

that vaccination may represent a useful strategy for disease prevention or modulation.<sup>6</sup> Antibodies against oxidized LDL have been demonstrated in atherosclerosis, which may be protective.<sup>7</sup> Serum anti-oxidized LDL antibody titer is an independent predictor of cardiovascular mortality in a cohort of patients with end-stage renal disease.<sup>7</sup> In another study revealed that because antibodies may protect or neutralize pathogens and immunogens, humoral immunity to oxidized LDL can reduce the incidence of atherosclerosis. The protective role of T-cell-dependent antibody was demonstrated in rabbits and mice immunized with oxidized LDL.<sup>8</sup>

In conclusion, immunosuppression in transplantation may cause deficient atheroprotective cellular and humoral immune reactivity. Nontraditional markers add a lot to explain the increased rate of cardiovascular disease in transplantation, especially effects by immunosuppression and renal transplantation. Accelerated atherosclerosis in transplantation probably due to both destructive immunologic forces, inflammatory activity, and adversely affected protective immunologic mechanisms targeting atheroantigens.

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## REFERENCES

1. Ghods AJ. Risk factors profile and cardiovascular events in solid organ transplant recipients. *Iran J Kidney Dis.* 2012;6:9-13.
2. Marcen R. Cardiovascular risk factors in renal transplantation—current controversies. *Nephrol Dial Transplant.* 2006;21 Suppl 3:iii3-8.
3. Israni AK, Snyder JJ, Skeans MA, et al. Predicting coronary heart disease after kidney transplantation: Patient Outcomes in Renal Transplantation (PORT) Study. *Am J Transplant.* 2010;10:338-53.
4. Ait-Oufella H, Salomon BL, Potteaux S, et al. Natural regulatory T cells control the development of atherosclerosis in mice. *Nat Med.* 2006;12:178-80.
5. Nilsson J, Wigren M, Shah PK. Regulatory T cells and the control of modified lipoprotein autoimmunity-driven atherosclerosis. *Trends Cardiovasc Med.* 2009;19:272-6.
6. Hansson GK, Nilsson J. Vaccination against atherosclerosis? Induction of atheroprotective immunity. *Semin Immunopathol.* 2009;31:95-101.
7. Shoji T, Fukumoto M, Kimoto E, et al. Antibody to oxidized low-density lipoprotein and cardiovascular mortality in end-stage renal disease. *Kidney Int.* 2002;62:2230-7.
8. Shoenfeld Y, Wu R, Dearing LD, Matsuura E. Are anti-oxidized low-density lipoprotein antibodies pathogenic or protective? *Circulation.* 2004;110:2552-8.

## Re: Elevated Serum Levels of Vitamin D in Infants With Urolithiasis

Dear Editor,

We have read with great interest a recently article by Fallahzadeh and colleagues<sup>1</sup> titled "Elevated serum levels of vitamin D in infants with urolithiasis" published in your most valuable journal. They focused on the role of the serum levels of vitamin D on the pathogenesis of urolithiasis in infants. The authors concluded that high serum levels of vitamin D may play an important role in the pathogenesis of renal stone formation, particularly in the infants with hypercalcemia.

Although hyperuricosuria and hyperoxaluria are two important metabolic risk factors in urolithiasis

among pediatric patients,<sup>2</sup> it is of interest that Fallahzadeh and colleagues<sup>1</sup> reported hyperoxaluria to be as low as 3% of their patients and they had no hyperuricosuria. However, hyperuricosuria has been reported in 2% to 10% of children and adolescents with metabolic predisposition to renal stone formation.<sup>2</sup>

Urinary stone is related with many complicated factors such as metabolic defects, genetic and environmental effects.<sup>3,4</sup> Fallahzadeh and coworkers showed that 53% of their cases had at least one metabolic disorder.<sup>1</sup> It is of interest that serum levels of 25-hydroxyvitamin D3 were also significantly

greater in patients with urolithiasis than those who had no renal stone.<sup>1</sup> The role of vitamin D receptor (*VDR*) gene polymorphism in pediatric urolithiasis has been shown in several studies.<sup>5,6</sup> Yiwei Lin and associates reported that *VDR* polymorphisms could be potential biomarkers for urolithiasis susceptibility.<sup>7</sup> Ozkaya and colleagues showed an association of *VDR* gene polymorphism with the risk of calcium urolithiasis.<sup>5</sup>

Mortazavi and Mahbubi demonstrated that 60% of patients with renal calculi were under two years of age and 60% of them had history of high dose vitamin D3 injection for suspected rickets.<sup>8</sup> Although it is retrospectively difficult to establish the diagnosis of vitamin D3 overdose when plasma calcium has returned to normal range, this chance should be considered.<sup>8</sup>

We agree that gender has no impact on development of renal calculi in infants ( $P = .62$ ),<sup>1</sup> which is resemble to our previous study ( $P = .24$ ).<sup>2</sup> Fallahzadeh et al<sup>1</sup> reported a high family history of urolithiasis (81%), we also found a positive family history of %95 in the first- or second-degree relatives of the infants with renal stone.<sup>2</sup>

Although urolithiasis in children is a relatively infrequent problem,<sup>2</sup> its true incidence in childhood may be higher than prior observations. Some studies demonstrate that the frequency of pediatric urolithiasis has been increased, even in non endemic areas for urinary stone disease.<sup>9,10</sup> This may be partly due to improved alertness and routine practical ultrasonography in children with presenting calculus or non-calculus symptoms for urolithiasis.<sup>2</sup>

We completely agree that evaluating of serum vitamin D in children with urinary calculi. Finally,

we suggest that further studies require about supplemental therapy with vitamin D in infants, especially in those who have positive family history of renal calculi.

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## REFERENCES

1. Fallahzadeh MH, Zare J, Hosseini Al-Hashemi G, et al. Elevated serum levels of vitamin D in infants with urolithiasis. *Iran J Kidney Dis.* 2012;6:186-91.
2. Beiraghdar F, Panahi Y, Madani A, Jahani Y. Non Calculus Signs and Symptoms of Hyperoxaluria and Hyperuricosuria in Children: A Single Experience. *Nephro-Urol Mon.* 2009;1:137-42.
3. Goodman HO, Holmes RP, Assimios DG. Genetic factors in calcium oxalate stone disease. *J Urol.* 1995;153:301-7.
4. Worcester EM, Coe FL. Clinical practice. Calcium kidney stones. *N Engl J Med.* 2010;363:954-63.
5. Ozkaya O, Soylemezoglu O, Misirlioglu M, Gonen S, Buyan N, Hasanoglu E. Polymorphisms in the vitamin D receptor gene and the risk of calcium nephrolithiasis in children. *Eur Urol.* 2003;44:150-4.
6. Bid HK, Chaudhary H, Mittal RD. Association of vitamin-D and calcitonin receptor gene polymorphism in paediatric nephrolithiasis. *Pediatr Nephrol.* 2005;20:773-6.
7. Lin Y, Mao Q, Zheng X, Chen H, Yang K, Xie L. Vitamin D receptor genetic polymorphisms and the risk of urolithiasis: a meta-analysis. *Urol Int.* 2011;86:249-55.
8. Mortazavi F, Mahbubi L. Clinical Features and Risk Factors of Pediatric Urolithiasis. *Iran J Ped.* 2007;17:129-33.
9. Edvardsson V, Elidottir H, Indridason OS, Palsson R. High incidence of kidney stones in Icelandic children. *Pediatr Nephrol.* 2005;20:940-4.
10. Lopez M, Hoppe B. History, epidemiology and regional diversities of urolithiasis. *Pediatr Nephrol.* 2010;25:49-59.

## Re: Maternal Urinary Tract Infection as a Risk Factor For Neonatal Urinary Tract Infection

Dear Editor,

We read with interest the article recently published in the *Iranian Journal of Kidney Diseases*, titled "Maternal urinary tract infection as a risk factor for neonatal urinary tract infection" by Emamghorashi and colleagues.<sup>1</sup> This case-control

study focused on the impact of maternal urinary tract infection (UTI) during pregnancy on the development of neonatal UTI. They showed that maternal UTI can be a risk factor for neonatal UTI and a significant correlation was seen between maternal and neonatal UTI.