

Shorter Antibiotic Course for UTIs May Be Possible

BY LINDA LITTLE
Contributing Writer

SCOTTSDALE, ARIZ. — The treatment and diagnosis of urinary tract infections in young children are undergoing dramatic changes, Aaron L. Friedman, M.D., said at a pediatric update sponsored by Phoenix Children's Hospital.

Urinary tract infections affect 3%-4% of young girls and 1% of young boys—making the condition relatively common in children.

Dr. Friedman, chairman of the department of pediatrics at Brown University, Providence, R.I., said the standard treatment today is 7-14 days of antibiotics. However, there is now evidence that this

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could be shortened to 2-4 days for uncomplicated infections.

He pointed to a compilation of 10 studies of 652 children, aged 3 months to 18 years, comparing the conventional antibiotic course of 7-14 days with a 2- to 4-day

treatment. The shorter course was found as effective as the longer course in eradicating lower urinary tract infections in children.

"There is increasing evidence that treatment as short as 2-4 days is sufficient for uncomplicated urinary tract infections in children who don't have bacteria floating in their blood and no kidney involvement," Dr. Friedman said.

Another change is the amount of work a physician should put into finding the cause of the urinary tract infection. Because of the fear of kidney damage due to ureterovesical reflux in young children, the dogma has been to order imaging studies, such as ultrasound and voiding cystourethrogram (VUCG), after the diagnosis.

Both imaging studies are conventionally done weeks after the diagnosis of urinary tract infection in young children, said Dr. Friedman.

Ultrasound is now considered of little value, and the utility of VCUG—especially in children older than 1 year—is under considerable review, he said.

This applies only to children aged 1 year and older, he said. "Infants should be examined aggressively, but for everyone else, there should be a more nuanced approach."

A U.S. study of more than 300 children aged 1-24 months showed that ultrasound was normal in 88% of children and that VCUG was positive for reflux in only 39%. Additionally, the nuclear medicine scan was positive for renal scarring in only 9.5% of patients.

"There is very little utility in ultrasound in urinary tract infections in children," he said. "It doesn't help in early treatment,

and it doesn't give you any more information than what you had before."

There is increasing evidence about the use of VUCG with the first urinary tract infection, he said.

VUCG was thought to be useful in defining the population that needed prophylactic treatment. However, there is increasing skepticism such treatment is advantageous in these children.

"The problem is that we don't know that prophylactic treatment with low-dose

antibiotics for an 18-month to 2-year period is useful," he said. "While it does reduce the recurrences, there is no evidence that it improves the long-term outcome."

"We are in a continuum here, where the conventional approach recommended a voiding study," Dr. Friedman said.

However, it may be better only to use the voiding study in children who aren't getting better with antibiotics and don't fit the usual pattern of recovery, he said.

In these children, the imaging tech-

nique can aid in diagnosing troublesome vesicoureteral reflux.

But even with a diagnosis, it is recommended that only children with high grade (grade 4-5) be treated surgically, he said. "In these children, you won't get anywhere by waiting."

"Children with lower-grade refluxes, between [grades] 1 and 2, have the likelihood of getting better on their own," he said. "Grade 3 is right in the middle; some get better, and some don't." ■

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