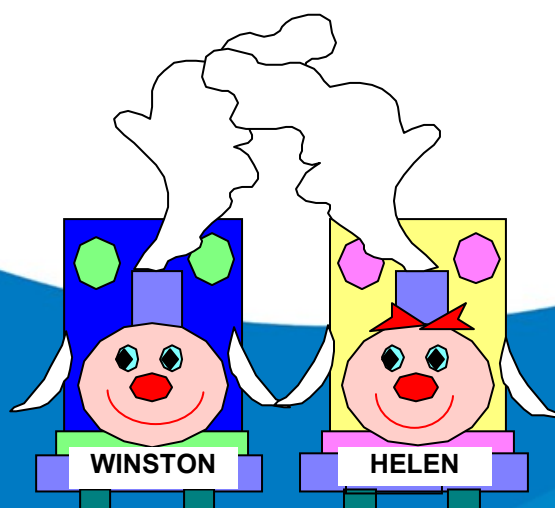


Exchange transfusion for neonatal jaundice

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Na żądanie ta ulotka może zostać udostępniona
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The nature and reasons for the condition

Jaundice is the name given to the yellow appearance of the skin and eyes. It is due to the build up of a chemical in the body called bilirubin, which is normally passed out of the body in urine and stool (poo).

Jaundice is fairly common in newborn babies. It usually occurs in the early postnatal period and can last up to 2 weeks in a full term baby and 3 weeks in a pre-term baby. If your baby remains jaundiced beyond this point, we refer to it as prolonged jaundice.

In most babies, jaundice is not harmful. However, it can become harmful for some babies if the bilirubin reaches a very high level and it is not treated.

Reasons for the Procedure (What is an exchange transfusion?)

During an exchange transfusion some of your baby's blood is replaced by donated human blood. A small quantity of your baby's blood is taken from a vein or an artery. Donated blood is then given back to your baby to replace the blood that has been taken. This process is repeated until a sufficient amount of your baby's blood has been exchanged for donated blood.

Why does my baby need an exchange blood transfusion?

The most common indication for exchange transfusion is high levels of jaundice (raised levels of yellow pigment called 'bilirubin') possibly with a low blood count.

This is due to excessive breakdown of your baby's red blood cells. The aim of treatment is to prevent any harmful effects of jaundice on the baby's brain and other internal organs.

Normally jaundice is treated with phototherapy (purple/blue lights) you may have seen on the unit. When the jaundice levels are really high and not responding to phototherapy, exchange transfusion may be necessary.

Nature of the procedure (what happens during an exchange transfusion?)

An exchange transfusion aims to remove the bilirubin present in the blood of your baby. It is done by slowly removing the circulating blood from your baby, small amounts at a time, and replacing it with new donor blood. We have to do this over 2-3 hours. We usually have to insert two special drips through the baby's belly button (umbilical catheters), one to remove the baby's blood and another to give the new blood. These drips may already be in place. The blood used for exchange transfusion has to be specially ordered from the blood bank. Your baby will need to be admitted to the Special Care Baby Unit and be carefully monitored during this procedure.

Risks and benefits of the procedure

The risk of complications from the procedure tends to be more serious in babies who are smaller and already unwell. There are risks associated with the procedure, such as low blood count, fluid overload, abnormal salt or sugar levels, low temperature and infection. Serious complications can include abnormal heart rhythms and seizures (fits). Very rarely it may result in death – these babies are usually very unwell with additional medical problems.

Your doctor will explain about the benefits of the procedure as well as the risks involved. Your signed consent (permission) will be requested before going ahead with the procedure.

How your baby will be monitored

Your baby will be in an incubator and be under the lights. Your baby will have an eye mask over their eyes to protect them from the phototherapy lights. They will have regular physiological observations taken including heart rate, temperature and oxygen levels.

Your baby will have regular blood tests to ensure they are responding to treatment.

References

National Institute for Health and Clinical Excellence (NICE) (May 2010): Neonatal Jaundice. Nice Clinical Guideline 98. London

If you have any further questions, please contact your child's consultant via their secretary via the hospital switchboard 0151 426 1600.

The secretaries are available Monday to Friday 9.00am to 5.00pm

If you need to contact the department outside of these hours, please phone either:

Ward 3F 0151 430 1616

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