TYROSINEMIA TYPE II and III (TYR II/TYR III)

FAMILY FACT SHEET

What is a positive newborn screen?

Newborn screening is done on tiny samples of blood taken from your baby's heel 24 to 36 hours after birth. The blood is tested for rare, hidden disorders that may affect your baby's health and development. The newborn screen suggests your baby might have a disorder called tyrosinemia type II or tyrosinemia type III.

A positive newborn screen does not mean your baby has tyrosinemia type II or III, but it does mean your baby needs more testing to know for sure.

You will be notified by your primary care provider or the newborn screening program to arrange for additional testing.

What is Tyrosinemia Type II and Tyrosinemia Type III?

Tyrosinemia Type II and III affect an enzyme needed to break down proteins from the food we eat. In tyrosinemia type II and III, the enzyme used to break down proteins is missing or not working properly.

A person who has tyrosinemia type II or III doesn't have enough enzyme to break down protein containing tyrosine. When the body can't break down tyrosine, it builds up in the body and causes health problems.

Tyrosinemia type II and III are genetic disorders that are passed on (inherited) from parents to a child. The mother and father of an affected child carry a gene change that can cause tyrosinemia type II or III. Parents usually do not have signs or symptoms, or even know they carry the gene change.

What problems can Tyrosinemia Type II and Tyrosinemia Type III cause?

Tyrosinemia type II and III are different for each child. Some children with tyrosinemia type II or III have only a few health problems, while other children may have very serious complications.

If tyrosinemia type II and III are not treated, a child might develop:

- Poor coordination and balance
- Brain damage
- Eye problems (Type II)
- Behavior changes (Type II)
- Skin lesions (Type II)
- Seizures (Type III)

It is very important to follow the doctor's instructions for testing and treatment.

What is the treatment for Tyrosinemia Type II and Tyrosinemia Type III?

Tyrosinemia Type II and III can be treated. Treatment is life-long and can include:

- Low-protein diet – a dietitian will help you with the best diet for your child.
- Medications to help lower amino acid levels.

Children with tyrosinemia type II and III should see their regular doctor, a doctor who specializes in tyrosinemia type II and III, and a dietitian.

Prompt and careful treatment helps children with tyrosinemia type II and III live the healthiest lives possible.

Michigan Resources and Support

Michigan Newborn Screening
Nurse Consultant
Toll-free: 1-866-673-9939
newbornscreening@michigan.gov

Michigan Metabolic Coordinating Center
C.S. Mott Children's Hospital, Michigan Medicine:
1-734-764-0579

Children's Special Health Care Services
Toll-free: 1-800-359-3722

MDHHS Michigan Department of Health & Human Services | Michigan Newborn Screening

Phone 1-866-673-9939
www.michigan.gov/newbornscreening
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