Minnesota Newborn Screening program



FAD - Hemoglobin D Trait

What was found on the newborn screen?

The newborn screen that was collected at birth found that your baby has fetal hemoglobin (F), adult hemoglobin (A), and abnormal hemoglobin (D).

What does this mean?

This means your baby likely has hemoglobin D trait (AD). The fetal hemoglobin goes away as babies get older.

What is hemoglobin D trait?

Hemoglobin D trait is not a disease and can never become a disease. Hemoglobin trait does not cause health problems. You may have hemoglobin D trait and not know it. People with hemoglobin D trait will always have it; you cannot grow out of it.

Hemoglobin D trait is common and can occur in any race. It is most common in people from East India. Hemoglobin D trait is an inherited condition that affects the hemoglobin in your red blood cells. Hemoglobin is a protein in red blood cells. The job of hemoglobin is to carry oxygen throughout the body. Red blood cells with normal hemoglobin (A) are flexible and doughnut shaped. Red blood cells with abnormal hemoglobin (D) are smaller than normal.

More information about trait can be found on our website: www.health.state.mn.us/people/newbornscreening/families/trait.html.

How do you know if your baby actually has hemoglobin D trait?

A simple blood test called a hemoglobin electrophoresis can tell if your baby has hemoglobin D trait. This test will likely be performed when your baby is between nine and twelve months of age. Talk with your baby's doctor about plans for testing and any questions you have about it.

Why is it important to know?

When a baby has hemoglobin D trait, we know that at least one parent has it too. Trait is passed on from parent to child like other genes for eye color and height. If only one parent has trait, it is not a problem. However, if both parents have hemoglobin D trait or some other hemoglobin trait, each pregnancy can result in the child having a hemoglobin disorder. Hemoglobin disorders are lifelong and can cause serious health problems. Learning about trait is important for your baby AND for you and your partner too.



Resources

Newborn Screening Genetic Counselors

(651) 201-3548 health.newbornscreening@state.mn.us

Sickle Cell Foundation of Minnesota www.sicklecellmn.org Sickle Cell Disease Association of America, Inc www.sicklecelldisease.org



