

CHAPTER 8

Blood transfusion

Blood transfusion is a life-saving intervention provided that it is carried out correctly and that the transfused blood is safe for the recipient. Because of inherent risks, transfusion should be prescribed only for conditions for which there is no other treatment.

For travellers, the need for a blood transfusion is almost always due to a medical emergency involving sudden massive blood loss, such as:

- traffic accident
- gynaecological and obstetric emergencies
- severe gastrointestinal haemorrhage
- emergency surgery.

The safety of blood and blood products depends on careful selection of donors, testing all donations for transfusion-transmissible infectious agents and rigorous control of all procedures involved in donation, testing and transfusion.

The safety of transfusion depends on appropriate prescription (only when there is no other remedy), careful checking of compatibility of the blood or blood product with the recipient's blood, and rigorous control of all procedures involved.

In many developing countries, safe blood products and the expertise to prescribe and carry out safe transfusion are not available in health care facilities. The risks associated with unsafe blood transfusion are:

- incompatibility of transfused blood owing to failure to carry out careful compatibility testing;
- transfusion of infectious agents that cause diseases such as HIV, malaria, hepatitis B, hepatitis C, syphilis, Chagas disease (as a result of their presence in the transfused blood or on transfusion equipment).

Initial management to prevent further blood loss by positioning the patient correctly helps to maintain adequate blood pressure and flow of blood to vital organs.

In many cases, transfusion of blood can be avoided by replacing the blood volume with plasma substitutes (crystalloids or colloids). In areas where malaria occurs, transfused patients should receive antimalaria therapy as a routine precaution.

Precautions

- Travellers should carry a medical card or other document, showing their blood group and information about any current medical problems or treatment.
- Unnecessary travel should be avoided by those with pre-existing conditions that may give rise to a need for blood transfusion.
- Travellers should take all possible precautions to avoid involvement in traffic accidents (see Chapter 4).
- Travellers may obtain in advance a contact address at the travel destination for advice and assistance in case of medical emergency.
- Travellers with medical conditions such as haemophilia, who may need blood transfusion, must take medical advice in advance and identify appropriate medical facilities at the travel destination.
- Travellers with a medical condition that necessitates transfusion of plasma-derived products to replace coagulation factor or immunoglobulin should obtain medical advice and make appropriate arrangements in advance.

Further reading

The clinical use of blood: handbook. Geneva, World Health Organization, 2001.