Types of Donation

Whole Blood

Autologous: It's the collection, normal testing and processing of a patient's own blood for him or herself. This can only be performed for planned surgery. SANBS Medical Officer will assess the patient's eligibility in terms of general health and other requirements.

Directed: A patient can ask a family member or friend to donate. Chosen donors have to meet the same criteria as normal donors and must naturally also have a blood type compatible with the patient receiving the blood.

If blood is donated by first line blood relatives, it will require a further step of irradiation to prevent an entity called Transfusion Associated Graft verse Host Disease.

Apheresis

Platelet: Platelets play a vital role in blood clotting and prevention of excess blood loss. Platelet donation is a simple process that takes about two hours to complete. The blood is processed through a cell separator, which retains the platelets and returns the other blood components to the donor's system. This procedure enables people to donate platelets every month.

Plasma: Plasma contains many important components that can be given to patients with special needs.
Plasma donation is a similar process to platelet donation, and takes about 90 minutes. The blood is processed through an aphaeresis machine that filters out the plasma and returns the red cells and other cellular components to the donor's system.

As all the red cells are returned, these donors are able to donate more frequently than whole blood donors. Specialized equipment is needed for plasma and platelet donation, so these procedures are only carried out at particular donor centres or branches.

After donating, eat well and increase your fluid intake for the next four to six hours. Do not smoke for at least 30 minutes. Also avoid strenuous physical exertion and lifting heavy objects with the arm used for making the donation for at least two hours afterwards.

Autologous donation

This option is an alternative to allogeneic blood for those patients whose general condition falls within donor guidelines, and whose intraoperative blood requirements can be reasonably accurately assessed.

Suitable candidates must be able to tolerate the rapid withdrawal of 450-500 ml of blood, and the longer-term reduction in haemoglobin levels. They should be over 50 kg in weight, have a haemoglobin level of 11 g/dl (Hct of 0.33) or more, and be between the age of 16 and 70.

Older or younger patients may be accepted after consultation with SANBS medical staff. Absolute contradictions to admission to this programme include severe heart disease, severe respiratory disease and bacteraemia. Other conditions such as insulin dependent diabetes mellitus and patients on anti-convulsive therapy should be assessed carefully in conjunction with the attending physician.

The patient's doctor should initiate all requests for this procedure and refer the patient to the Regional Blood Transfusion Service. The procedure should be initiated about six weeks prior to the operation depending on the amount of blood needed.

Designation donation

Another alternative to allogeneic or autologous transfusion is the donation of the patient's blood requirements by family or friends who have compatible blood groups. However, in terms of voluntary self-deferral safety, this carries a risk of the exertion of undue pressure by the prospective recipient.

It must be reiterated that this is not an option in an emergency situation, as all blood must be fully tested before issue. Blood from relatives carries the risk of "graf"