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The Author Response

Serum anti-Müllerian hormone levels and phenotypes of polycystic ovary syndrome

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Reply:

We recently published an original article entitled "Can high serum Anti-Müllerian hormone (AMH) levels predict the phenotypes of polycystic ovary syndrome (PCOS) and metabolic disturbances in PCOS patients?" [1]. There are numerous reports on high serum AMH levels in patients with PCOS, and their serum AMH levels are much variable. We were curious about the possibility that high serum AMH levels are correlated with the phenotypes of PCOS and metabolic derangement. We did not find any significant difference according to the phenotypes of PCOS in the non-obese group.

The correspondents pointed out that our result is different from a recent report from Sahmay et al. [2]. The study of Sahmay et al. [2] was a cross-sectional retrospective study and included 251 women with PCOS. They concluded that AMH levels seem to play a diagnostic role in determining the severity of PCOS. There are differences in this study population, who had over 75% hyperandrogenism (HA) and had a similar body mass index (BMI) among the groups. Our study group showed a relatively low percentage of HA (36%, 59/175) and significantly higher BMI in the PCOS patients who had 3 diagnostic criteria (anovulation+HA+polycystic morphology). PCOS women without HA are more common in Korea and are less likely to have metabolic dysfunction, insulin resistance, and elevated blood pressure [3]. PCOS without HA could be a mild phenotype of PCOS [3]. In another study, it was reported that Chinese women with PCOS showed lower rates of HA, hirsutism, obesity, and insulin resistance [4]. Furthermore, obese women have lower AMH levels compared to non-obese women [5]. Recently, it has been recommended that the follicle number per ovary for the diagnosis of polycystic ovary morphology be set at ≥ 25 [6]. The thresholds used to define follicle excess, particularly in diverse populations must be reconsidered. We suggest that ethnicity might contribute to variation. We value the comments of the correspondents and plan to perform a larger scale study to clarify these results.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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