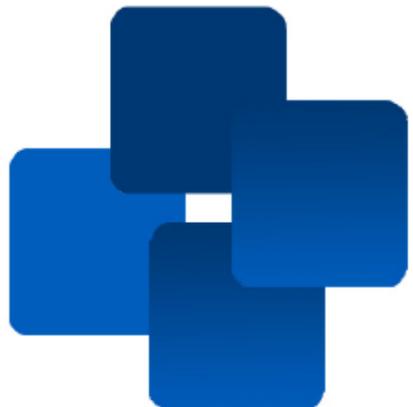


Information for Parents

Exchange Transfusion

Neonatal Unit



What is an exchange transfusion?

The procedure involves removing your baby's blood in stages and replacing it with fresh donor blood.

Why is an exchange transfusion needed?

Your baby may require an exchange transfusion for a number of reasons:

- Rhesus incompatibility
- ABO incompatibility
- Severe jaundice which is not responding to phototherapy
- Severe disturbances in body chemistry
- Toxic effect of drugs

What is Rhesus incompatibility?

This occurs when a woman with a Rhesus negative blood group has a baby with a Rhesus positive blood group. It is possible for a small amount of the baby's blood to enter into the mother's circulation during the pregnancy or labour. The mother will produce antibodies to destroy these cells for her own self-protection. This may not be a problem with the first pregnancy. However, if she has another pregnancy in which the baby is Rhesus positive, the antibodies that have formed will pass into the baby's bloodstream via the placenta and destroy the baby's red blood cells. This may cause severe anaemia and jaundice.

What is ABO incompatibility?

Everyone with group O blood has natural anti-A and anti-B antibodies. So when the Mother's blood group is O and her baby's blood group is A or B her antibodies may destroy the baby's red blood cells in a similar way.

Is the blood used for exchange transfusion safe for my baby?

Adult donor blood (screened for infections) is cross-matched against both the mother's blood and the baby's blood to ensure that it is compatible with both.

How will the exchange transfusion be done?

- In order to carry this out the doctors will need to insert fine tubes (catheter) into an artery and vein (usually through the umbilicus).

- A small amount of your baby's blood is removed and replaced with donor blood slowly over a few minutes. This is repeated every few minutes for up to two to three hours according to how much blood is exchanged and will depend on the reason for the exchange transfusion.
- It is important to ensure that your baby remains stable throughout the procedure so these cycles are taken slowly and your baby will be closely monitored.

Will I be able to see my baby?

You may be asked to leave the room whilst the catheters are being inserted; this is because it has to be a sterile procedure. The exchange can take several hours and because it is a sterile procedure, your baby may be covered in sterile towels in order to create a safe clean area for the doctor to work with. Therefore, your baby may not be very visible during the procedure, but if your baby is stable, you could visit briefly to see how things are progressing. The nurses and doctors will also keep you updated.

Are there any risks?

Exchange transfusion is a procedure, which has been carried out many times in neonatal units. Like all procedures however, there are small risks attached. For exchange transfusion these include:

- Infection
- Low blood sugar
- Problems with blood clotting
- Unstable blood pressure
- Breathing problems
- Unstable sodium and calcium levels in the bloodstream

Your baby will be monitored for these problems and treated promptly in the unlikely event that any arise. It is important to remember that the decision to perform an exchange transfusion will only have been reached because the risks of **not** doing it are greater for your baby.

What happens after the exchange?

Your baby will stay on the neonatal unit and the catheters kept in place until the blood results indicate that a second exchange is not required.

Consent

- After you have read this information, the doctors will ask you to sign a consent form for the procedure.
- You will only be asked to sign the consent form once you have fully understood why your baby requires this treatment.
- The doctors will discuss any issues you may have about the procedure.

Contact Telephone Numbers:

Neonatal Unit, Lister Hospital 01438 284125

Children's Emergency Department 01438 284606

Further Information

For more information see the Bliss Baby Charity website at:

www.bliss.org.uk

Bliss helpline telephone number: 0808 801 0322

Or e-mail: hello@bliss.org.uk

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