collecting, testing and storing blood, and then in transfusing it. Even if this calls for a re-look at the entire process, it must be done. It is as crucial as making sure no one dies because they could not get blood in time.

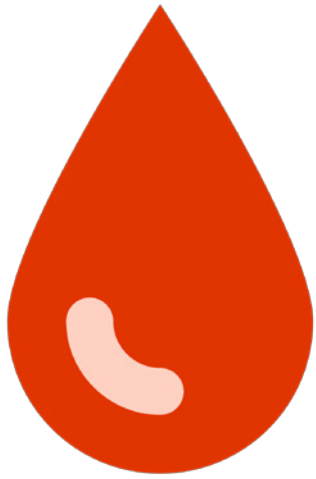
Source : The Hindu

BLOOD TYPE

A blood type is a classification of blood, based on the presence and absence of antibodies and inherited antigenic substances on the surface of red blood cells. These antigens may be proteins, carbohydrates, glycoproteins, or glycolipids, depending on the blood group system.

What are the major blood types?

If your blood type is:	You can give to:	You can receive from:
O Positive	O+, A+, B+, AB+	O+, O-
A Positive	A+, AB+	A+, A-, O+, O-
B Positive	B+, AB+	B+, B-, O+, O-
AB Positive	AB+ Only	All blood types



Letters to the editor

Also, for the bloodline newsletter - can you please add Vicky Tan in the distribution list?
Thank you.

Warmest Regards
Cindy Ng
Global Commercial

Thank you for sharing Baby,

Helen Vandebovenkamp
Sr. Mgr Corporate Communications
Terumo BCT Europe NV

Dear Baby,
Thank you for your article.

Reading the article about HIV transmission to a patient, I wonder if there's any local interest in pathogen reduction technology (such as Terumo BCT's Mirasol PRT System) to increase the safety of blood and blood transfusions in India.

Kind regards,

Bart Romanus
Senior Regulatory Affairs Specialist
Terumo BCT Europe N.V.

Thank you Baby!

Best regards,

Yosuke Sato
Global Marketing Manager - Whole Blood

Dear Madam,
Greetings of the day!

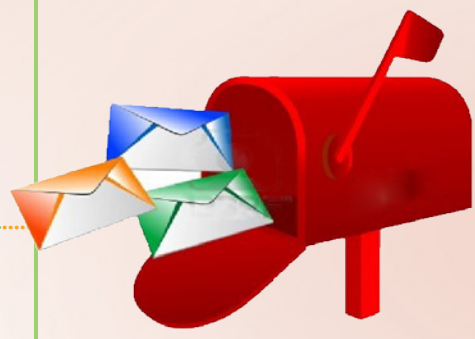
Thank you for sharing the publication and your effort to promote voluntary blood donation is very appreciable.

The contents included in the journal encouraged to motivate and promote voluntary blood donation but some contents included in this issues show that concerning stakeholders should be aware about safe blood even there is a lot challenges to achieve 100% voluntary safe blood donation till now.

And, Congratulation for completing half century edition of the Blood Line News Letter and wish you all the best for coming days.

Warm regards

Machakaji Maharjan,
Central treasurer



Thank you very much for sending us Blood Line e magazine.
It is very helpful & informative.
Regards

Kabi Ghosh
Hony.General Secretary
DURGAPUR SUB-DIVISIONAL VOLUNTARY BLOOD DONORS' FORUM

Dear Baby,

Thanks for Blood line! I've also asked IT's help to include me into the distribution list for commercial.

Best Regards,

Vicky Tan
Sr.Manager,Supply Chain
Apac

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