Hypercalciuria in Children

Hypercalciuria means there are high levels of calcium in the urine. This can be checked on a single urine sample, but is best checked with a 24-hour urine test. The high level of calcium in the urine is often caused by increased absorption or a defect of the kidneys. Increased levels of urine calcium can cause kidney stones.

Hypercalciuria is treated by bringing the urine calcium to normal levels. This lowers the risk of getting kidney stones.

1. As part of your child’s work-up, we will do blood tests and we may suggest a 24-hour urine test to look for risk factors leading to kidney stones. The results of this test will help us plan further treatment. We will also do 24-hour urine tests 2 to 4 times a year to watch the level of calcium in the urine.

2. A kidney (renal) ultrasound and abdominal x-ray (KUB) may be ordered to look for kidney stones. These tests might be done every 12 to 18 months.

3. A low salt diet is a very big part of the treatment to lower calcium in the urine and prevent kidney stones. Our nutritionist will be talking with you about your child’s eating habits to help lower their risk for kidney stones.

**Increasing fluids:** Kidney stones are more likely to form in urine that is concentrated. By drinking more, your child’s urine will be more diluted. This will lower the risk of stones forming.

**Decreasing salt:** The salt in your diet is linked to calcium in the urine. If the amount of salt in the diet is lowered, the amount of calcium in the urine will also be lower.

The goal for your child is to have no more than ___________mg of sodium a day. Our kidney nutritionist can talk with you about how you can lower salt in your child’s diet.

**Eating the right amount of calcium:** Your child’s high urine calcium levels are **not** caused by eating too much calcium. In fact, because your child is losing calcium in the urine, most of this comes from the bones. We want to be sure that your child takes in enough calcium in his daily diet, but not more than is needed. The goal for your child is to have _______mg of calcium a day.

4. Drugs are often used if your child has a kidney stone or if the level of calcium in the urine is high and does not come down with fluid and diet changes alone. Diuretics are the most common types of drugs used.
**Diuretics:** Moduretic or Hydrochlorothiazide are diuretics we often use. These drugs help to lower the amount of calcium in the urine. For 2-6 hours after taking the drug, your child will have to go to urinate more often. The kidneys will lose more potassium with the use of these drugs. Because of this, we suggest you increase the potassium in your child’s diet.

We will be checking the level of your child’s blood potassium about 2 weeks after starting the diuretic and 2-3 times a year. If your child has a low potassium level our pediatric nutritionist will be able to talk to you about increasing potassium in the food you eat. If your child’s potassium level is too low, we may prescribe a potassium supplement.

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