Fever in Child Less Than 2 Years Old? Think UTI

BY TIMOTHY F. KIRN
Sacramento Review

Incline Valley, Nev. — Urinary tract infection is so common in children younger than age 2 years that a physician should almost always get a urine culture when working up a fever in a child that age. Dr. Nathan Kupperman, an emergency medicine conference sponsored by the University of California, Davis.

That includes getting a urine culture for febrile children younger than age 2 years who have a clinically documented viral infection, he said.

"Urinary tract infections in young febrile infants, particularly, are very common, and these viral infections are very common, so overlap occurs not infrequently," said Dr. Kupperman, professor of emergency medicine and pediatrics and chair of the department of emergency medicine at the university.

Studies have looked at concurrence of bacterial infection and viral group, varicella, staphylococci, and bronchitis, and influenza, and they suggest that a urinary tract infection can also be present for about 3% of the time, he said.

Urinary tract infection (UTI) is probably the most important bacterial infection in children 0-3 months of age, because girls are so common and because of its serious consequences. Urinary tract infection occurs in 5%-10% of children aged 0-3 months who have a fever above 38°C. About half the time, the normal routine urinalysis performed for a child of that age will be normal even when there is an infection, Dr. Kupperman noted. So, one should have a culture done, with Gram staining.

In children younger than age 2 years overall, UTI accounts for 7%-8% of infections in girls with a temperature of 39°C or higher, and 2%-3% of boys with a temperature of 39°C or higher. Most of those boys, however, are uncircumcised. The rate among circumcised boys is 0.2%-0.4%, Dr. Kupperman said.

The reason for the UTI vigilance is that the kidney is so much more susceptible to damage in the young. It is estimated that most UTIs that do not occur in children younger than age 4 years, and especially in those younger than 1 year.

Approximately 13%-15% of end-stage renal disease was related to an unrecognized, and untreated, UTI in early childhood, Dr. Kupperman said.

Diabetes

CTAP: First UTI Infections

The piddleria, tetanus and acellular pertussis (DTaP) vaccine manufactured by Sanofi-Pasteur was approved last month for use as the fifth consecutive dose of the vaccine series in children aged 4 through 6 years, following five doses of the vaccine series of the same vaccine.

The vaccine, marketed as DTAPE (Diphtheria and Tetanus Toxoids and Acel- lular Pertussis Vaccine Adsorbed) by Sanofi-Pasteur, was approved for four consecutive doses in 2002, administered at 2, 4, 6-18 months of age. The Food and Drug Administration approved the fifth dose last month, based on safety data and booster responses in a study of more than 400 children for the 4- to 6-year-old dose at 2 different sites, according to local pediatricians.

From a practical standpoint, this approval allows pediatricians using DAPA- CET to stock one brand of the vaccine in the refrigerator for use for follow-up doses, Dr. Robert W. Frenck Jr., professor of pediatrics, Cincinnati Children’s Hospital Medical Center, said in an interview.

Although there is no scientific reason to suspect that using different brand vac- ccines for a vaccine series in a child would be ineffective, “from a purist standpoint, if you can use the same vaccine for the whole series, you may have some benefit,” added Dr. Frenck, a member of the American Academy of Pediatrics’ Committee on Infectious Dis- eases.

He was not involved in DAPACET studies and had no conflicts to disclose.

—Elizabeth Mechtaich

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DTaP Vaccine

Now Cleared for All Five Doses

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