Will my child need a plasma transfusion?

Patient information
Dear Parent,

Having a child admitted to hospital is a difficult time for everyone in the family. To help, we have created this information leaflet. It explains what to expect if your child needs to receive a plasma transfusion as part of their treatment.

Kind regards,

Kate Pendry
Dr Kate Pendry
Clinical Director, Patient Blood Management
What is plasma?

Plasma is a yellow liquid that carries red cells, white cells and platelets within the blood vessels around the body. It contains vital proteins known as clotting factors. These clotting factors, together with platelets, allow blood to ‘clot’ when needed. Healthy blood clotting is important to prevent excessive bleeding and bruising.

Blood from donors is separated into red cells, platelets and plasma. The plasma is quickly frozen to make Fresh Frozen Plasma, often called FFP. Plasma given to patients may be made from a single bag of blood or manufactured from lots of plasma from many thousands of blood donations.

What is plasma used for?

Plasma is usually used to replace missing or low levels of clotting factors. It may be needed for patients who have liver disease, for patients with other types of clotting problems or certain types of inherited bleeding disorders.

Plasma may also be required for patients who have lost a lot of blood, or for those having heart or liver surgery. Most people can cope with losing a moderate amount of blood without needing a plasma transfusion. However, if a large amount of blood is lost, a plasma transfusion may be the only way of replacing clotting factors quickly.
How will the plasma be given and how will my child feel?

Plasma is given through a tiny tube directly into a vein in the arm. Most people do not feel anything unusual during a plasma transfusion. Your child will be carefully monitored before, during and after the transfusion. If your child feels unwell during or after the transfusion, please inform the healthcare professional immediately.

A few children may develop a slight fever, chills or a rash. These are usually due to a mild reaction or allergy and are easily treated with medication or by slowing down or stopping the transfusion. Severe reactions to plasma transfusion are rare. If they do occur, staff are trained to recognise and treat them.

Risks associated with a plasma transfusion

The risk that a plasma transfusion will cause severe harm or even death is very low but this should be discussed with the healthcare professional. One of the most important checks for a safe transfusion is to make sure your child gets the right plasma. Staff should carry out careful identification checks of your child, both when they take blood samples before the transfusion and along with the bag of plasma, before it is given. This is why it is important that your child wears an identification band. If you are with your child, you may also be asked to confirm their full name and date of birth. It is alright to remind the healthcare professional to ask you for this information.
Compared to other everyday risks, the likelihood of getting an infection from a transfusion is very low. All blood donors are unpaid volunteers and the risk of an infected unit entering the UK blood supply continues to decrease¹. Donors and blood donations are screened for a number of infections which can be transmitted through blood, but it is not practical or even possible to screen all donations for all infections, therefore, there will always be a small risk associated with having a transfusion.

In the UK a number of precautions are taken to ensure that the plasma given to children is safe. All children born on or after 1 January 1996 receive plasma which is imported from abroad. This is to reduce the very small risk of acquiring variant Creutzfeldt-Jakob Disease (vCJD). The imported plasma will also have been treated to destroy viruses such as the Human Immunodeficiency Virus (HIV) or Hepatitis C. This is either done using methylene blue or a solvent-detergent treatment.

The risk of getting vCJD from a transfusion is extremely low. Each year, approximately 2.6 million blood components are transfused in the United Kingdom and there have been only a handful of cases where patients are known to have become infected with vCJD. More information on vCJD can be found on the NHS Choices website: www.nhs.uk/conditions/Creutzfeldt-Jakob-disease/Pages/Introduction.aspx

Further information on the risks of transfusion can be found at: www.shotuk.org/home/
What if I have worries about my child receiving plasma?

If you are worried or have any questions, please talk to the healthcare professional. Many hospitals have a dedicated Hospital Transfusion Team and if appropriate, they may be able to come and discuss your concerns with you.
Additional Information

As a precautionary measure to reduce the risk of transmitting vCJD, people who have received a transfusion of blood or any blood component since 1980 are currently unable to donate blood or blood components.

Further information on blood transfusion is available in other patient information leaflets. Please ask the healthcare professional if you would like a copy of these.

You may also find the following websites useful:

**NHS Choices:**

**NHS Blood and Transplant:**

**Reference**


We would welcome your feedback and comments on this leaflet. You can contact us in the following ways:

**By post to:**
Customer Service, NHS Blood and Transplant, Part Academic Block, Level 2, John Radcliffe Hospital, Headley Way, Headington, Oxford OX3 9BQ

**By email to:** nhsbt.customerservice@nhsbt.nhs.uk
**Or by phone:** 01865 381010

This leaflet was prepared by NHS Blood and Transplant in collaboration with the National Blood Transfusion Committee. Further supplies can be obtained by accessing [https://hospital.nhsbtleaflets.co.uk](https://hospital.nhsbtleaflets.co.uk)

Individual copies of this leaflet can be obtained by calling **01865 381010**.
NHS Blood and Transplant (NHSBT) is a Special Health Authority within the NHS and provides the blood that patients receive. In order to plan for future blood demands, information about which patients receive blood needs to be gathered. We may ask a hospital or GP to provide limited medical information on a sample of patients who have received blood transfusions.

Any information that is passed on to NHSBT is held securely and the rights of these patients are protected under the Data Protection Act (1998).