# BABIES RECEIVING A BLOOD TRANSFUSION

# A guide for parents

#### WHAT IS A BLOOD TRANSFUSION?

A blood transfusion involves blood being given through a tube into the bloodstream.

Transfusion has been recommended because it is the best option for your baby at this point.



### WHICH BLOOD PRODUCT MIGHT MY BABY RECEIVE?

After blood is collected from a donor it is separated into parts so your baby only receives the part that they need.



#### **RED BLOOD CELLS**



#### **PLATELETS**



# FRESH FROZEN PLASMA, CRYOPRECIPITATE

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#### **PLASMA PRODUCTS**

#### Carry oxygen around the body

- A low number of red blood cells results in anaemia
- Some causes of anaemia include prematurity, blood loss and increased red cell breakdown (haemolytic disease of the newborn).

# Help to stop bleeding by forming a clot

- Low platelet count can be due to too few being made, too many being used or too many being destroyed.
- Some causes include infection and antibodies.

### Liquid part of blood containing important plasma proteins

 May be required in acute bleeding where proteins in the plasma are reduced.

#### **Concentrated blood proteins**

- Albumin helps maintain fluid levels.
- Immunoglobulins helps the immune system.
- Clotting factors for treating specific bleeding problems.

### **ARE TRANSFUSIONS SAFE?**

The blood for transfusion is collected by the Australian Red Cross Blood Service from voluntary, unpaid Australian donors. The blood supply is one of the safest in the world and most babies will have no complications during or after their transfusion.

Although transfusions are generally very safe, there are some associated risks. However, precautions are taken to avoid any complications. There are three key risks to be aware of:



## HAVING A REACTION



#### **CATCHING AN INFECTION**



# RECEIVING THE WRONG BLOOD PRODUCT

- Reactions can range from mild to severe.
- Mild reactions are the most common and include a rash or slight fever.
- Severe reactions include breathing difficulties, high fever and severe allergy (anaphylaxis).
- Your baby will be carefully monitored. Alert the nursing staff if you have any concerns about your baby during the transfusion.
- In Australia, blood is carefully screened for infections.
- This includes screening donors and testing the blood after it has been donated.
- Risk of catching any diseases such as Hepatitis C or HIV is less than one in a million.
- This occurs rarely (usually a checking error).
- This is prevented by multiple checks in the laboratory and at the bedside prior to beginning transfusion.
- It is important that your baby is wearing an identification band throughout the process.



### **HOW IS BLOOD GIVEN?**



Your baby will need a small plastic tube placed into a vein



The blood product will be carefully checked to make sure it matches your baby's blood



The transfusion will begin



Your baby will be carefully monitored



The transfusion should take less than four hours



We usually observe no change in the baby during their transfusion



If you have any concerns about your baby at any stage of the process, alert nursing staff immediately

### DO I NEED TO GIVE CONSENT FOR A BLOOD TRANSFUSION?

Yes, consent is necessary prior to your baby being given a transfusion.

Consider the following statements and if you have any doubts, please ask your clinical team.

- I understand why transfusion has been recommended and other possible options for treatment
- ✓ I am aware of the expected benefits of a transfusion for my baby
- ✓ I am aware of the potential risks and side effects
- ✓ I am aware of which blood products will be transfused to my baby
- ✓ I am aware of how the transfusion will be given and how long it will take



In an emergency, there may not be time to discuss your baby's transfusion and obtain your consent. However, the reasons for the transfusion will be explained to you as soon as possible.

### FREQUENTLY ASKED QUESTIONS

### **CAN I DONATE BLOOD TO MY BABY?**

The risk of blood from donors provided by the Australian Red Cross Blood Service is extremely low, so parents' blood is not used.

In addition, there are some increased risks of rare transfusion reactions when babies receive blood from relatives.

# WILL THE BLOOD TRANSFUSION AFFECT THE NEWBORN SCREENING TEST?

Yes, there is a chance it might. This test is usually done between 48–72 hours after birth. If the blood spot sample has not yet been taken, your baby will need it done before receiving a transfusion. They may also need a further sample after transfusion.

# WILL THIS TRANSFUSION AFFECT MY BABY IN THE FUTURE?

A transfusion will be given only if medically necessary. From what we know so far, there are limited long-term effects. If your baby needs a transfusion in the future, remember to mention that they have had one before as it may influence which blood is given.

