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picture 1 - blood collected post-operatively in the DONOR autologous reinfusion system

picture 2 - blood being filtered through the DONOR autologous reinfusion system

picture 3 - blood being re-infused into the patient; 92.88% of drained blood is re-infused

THE DONOR AUTOLOGOUS BLOOD REINFUSION SYSTEM

Three of the leaders in the field of blood management, Van Straten Medical, Pall Medical and Medinorm, joined forces to visualise and manufacture the state of the art DONOR™ autologous blood reinfusion system.

The DONOR™ systems represents the latest innovative design for filtering and reinfusing your own blood. This makes it immediately available to the body for recuperation at optimum levels.

1. the blood is safe because it is your own
2. no risk of transfusion transmitted diseases, such as HIV Aids, Hepatitis, etc.
3. no negative alterations to your body's normal immune response
4. the blood is fresh because it is re-infused immediately
5. because healing starts immediately, it leads to a money-saving, shortened recovery period
6. greatly reduces the risk of bacterial infection
7. it takes pressure off the blood banks, so that available blood can be used for emergencies

If you are to undergo major surgery, particularly orthopaedics surgery, speak to your surgeon about using the DONOR system. It's worth the peace of mind!

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If you had to receive a blood transfusion after an operation, would you choose ..........

a) your own blood
or
b) somebody else's ??????

We would like to think that the answer to this question is a foregone conclusion, but a few facts need to be clarified.

Firstly, there are 3 ways by which a patient can receive a blood transfusion:

1. homologous blood transfusion (blood from the blood bank)
2. autologous blood transfusion (your own blood donated prior to the operation and stored by the blood bank)
3. autologous reinfusion
   a) your own blood collected intra-operatively, which is then washed and re-infused
   b) your own blood collected post-operatively, which is then filtered and re-infused

1. homologous blood transfusion (blood from the blood bank). This is the most common and accepted method of blood transfusion.

The risks associated with the use of homologous blood are recognised as being low, however there are risks. These included transmission of the HIV, Hepatitis B&C and many other viruses.

However, this is not the only reason why more and more people are looking for safer alternatives. When blood is stored it undergoes many changes collectively called “storage lesion”. Storage lesion affects the ability of the red cells to carry and release oxygen to the tissues and interferes with the ability of the blood to clot.

Foreign leucocytes (white blood cells) and platelets, which are present in homologous blood, may stimulate your own body to make antibodies that can cause immediate, sometimes severe, reactions. Homologous blood can have harmful effects on the body’s immune system, which make you more susceptible to post-operative bacterial infections, including pneumonia.

2. autologous blood transfusion (your own blood donated prior to the operation and stored by the blood bank). Pre-donated blood is safe and always compatible to your stem. Furthermore, it eliminates any blood-group incompatibility problems.

However, it has to be stored and is therefore subject to the same deterioration as other stored blood:

1. decreased ability to release oxygen
2. complications from breakdown products
3. loss of clotting factors

3a autologous reinfusion; your own blood collected intra-operatively, which is then washed and re-infused.

Blood lost during an operation is collected and “washed” in what is essentially a high-tech washing machine, commonly known as a “cell saver”. This procedure is quite adequate for most operations, but not only is there a limit to the amount of blood that can be recycled this way, there is also a minimum volume required. In all cases only about 40% of collected blood can be re-infused.

3b autologous reinfusion; your own blood collected post-operatively, which is then filtered and re-infused. During the first 6 - 8 hours post-operatively 80% of blood loss takes place. It therefore makes sense to collect blood during this period for purification and re-infusion.

This is exactly what the DONOR™️ post-operative autologous reinfusion system does and it has many advantages over pre-donated blood:

1. the patient does not have to make regular trips to donate blood
2. surgery can be scheduled without delay
3. anaemia is not induced before surgery by regular blood donation
4. no blood is wasted if scheduled surgery is cancelled
5. the risk of the patient being given the wrong blood is eliminated