

Doctors say kidney stones in kids are on the rise

By LINDSEY TANNER, AP Medical Writer *Lindsey Tanner*, *Ap Medical Writer* Thu Mar 26, 5:56 pm ET

CHICAGO – Doctors are puzzling over what seems to be an increase in the number of children with kidney stones, a condition some blame on kids' love of cheeseburgers, fries and other salty foods.

Kidney stones are usually an adult malady, one that is notorious for causing excruciating pain — pain worse than childbirth. But while the number of affected children isn't huge, kids with kidney stones have been turning up in rising numbers at hospitals around the country.

At Children's Hospital of Philadelphia, the number of children treated for kidney stones since 2005 has climbed from about 10 a year to five patients a week now, said Dr. Pasquale Casale.

Johns Hopkins Children Center in Baltimore, a referral center for children with stones, used to treat one or two youngsters a year 15 or so years ago. Now it gets calls about new cases every week, said kidney specialist Dr. Alicia Neu.

In a 2007 study in the *Journal of Urology*, doctors at North Shore-Long Island Jewish Medical Center reported a nearly fivefold increase in children brought in with kidney stones between 1994 and 2005. In 2005, 61 youngsters were treated there for stones.

Dr. David Hatch at Loyola University Medical Center in Maywood, Ill., near Chicago, also has seen an increase. His youngest patient was a cranky 8-month-old girl whose mother found a pea-size kidney stone in her diaper.

Kids' stones have been the talk of recent pediatric kidney specialists' conferences, said Dr. Uri Alon, director of the bone and mineral disorders clinic at Children's Mercy Hospital in Kansas City.

So far, the only evidence is anecdotal. But Alon is involved in research trying to determine if the increase is real and not just the result of greater awareness and better ways of detecting stones. Alon also is studying whether improved nutrition can prevent kids' kidney stones.

Eating too much salt can result in excess calcium in the urine. In children, most stones are calcium-based, and Alon said their eating habits, plus drinking too little water, puts them at risk. Plenty of water is generally recommended to help prevent kidney stones.

Matty Billemeier is just 8 years old but already has had four bouts with stones, the first in 2007, the last a year ago in April. He was first stricken in his first-grade class; the school nurse, his parents and even the emergency room doctors all thought it was his appendix.

"It felt really painful and intense," the Doylestown, Pa., boy recalled. "I was really scared because it was hurting a lot."

Darryl Billemeier said it was frightening seeing his son writhing and screaming in pain. The boy was transferred from a local hospital to Children's Hospital of Philadelphia, where ultrasound tests showed kidney stones.

"We really didn't know what to make of it," Billemeier said. "I definitely thought they were more of an adult thing."

The first time, Matty needed surgery; the other times the stones passed during urination.

Now he takes diuretic pills to increase urination, brings a water bottle to school everyday, and has given up favorite foods, including sausages, pickles and packaged ramen noodles — all high in salt.

His parents are both busy teachers, and with four other sons, family meals used to include quick processed foods like canned spaghetti or chicken nuggets. Until Matty's diagnosis, salt "wasn't something we really thought about," Billemeier said.

The main problem associated with kidney stones is extreme pain. It is caused by stones blocking urine flow, which, if untreated, could lead to kidney damage.

The preferred treatment is observation — giving kids pain medicine but nothing else to see if the stones will pass on their own. Stones can be as small as a sugar granule or as large as a pearl. Bigger ones have been reported but are rare; most are less than 1/4 inch in diameter, which can usually pass on their own. But even small ones can mean incredible pain.

When that doesn't happen, the patient is anesthetized and doctors may thread a slender scope through the urinary tract to break up and remove the stone. Other treatment may involve noninvasive shock-wave therapy that uses sound waves to break up the stone, or minimally invasive surgery.

Dr. Barry Duel, a pediatric urologist at Cedars-Sinai Medical Center in Los Angeles, said kidney stones can be a sign of underlying metabolic problems that result in too much calcium in the urine. But he said in most cases children have no underlying disorder and are otherwise healthy.

Still, because some metabolic problems can slow growth if untreated or lead to repeated bouts with kidney stones, the American Academy of Pediatrics recommends metabolic testing for all children with kidney stones.

Hatch, the Loyola urologist, said the best prevention is plenty of water, so that the minerals in urine stay dissolved.

How much water depends on a child's size, but for an average-size 10-year-old it would be about four cups a day, on top of whatever else they are drinking. That is far more than most kids drink.

"What I like to tell kids is that they should drink enough water to keep their pee almost clear," Hatch said.

For children who have had one kidney stone, doctors sometimes recommend fresh-squeezed lemonade or other citrus juice, which can help keep the urine from forming stones.
