Family Fact Sheet

Barts Present:

Blood Spot Screen Result Notification

Hemoglobin Barts Present

What was found on the newborn screen?

The newborn screen that was collected at birth found that your baby had Barts hemoglobin present.

What does this mean?

When Barts hemoglobin is present, it means your baby likely has a type of alpha thalassemia.

What is alpha thalassemia?

Alpha thalassemia is a disorder that affects the amount of hemoglobin in the blood. Hemoglobin is a protein in the red blood cells. The job of hemoglobin is to carry oxygen to the body. When the body doesn't get enough oxygen, it can cause health problems.

Each person needs four copies of the alpha globin gene, people with a type of alpha thalassemia are missing one or more copies.

Number of Copies Missing	Clinical Outcome
0	Normal
1	Silent carrier
2	Alpha thalassemia trait
3	Hemoglobin H disease
4	Alpha thalassemia major (also called fetal hydrops)

People who are silent carriers or have alpha thalassemia trait are usually healthy and do not need any special care or treatment.

Most people with hemoglobin H disease have fewer red blood cells (anemia) and an enlarged spleen. They need a doctor who specializes in this condition (a hematologist) as part of their regular medical care.

Babies with alpha thalassemia major can have serious health complications before they are even born because they are unable to make normal hemoglobin. If found early, some of these babies can survive with lifelong blood transfusions.

How do you know if your baby actually has a type of alpha thalassemia?

Newborn screening cannot determine what type of alpha thalassemia a baby has from their screening result. Your doctor can do tests, including hemoglobin electrophoresis, complete blood count (CBC), and a reticulocyte count to find out which type of alpha thalassemia the baby has. These tests can be done when your baby is between four and six 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?

Alpha thalassemia is passed on from parents to child like eye color and height. The chance of having a child with alpha thalassemia depends on how many copies of the gene each parent is missing. Learning which type of alpha thalassemia your baby might have is important for your baby, your family, and for you and your partner too.

Resources

Genetics Home Reference:
http://ghr.nlm.nih.gov

Save Babies Through Screening Foundation:
www.savebabies.org

Baby's First Test:
www.babysfirsttest.org

DEPARTMENT OF HEALTH
Public Health Laboratory, Newborn Screening
601 Robert St. N., St. Paul, MN 55155
Phone (800) 664-7772 Fax (651) 215-6285 **interpreters available*
www.health.state.mn.us/newbornscreening, health.newbornscreening@state.mn.us

REV 09/2020