Unrevealing of Primary Vesicoureteral Reflux which is Not Harmful for Kidneys in Children Should Be Considered as Success

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Uncovering of harmless primary vesicoureteral reflux (VUR) results in follow up of just a VUR image causing unnecessary stress for the parents, patients and physicians. Furthermore, voiding cystourethrography, gold standard for VUR diagnosis, is an invasive method having radiation hazard.

Following questions will remain unanswered until non-invasive diagnostic methods for VUR are discovered: Is VUR a physiological phenomenon that disappears during growth in children? Which VUR is benign or harmful for the kidney^[1]? Is the degree of VUR a sufficient parameter to state that it is harmless?

It is necessary to look over the results of some studies for making comments on the questions above. The prevalence of VUR in healthy children was reported as 0.4-1.8% based on statistical calculations. However, this ratio increased up to 17.2% based on the assessments in healthy renal units^[2]. Spontaneous resolution rate of VUR is decreased as its grade increases. Today, we need a non-invasive gold standard method for diagnosis of VUR in both healthy and ill children^[3,4].

The last recommendations of American Academy of Pediatrics was based on a formal meta-analysis of recent studies that did not detect a statistically significant benefit of prophylaxis in preventing recurrence of febrile UTI in infants without reflux or those with grades I to IV VUR^[5]. A previous study showed that antimicrobial prophylaxis did not reduce the risk of recurrent UTI, but rather led to infections with resistant microorganisms^[6]. In conclusion, unrevealing of harmless primary VUR in children should also be considered as success.

Key words: Vesicoureteral Reflux; Kidney; Children

References

- 1. Venhola M, Uhari M. Vesicoureteral reflux, a benign condition. *Pediatr Nephrol* 2009; 24(2): 223-6.
- Sargent MA. What is the normal prevalence of vesicoureteral reflux?. *Pediatr Radiol* 2000;30(9):587-93.
- 3. Snow BW, Taylor MB. Non-invasive vesicoureteral reflux imaging. J Pediatr Urol 2010; 6(6): 543-9.
- Soylu A, Kavukçu S, Güneş et al. Evaluation of the effects of vesicoureteral reflux on urine temperature. *Pediatr Nephrol* 2003; 18(7):724-5.
- 5. Subcommittee on urinary tract infection; steering committee on quality improvement and management. Urinary Tract Infection: Clinical Practice Guideline for the Diagnosis and Management of the Initial UTI in Febrile Infants and Children 2 to 24 Months. *Pediatrics* 2011; 128(3): 595-610.
- 6. Conway PH, Cnaan A, Zaoutis T, et al. Recurrent urinary tract infections in children: risk factors and association with prophylactic antimicrobials. *JAMA* 2007;298(2): 179-86.

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