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Correspondence

Endometrial thickness still presents a best reference to predict endometrial cancer



To the Editor,

We read with interest the report of Dr Kim and colleagues, entitled “Diagnostic utility of three-dimensional power Doppler ultrasound for postmenopausal bleeding,” which was published in the June issue of the *Taiwanese Journal of Obstetrics and Gynecology* (TJOG) this year [1]. The authors performed a prospective observational study between 2009 and 2012 to investigate 225 women complaining of postmenopausal bleeding. Results showed that endometrial thickness, endometrial volume, vascularization index, flow index, and vascularization flow index could be used to distinguish the benign from the malignant endometrial lesion; in addition, endometrial thickness and vascularization flow index could be further used to distinguish other benign from hyperplasia endometrial lesions. The authors concluded that the diagnostic usefulness of three-dimensional power Doppler ultrasound for endometrial thickness is promising in women with postmenopausal endometrial bleeding. Although the study was well designed, some questions are raised about this article. We hope that the authors would respond to our questions.

First, the authors might have made a typing error on page 223 of TJOG [1]. The phrase “the best predictive values were 7.5 mm for endometrial thickness and 2.275 for VFI” should be used in place of the original form the authors wrote—“the best predictive values were 7.5 mm for endometrial volume and 2.275 for VFI” [1].

Second, we are wondering why the endometrial thickness of women in the benign group was higher up to 8.70 mm of the mean (3.91 mm of the standard deviation)? If the mean thickness of the endometrium in the benign group was near 9 mm, it is not practical to use an endometrial thickness of 9.5 mm as a cutoff value to predict endometrial malignancy. The difference used to distinguish the benign from malignancy should be large enough to avoid bias of interoperators and intraoperators. We believe that this thickness might be overestimated, and it is possible that the authors enrolled women with endometrial polyp and/or endometrial hyperplasia into the benign group, which might significantly increase the estimate of the thickness of the endometrium. Therefore, could the authors provide the mean and standard deviation of the endometrial thickness after excluding endometrial polyp, endometrial hyperplasia, and endometrial cancers? In

addition, the classification of the endometrial hyperplasia could be found in everywhere [2,3], but the clinical significance might be much different. It is sometimes difficult to distinguish complex hyperplasia with atypia from cancer, suggesting that the authors should separate these lesions clearly, and re-analysis of their data is welcome.

Third, in terms of endometrial vascularization flow index, a similar argument was raised. The mean of endometrial vascularization flow index was 2.77 with a standard deviation of 2.23 in the benign group, however, the authors suggested that the cutoff value of the vascularization flow index was 3.765 and 2.275 to predict the endometrial malignancy and endometrial hyperplasia, respectively [1]. The overlapping range between the benign and malignancy might impede the value for clinical practice.

Our comments are not intended to dispute the excellent work of Dr Kim and colleagues. We made our comments, because we believe that better techniques and higher resolution of the transvaginal ultrasound as well as careful history taking are still the gold standard to investigate women with postmenopausal bleeding. Although many high-technology advances, such as that suggested by the authors (three-dimensional power Doppler ultrasound), will provide additional value to improve the diagnostic accuracy of various diseases (e.g., Dr Kim's report), and all are welcome, any benefit should be balanced with the expense, that is to say that cost-effectiveness should always be taken into consideration.

Conflicts of interest

The authors have no conflicts of interest relevant to this article.

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