Provider Fact Sheet

TRAIT Result:
Blood Spot Screen Result Notification

Minnesota Newborn Screening program

FAS — Sickle Cell Trait (SCT)

The newborn screen identified fetal (F), adult (A), and abnormal (S) hemoglobin

Next Steps

Please take the following recommended actions:

- **Discuss** the result with the family at the next well-child visit, including the follow-up plan for confirmatory testing and education about inheritance.
- **Prepare** any requested referrals or resources for the family (may desire genetic counseling).
- **Collect** follow-up clinical testing. A hemoglobin electrophoresis should be performed between 9 and 12 months of age.
- **Fax** hemoglobin electrophoresis result to MDH staff at (651) 215-6285.

If you have questions about the newborn screening result or your next steps, an on-call Newborn Screening Program genetic counselor is available at (651) 201-3548.

Review with Family

MDH has mailed the family a packet of information about this result. Educate the family about the need for confirmatory testing, parental testing, and inheritance. If you are unable to answer their questions, consider referring them to a genetic counselor or pediatric hematologist. Contact information for pediatric hematologists can be found on the resource list provided.

Individuals Affected by Sickle Cell Trait

SCT occurs in all ethnic groups but is most common in West Africans (1 in 8) and African Americans (1 in 12).

Clinical Summary

Sickle cell trait (SCT) is not, in itself, a disease. People with SCT have both normal hemoglobin (A) and abnormal hemoglobin (S) in their red blood cells. SCT is different from sickle cell disease (SCD) in which only sickle hemoglobin is present.

Most people with SCT never develop symptoms, however, it has been linked to splenic infarction (typically at high altitudes).

People with SCT should seek care or consult with their provider when:

- Traveling/exercising at high or low altitudes
- Engaging in vigorous activity in extreme heat
- Considering surgery
- Eye trauma occurs
- Hematuria is present

Because SCT rarely causes health problems, most people with SCT do not need treatment or change their normal activities.

Inheritance and Possible Implications

Although it is unlikely that SCT will pose health problems for this infant, SCT may have implications for family members. If both parents have SCT, there is a 1 in 4 (25%) chance with each pregnancy that they could have a child with SCD. SCD is a serious medical condition that can result in anemia, lung disease, infections, stroke, painful crises, and splenomegaly.

Because SCT and SCD are inherited conditions, genetic counseling should be offered.

Have you checked out our FREE hemoglobin trait resources for parents?

Parent-friendly website: www.health.state.mn.us/people/newbornscreening/families/trait.html
Education materials: www.health.state.mn.us/people/newbornscreening/materials/education.html

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