



Direct antibody test (DAT) positive

A guide for parents and carers

Your baby has had a direct antibody test (DAT). We have given you this factsheet to explain what a DAT involves and what it means if your baby is DAT positive. If you have any further questions, please speak to a member of your healthcare team who will be pleased to advise you.

What is a direct antibody test (DAT)?

- During pregnancy, some of the blood between the mother and baby may mix. This mixing of blood sometimes produces antibodies (proteins that are part of your body's natural defences) which may become a problem for the baby.
- As part of routine antenatal (pregnancy) screening blood tests, your midwife will record your blood type (blood group) and check whether your blood contains any antibodies that may affect your baby's red blood cells.
- If the tests find any antibodies that could cause problems for your baby, or if your baby develops jaundice (yellowing of the skin) that needs treatment after birth, we will take a sample of blood from your baby.
- This blood sample will then be sent to the laboratory for a direct antibody test (DAT). The test looks for signs of a reaction between the mother's blood group and her baby's.

What does DAT positive mean?

- The DAT results will tell us whether your baby is DAT positive (that your baby does have antibodies present in their blood).
- If your baby is DAT positive, there is a risk that they could develop anaemia (low number of red blood cells) and/or jaundice. Only a small number of DAT positive babies will develop these problems.
- A positive DAT result tells us to look out for any signs of anaemia and jaundice. It does not always mean that your baby will need treatment. Babies who are not DAT positive can also still develop anaemia and jaundice.
- If we find out that you have rhesus negative (Rh-) blood during pregnancy, the obstetric team may give you an injection called anti-D to stop your body making antibodies against your baby's blood.
- Sometimes this injection causes the DAT result to come out positive. Babies who are DAT positive for this reason do not usually develop anaemia or jaundice.



What is anaemia?

- Anaemia is a very common condition where the number of red blood cells in a person's blood, is less than normal. Anaemia can occur in DAT positive babies because their red blood cells are broken down by the antibody from their mother. The anaemia can be present at birth or can develop later.

What is jaundice?

- Jaundice is a common and usually harmless condition in newborn babies that causes yellowing of the skin and the whites of the eyes. It is caused by the build-up of bilirubin in the blood.
- Bilirubin is a yellow pigment (colour) produced when red blood cells, which carry oxygen around the body, are broken down. Newborn babies who are DAT positive may have higher levels of jaundice and may need to have treatment.

What happens if my baby is DAT positive?

- Your baby will be examined by a member of the neonatal team. Blood tests will also be taken to look for anaemia and jaundice. Your baby may require phototherapy treatment for jaundice.

What is phototherapy?

- Phototherapy (light treatment) is the most common treatment for jaundice. We will place your baby in a cot and treat them with a special blue light. This light will be absorbed by your baby's skin.
- Your baby will be undressed (apart from a nappy) during this treatment so that as much skin as possible is exposed to the light. We will make sure your baby's eyes are covered for comfort.
- We will continue this light treatment until the bilirubin level falls to a safe level, which usually takes a day or two.

What is folic acid?

- Folic acid is a vitamin that helps the body to make red blood cells.
- We will prescribe this for babies whose blood tests show that their red blood cell level has dropped more than expected.
- We will also show you how to give this to your baby before going home.
- You should continue you this until you are told to stop this by the neonatal team.



How will you monitor my baby?

- Most babies who are DAT positive will be able to go home as normal.
- If your baby is at higher risk of developing jaundice or anaemia, we will arrange a follow-up blood test approximately one week after your baby's discharge.
- A member of the neonatal team will contact you with the results. Depending on these results your baby may require further blood tests.

Date of blood test: _____

Location: **Paediatric outpatient department (Clinic 4D, Whittington Hospital)**

Neonatal Consultant: _____

The anaemia and/or jaundice may develop or get worse after you have taken your baby home.

Please look out for the following symptoms:

- increasing jaundice
- excessive sleepiness
- poor feeding
- fast or difficult breathing
- pale appearance

If your baby has any of the symptoms above or if you are worried about them, please contact your midwife, your GP or bring your baby to the Emergency Department where they will be reviewed by a member of the paediatric team.

Will there be any long-term problems?

- After delivery, the mother's blood and baby's blood stop mixing and any transferred antibodies are broken down over time. Once these have been broken down, the reaction in the baby's bloodstream ends. In the 12 weeks after being born, babies also start to produce new red blood cells naturally. Therefore, most babies will not have any long-term problems.



Contact us

If you need further information or advice, please speak to your midwife.

Patient advice and liaison service (PALS)

If you have a compliment, complaint or concern please contact our PALS team on 020 7288 5551 or whh-tr.PALS@nhs.net

If you need a large print, audio or translated copy of this leaflet please email whh-tr.patient-information@nhs.net. We will try our best to meet your needs.

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