

Direct Coombs Test (DCT)

Maternity and Neonatal Unit Patient Information Leaflet

Introduction

When you are pregnant and have routine antenatal screening blood tests we check for your blood type and the presence of antibodies that may cause problems with your baby's red blood cells. If the tests found any rhesus (Rh)-negative or other antibodies that could cause problems, then when your baby is born a sample of the cord blood (from the umbilical cord) is taken. This is sent to the laboratory for a Direct Coombs Test (DCT).

The test is also carried out as a part of routine investigation in babies who develop jaundice.

What is the DCT?

During pregnancy it is possible for blood from the baby to cross the placenta to the mother. Where there is a mismatch between the mother and baby's blood types it is possible for the mother to develop antibodies against the baby's red blood cells.

The antibodies (produced by the immune system in response to the mismatch) can cross via the placenta into the baby and on occasions can cause destruction of the baby's red blood cells.

This most commonly occurs when the mother has a RhD-negative blood type and the baby is RhD-positive, although it can occur with other blood types such as RhC as well as other mismatches such as blood group ABO incompatibility.

If there is a mismatch, the DCT of the baby's cord blood will be positive. The test is looking for any 'foreign' antibodies that are already adhered (stuck to) your baby's red blood cells as this can cause the breakdown of the red cells (known as haemolysis).

We perform a full blood count test to check the number of red blood cells and haemoglobin (iron) level to see the effect of the antibodies in your child (e.g. jaundice).

In the last few years mothers who have a RhD-negative blood type are routinely given anti-D immunoglobulin in pregnancy which helps remove RhD foetal red blood cells before they can cause problems. Due to anti-D immunoglobulin being given, the incidence of DCT positive babies has reduced but it can still occur.

Your baby has been identified as DCT positive

As your blood type is Rh-negative, we have checked your baby's blood for any antibodies. Your baby has been found to have antibodies on their red blood cells (DCT positive). It is therefore important that we monitor your baby's blood count to ensure that the number of red blood cells and haemoglobin levels do not fall rapidly or fall below what a baby doctor (paediatrician) considers as normal. The antibodies usually disappear fairly quickly so we will monitor the effect of these antibodies for the first two weeks of your baby's life.

How do you monitor my baby?

For us to do this you will need to bring your baby for blood tests on a Tuesday, once a week for two weeks to the blood collection department in the main outpatient blood collection department at Russells Hall Hospital. If more tests are required, it will be discussed with you by the midwifery or neonatal team.

Your baby's blood results will be reviewed by a member of the neonatal unit staff who will contact you if the blood result is abnormal or your baby requires treatment. It is therefore very important that you give **your correct telephone numbers** to the midwife before you go home as these are the numbers we will contact you on. You will need to give us both landline and mobile numbers.

What happens now?

Your baby will be given a medicine called folic acid which is a vitamin that helps the body to make red cells in the bone marrow. They will need to take the folic acid every day for one month or as directed by your baby's consultant. There is no alternative to this medication.

It is important that your baby receives each dose of the folic acid, as it is important for red blood cell development. If your baby does not receive treatment or misses too many doses, then their red blood cell levels may drop which will result in your baby being admitted to the hospital.

It is important that your baby does not run out of folic acid. If you run out then you can either get a prescription from your GP or speak to a member of the neonatal unit.

If you have any concerns, questions or if there is anything you do not understand about this leaflet please contact:

Neonatal Community Team:

Monday to Friday, 8am to 4pm – 01384 456111 Ext 3120
Out of these hours – 01384 244364

Community midwives who visit you when you go home:

Monday to Friday, 9am to 5pm – 01384 456111 Ext 3358
Out of these hours – 01384 456111 Ext 3360

This leaflet can be made available in large print, audio version and in other languages, please call 0800 0730510

ਜੇਕਰ ਇਹ ਲੀਫਲੈੱਟ (ਛੋਟਾ ਇਸ਼ਤਿਹਾਰ) ਤੁਸੀਂ ਆਪਣੀ ਭਾਸ਼ਾ (ਪੰਜਾਬੀ) ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕ੍ਰਿਪਾ ਕਰ ਕੇ ਪੇਸ਼ਟ ਇੰਨਫਰਮੇਸ਼ਨ ਕੋ-ਆਰਡੀਨੇਟਰ ਨਾਲ **0800 0730510** ਟੈਲੀਫੋਨ ਨੰਬਰ ਤੇ ਸੰਪਰਕ ਕਰੋ।

यदि आपको यह दस्तावेज़ अपनी भाषा में चाहिए तो पेशन्ट इनफरमेशन को-आरडीनेटर को टैलीफ़ोन नम्बर **0800 0730510** पर फ़ोन करें।

જો તમને આ પત્રિકા તમારી પોતાની ભાષા (ગુજરાતી)માં જોઈતી હોય, તો કૃપા કરીને પેશન્ટ ઈન્ફર્મેશન કો-ઓર્ડિનેટરનો **0800 0730510** પર સંપર્ક કરો.

आपनि यदि এই প্রচারপত্রটি আপনার নিজের ভাষায় পেতে চান, তাহলে দয়া করে পেশেন্ট ইনফরমেশন কো-অর্ডিনেটরের সাথে **0800 0730510** এই নম্বরে যোগাযোগ করুন।

إذا كنت ترغب هذه الوريقة مترجمة بلغتك الاصلية (اللغة العربية), فرجاء ا اتصل بمنسق المعلومات للمريض

0800 0730510 على التالفون Information Co-ordinator

ہمب ضرورت اسلطفات کو اپنی زبان (اردو) میں حاصل کرنے کے لئے براہ مہربانی ٹیلیفون نمبر **0800 0730510** پر وھعت انفرمیشن کو-آورڈینٹر (مریضوں کے لئے معلومات کی فراہمی کے سلسلے میں انٹر) کے ساتھ رابطہ پایتہ تم کریں۔