

## Patient information

# Direct Coombs Test (DCT)

### What is it?

This is a blood test commonly performed in newborn babies. Blood may be taken from your baby by a heel prick test or a needle. It tests for evidence of a reaction between the blood groups of the baby and his/her mother.

### What are blood groups?

All pregnant women have a blood test to determine their blood group during their pregnancy. These blood groups can be A, B, AB or O. There is also Rhesus blood types, which are either “positive” or “negative”.

### Reactions between baby and mother blood groups

A baby’s blood group is inherited from both parents. It is common that a baby will have a different blood group to his/her mother. Sometimes a mother’s blood will recognise that the baby’s blood group is different and it produces substances called antibodies. These antibodies can cross to baby’s bloodstream where they destroy the baby’s red blood cells. This attack of the baby’s blood cells is detected by the Coombs test.

### What if the Coombs test is positive?

There are two main problems that can happen when a Coombs test is positive. These are jaundice and anaemia.

Many babies will not develop either of these problems but it is important to be aware of and check for them.

## **What is Jaundice?**

Jaundice is yellow colour to the skin. It is caused by the build-up in the skin of a pigment called bilirubin. Bilirubin is released when red blood cells are broken down.

A mild degree of jaundice is very common in newborn babies and is not usually a problem.

However babies who are Coombs positive may have higher levels of jaundice. High levels of jaundice need to be treated. The usual treatment for jaundice is phototherapy which involves exposing the baby to a light source.

## **What is Anaemia?**

Anaemia means that there are fewer red blood cells than usual. Anaemia can occur in Coombs positive babies because their red blood cells are broken down by the antibody from their mother. The anaemia may not be present at birth, but can develop over the first few weeks and months of life.

## **What will happen to my baby?**

High jaundice levels will be treated with phototherapy.

If your baby is thought to be at risk of developing anaemia or is anaemic they will be prescribed Folic Acid.

## **What is Folic Acid?**

Folic Acid is a medicine used by the body to make red blood cells. You will be shown how to give this to your baby before going home. Your baby should take this for 3 – 4 months.

## **At Home**

It is possible that the jaundice and anaemia may get worse after your baby has gone home.

Concerning symptoms include:

- Increasing jaundice

- Excessive sleepiness
- Poor feeding
- Fast breathing or difficulty breathing
- Baby appears pale

If you are worried, contact your midwife or General Practitioner (GP). Your baby may be given an appointment to return to the hospital clinic. At the clinic your baby's progress will be reviewed and further blood tests may be required.

### **Will there be any long-term problems?**

Most babies do not have any long-term problems. The mother's antibodies which have caused the positive Coombs test reduce in number and are usually gone from the baby's blood by 2 months of age.

### **Further advice**

If you are worried or need advice you can call the following departments who can best advise you on what to do:

- Rainbow ward 01284 713315 (24hrs a day)
- Your own GP / GP out of hours
- NHS 111
- Your midwife or health visitor

*If you would like any information regarding access to the West Suffolk Hospital and its facilities please visit the hospital website [www.wsh.nhs.uk](http://www.wsh.nhs.uk) and click on the link, or visit the disabledgo website:*

*<http://www.disabledgo.com/organisations/west-suffolk-nhs-foundation-trust/main>*