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LETTER TO THE EDITOR

Insertion/Deletion (I/D) Polymorphism of Angiotensin-Converting Enzyme Gene in Steroid-Resistant Nephrotic Syndrome for Children: An Updated Meta-analysis

Sirs

Steroid-resistant nephrotic syndrome (SRNS) is a risk disease in children and is prone to develop into end-stage renal disease. Some investigations suggested that the genetic factor might play an important role in the susceptibility of SRNS. We performed a meta-analysis to explore the association between angiotensin-converting enzyme (ACE) insertion/deletion (I/D) gene polymorphism and SRNS risk and conducted the search on 1 September 2010.¹ We found that D allele and DD genotype were not associated with the risk of SRNS. However, Prasun et al.² reported an investigation on the association of ACE I/D gene polymorphism with SRNS risk in 2011, but we did not include this study for our meta-analysis. They reported that the frequency distribution of the DD homozygous was markedly high in the SRNS group compared with that in the control subjects.

The investigation of Prasun et al.² was performed in Asian children. As mentioned above, we included the study of Prasun et al.² and reran the meta-analysis in overall populations and for Asian children. We found that D allele was associated with SRNS risk in overall populations [odds ratios (OR) = 2.12, 95% confidence intervals (CI): 1.05–4.25; $p = 0.04$]. This result was not consistent with our previous result for overall populations (OR = 1.69, 95% CI: 0.88–3.25; $p = 0.12$). Furthermore, the pooled OR for DD genotype was more favorable to SRNS group in overall populations (OR = 2.18, 95% CI: 0.74–6.47), although the difference was not statistically significant ($p = 0.16$). We also

found that the pooled OR for D allele or DD genotype was more favorable to SRNS group compared with the relevant results in our previous meta-analysis, although all the differences were not statistically significant.

The results presented above indicated that the D allele or DD genotype might be a risk factor for SRNS in overall populations and for Asians. The conclusion from rerun meta-analysis might be more robust than that in the previous meta-analysis. It indicated that more case-control association investigations to further clarify the role of the ACE I/D gene polymorphism in SRNS susceptibility were much necessary. So, we call for that more studies on the association between ACE I/D gene polymorphism and SRNS susceptibility be performed in the future.

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REFERENCES

- [1] Zhou TB, Qin YH, Su LN, et al. Insertion/deletion (I/D) polymorphism of angiotensin-converting enzyme gene in steroid-resistant nephrotic syndrome for children: A genetic association study and meta-analysis. *Ren Fail.* 2011;33:741–748.
- [2] Prasun P, Prasad N, Tripathi G, et al. Association of angiotensin-converting enzyme gene I/D polymorphism with steroid responsiveness in childhood nephrotic syndrome. *Indian J Nephrol.* 2011;21:26–29.