Elevated Argininosuccinic Acid

What was found on the newborn screen?
The newborn screen that was collected at birth found that your baby has high levels of an amino acid called argininosuccinic acid.

What does this mean?
High levels of argininosuccinic acid can indicate that your child has a metabolic disorder called argininosuccinic acidemia (ASA). A positive result does not mean you baby has ASA, but more testing is needed to know for sure.

What happens next?
Your baby’s doctor or a metabolic specialist will help arrange for more testing. Your baby will also be seen by a metabolic specialist.

What is argininosuccinic acidemia (ASA)?
ASA is part of a group of disorders called amino acid disorders. Children with ASA are unable to process ammonia, a waste product that is created when the body breaks down protein from food. This causes dangerous amounts of ammonia to build up in the body and cause health problems.

What health problems can it cause?
ASA is a lifelong condition. Possible health problems of ASA include:

- Lack of energy
- Poor feeding
- High levels of ammonia in the blood (hyperammonemia)
- Intellectual disabilities
- Unusual body movements
- Seizures
- Coma

Occasionally, a child may have a less common, mild form of ASA where ammonia builds up in the body only during periods of illness or other stress.

Children with ASA can benefit from prompt and careful treatment.

What treatment options are available?
Treatment for ASA consists of a lifelong, low protein diet. Certain medications and supplements may be prescribed. Early treatment can be life-saving. Even with treatment, some children still have episodes of high ammonia. This can result in brain damage causing lifelong learning problems and intellectual disabilities.

Children with ASA should see their regular doctor and a doctor who specializes in metabolic disorders.

Resources


Save Babies Through Screening Foundation: www.savebabies.org

Baby’s First Test: www.babysfirsttest.org