Urological Survey

This is a valuable paper for the interested in female urology. It is notable that the incidence of post operative urinary urge incontinence was similar in both the surgical group of patients who had preoperative urinary urge incontinence and the control group who had no preoperative urinary urge incontinence. Also of specific interest is that though the patients who preoperatively complained of urinary urge incontinence had negative cystometrograms, 9 of 10 patients had cystometric evidence of detrusor overactivity when plagued with postoperative urinary urge incontinence. In addition, other noteworthy urodynamic changes noted in the study group was a diminution in the maximum flow rate in the patients who had persistent urinary urge incontinence. The authors through their documentation of these urodynamic parameters and their noted difference in the pre- and post-operative patients raised a valuable point: is the etiology of preoperative urinary urge incontinence different from the etiology of postoperative urinary urge incontinence? The authors lead us to believe that this is definitely possible with postoperative urinary urge incontinence potentially being related to an infravesical outlet obstruction as opposed to a preoperative idiopathic condition.

The discussion section by Dr. Osman is of great value and warrants careful reading both for the facts, which it presents as well as the questions that it raises with regard to the etiology of this most troublesome malady. It would be of genuine interest if the author could expand on the urodynamic differences pre and postoperatively between the group that underwent a Burch urothropexy vs. those who underwent a suburethral pubovaginal sling secondary to the historical claim of the potentially obstructive nature of a suburethral sling.

In conclusion, the paper's findings are along the same line as those voiced by Dr. McGuire in the past in that the finding of detrusor instability on a preoperative cystometrogram does not preclude a good result (1). Interested readers should consider other landmark papers of great value on this topic (1,2).

References

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PEDIATRIC UROLOGY _____

Vesicoureteral reflux in the Hispanic child with urinary tract infection Pinto KJ From the Pediatric Urology Department, Urology Associates of North Texas and Cook Children's Medical Center, Fort Worth, Texas, USA J Urol. 2004;171: 1266-7

Purpose: Hispanic individuals have become the largest minority in the United States. Prior studies of minorities revealed real differences in vesicouretal reflux rates between white and black Americans. We studied the incidence of reflux in the Hispanic population to see if the reflux rate was different from that of the white population.

Materials and Methods: We reviewed the results of voiding cystourethrograms performed in Hispanic children as our normal screening for reflux and compared them to voiding cystourethrograms results in a group

of white children. The children were identified as Hispanic or white by their parents on an intake form.

Results: Of the Hispanic children 27% had vesicoureteral reflux on voiding cystogram, while 32% of the white children had vesicoureteral reflux.

Conclusions: Hispanic patients presenting with the first urinary tract infection seem to be afflicted with vesicoureteral reflux as often as their white contemporaries. Hispanic children should be screened as aggressively as white children when they present with urinary tract infections.

Editorial Comment

It has become clear that vesicoureteral reflux has some genetic determinants. Although the exact mechanisms are unclear, it is apparent that within families there is a 45% chance of sibling reflux and a 65% chance of reflux in offspring of patients with reflux. Furthermore, the rate of reflux in different races is quite different, with whites having a much higher rate than blacks.

In this context, this paper evaluates the rate of reflux in Hispanic children. The authors found that in the workup of a urinary tract infection, the chance of finding reflux was similar in Hispanic and white children. Although this suggests that there is no genetic difference, there are several caveats. Blacks not only have a lower rate of reflux but less urinary tract infections. Since this study only looks at Hispanics who had urinary infections, this study would not be able to evaluate the possibility that Hispanics might have a lower rate of infection also. Furthermore, blacks from different genetic groups appear to have different rates of reflux, so that the Hispanics in this study (primarily from Mexico) might not be representative of all Hispanics.

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Follow-up urine cultures and fever in children with urinary tract infection

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Background: The American Academy of Pediatrics practice parameter for urinary tract infection suggests a repeat urine culture if the expected clinical response is not achieved within the first 48 hours of therapy. The utility of repeat urine cultures and clinical significance of fever at 48 hours is unclear.

Objectives: To determine the frequency of positive repeat urine cultures in children admitted to the hospital with urinary tract infection, and to describe the fever curves of children admitted to the hospital with urinary tract infection.

Design and Methods: We reviewed all cases of urinary tract infection in children 18 years and younger who were admitted during a 5-year period to Children's Hospital of Wisconsin (Milwaukee). We recorded temperatures from hospital admission to discharge, age, sex, initial and follow-up culture results, antibiotics received, imaging performed, and medical history.

Results: Urinary tract infection was identified in 364 patients, and 291 (79.9%) had follow-up urine cultures. None were positive. Follow-up cultures produced 21,388.50 US dollars in patient charges. Fever lasted beyond 48 hours in 32% of patients. Older children were more likely to have fever beyond 48 hours.

Conclusions: Follow-up urine cultures were of no utility in children hospitalized for urinary tract infection, including those with fever lasting beyond 48 hours or those with an underlying urologic disease.

Urological Survey

Fever beyond 48 hours is common and should not be used as a criterion for obtaining a repeat urine culture. These conclusions are valid for children with vesicoureteral reflux. Such an approach would result in significant cost savings.

Editorial Comment

The authors challenge yet another dogma of medical practice. Most all of us have been taught that, when treating pyelonephritis in children, it is important to obtain a follow-up urine culture in about 48 hours in order to be certain the therapy is working. This would seem empirically to be even more important in situations in which the child remains febrile. Yet, the authors found that of 291 follow-up cultures, not a single one was positive! This was true even if the child remained febrile and independent of whether the child had reflux. The estimated cost of these negative cultures was over \$21,000! In an era of rising health-care costs, this is an important finding.

In a side observation, the authors found that 32% of children with febrile UTIs remained febrile for more than 48 hours and the rate was even higher in those over age 1. It would be interesting in a follow-up study to determine whether those who remained febrile longer had a higher rate of renal scarring, but that was not evaluated in this study.

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