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Letter to the Editor

Authors' reply to "Microalbumin screening"

We appreciate the interest and concern from Professor Viroj Wiwanitkit regarding our article "The prevalence of microalbuminuria and its relationships with the components of metabolic syndrome in the general population of China."[1] We are glad to reply to his comments. First, it is already an accepted practice to screen microalbuminuria for individuals with diabetes [2]. It is also recommended to screen microalbuminuria for individuals who are at increased renal risk in some western countries [3]. Screening the general population for microalbuminuria is still under investigation [4]. The findings of our study statistically supported screening microalbuminuria for high-risk individuals in China. Because few studies have examined microalbuminuria in the Chinese population, it needs further large-scale investigations to confirm our findings before translating our suggestion into a screening guideline for the Chinese population. Furthermore, the long-term outcome and cost-effective should also be investigated for screening and subsequent treatment for microalbuminuria [5].

Second, it is manifested that the prevalence of microalbuminuria increases with age in both men and women [6]. In our study, the subjects were categorized into 6 groups in decades and the prevalence of microalbuminuria had significant increase in those $\geq$60 y compared with those <60 y. Although it has been demonstrated that the age is correlated with microalbuminuria, the age is not a diagnostic marker, but a risk marker for microalbuminuria. The age-cutoff value may be found through the receiver–operator characteristic curve according to the microalbuminuria status, but we suppose that the age-cutoff level is no significance for screening microalbuminuria because we would not judge the status of microalbuminuria by the age-cutoff value. This situation is common clinically, for example, the status with or without hypertension would not be judged by the age-cutoff value although age is correlated with hypertension. Moreover, a screening recommendation for microalbuminuria should root in the comprehensive evaluation of various factors, including risk factors, cost-effective and long-term outcome of treatment for microalbuminuria.

Third, there are various factors that can lead to the findings of MAU, including interference factors and risk factors. The interference factors (e.g., pregnancy, menstruation and so on) had been excluded and controlled in our study. Risk factors are interesting and explored because microalbuminuria has been recognized as an early sign of kidney damage. Standard risk factors to identify individuals at increased risk for kidney disease include diabetes, hypertension, older age, family history of kidney disease, and possibly race/ethnicity. The relationship of these risk factors with microalbuminuria had been examined in some studies. Metabolic syndrome was given increasing attention on account of its strong correlation with diabetes and angiocardiopathy. In our study, we focused on the relationship of microalbuminuria with the components of metabolic syndrome. Meanwhile, the secondary factors, including age, sex, smoking, drinking and so on, were also examined. Certainly, there may be other risk factors that increase the risk of microalbuminuria, further studies are recommended to investigate the relationship between microalbuminuria and these risk factors.

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BaoDe Chen
DaGan Yang
WeiYi Xu
BoYe
Yu Chen*
ZhenYuan Ni
Department of Laboratory Medicine and Clinical Center for Endocrine and Metabolic Diseases, The First Affiliated Hospital of Medical College, Zhejiang University, 79 QingChun Road, Hangzhou, 310003, Zhejiang Province, China
*Corresponding author. Tel./fax: +86 571 87236383.
E-mail address: chenyyu@sina.com (Y. Chen).

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