Re: Predictive Value of Specific Ultrasound Findings when Used as a Screening Test for Abnormalities on VCUG

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Editorial Comment: This large, well designed review analyzes the predictive value of renal bladder ultrasound findings regarding the presence or absence of vesicoureteral reflux on voiding cystourethrogram. These findings in children 0 to 60 months old with a history of urinary tract infection substantiate the general impression that renal bladder ultrasound is a poor predictor of vesicoureteral reflux.

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Re: Utility of the Distal Ureteral Diameter on VCUG for Grading VUR

C. S. Cooper, S. E. Alexander, K. Kieran and D. W. Storm
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Editorial Comment: The authors report on 124 girls and 33 boys with primary vesicoureteral reflux. In all patients the ureteral diameter ratio (UDR), ie measurement of the distal ureter normalized to the L1 to L3 vertebral body distance, was calculated and compared regarding outcomes. After a mean of 2.7 years 47% of patients had persistent vesicoureteral reflux, 15% demonstrated spontaneous resolution and 38% had undergone operative intervention. Reasons for operative intervention included breakthrough urinary tract infection in a third of cases, decreased relative renal function associated with renal scarring in a third and failure to resolve, along with parental preference, in a third. The higher the UDR, the lower the chance of spontaneous resolution.

The authors found UDR a helpful parameter that could be used to predict resolution rates in children with primary vesicoureteral reflux. Specifically it was unlikely for a child with grade IV vesicoureteral reflux to have spontaneous resolution if the UDR was greater than 0.25. Similarly grades III and II vesicoureteral reflux resolved less commonly if the UDR was 0.3 and 0.35, respectively.

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