



## Correspondence

## The birth weight of vaginal birth after cesarean section



Dear Editor,

We appreciated Dr. Tsai's comments [1] about our previous publication in the June issue of the *Taiwanese Journal of Obstetrics and Gynecology* last year [2]. We reported a 10-year experience of vaginal birth after cesarean section (VBAC) in the Taipei Veterans General Hospital and found that body weight of newborns might be a key factor to predict the successful VBAC in the current study [2]. Dr. Tsai had provided three comments, including (1) the different birth weight between the success and failure of VBAC is not clinically important, because Dr. Tsai thought that birth weight of newborns in both groups of our study is within the normal limits; (2) sex gender might influence the statistic analysis and data which were presented as "mean and standard deviation" might not be appropriate; (3) macrosomia was an important factor, contributing to the possibility of successful VBAC, and it should be compared between two groups [1].

First, we totally agree with the first comment of Dr. Tsai that the difference of birth weight between failure (3380 gm) and success (3069 gm) of VBAC might not be clinically important, although the statistical analysis was significant. In agreement with Dr. Tsai's comment, our data found that body weight of babies born from successful VBAC under the assistance of vacuum delivery was similar to that of babies failed to try labor of VBAC (3329 gm vs. 3380 gm) [2], suggesting that successful VBAC might be varied by different delivery modes or with/without assistance of instruments. Therefore, we would like to add one paragraph as a conclusion in our previous study. Since birth weight of babies born by assistance of vacuum procedure in the successful VBAC group was similar to that in the failure of try of VBAC, try of labor of VBAC could be offered to all eligible women and should not be discouraged in women without a significant clinical contraindication, such as a previous history of destructive and complicated procedure for the uterus, such as adenomyomectomy and so on [3,4].

Second, we totally agree with the importance of sex gender, which might be a confounding factor in our study. The birth weight of male baby is significantly different from that of female baby [5]. In addition, sex gender might be varied markedly in the Chinese zodiac year [6]. Finally, the Smith et al. model is potentially utilized within the UK to provide women with an informed choice when deciding on mode of delivery after a previous cesarean section, and this Smith et al. model also included fetal sex as one of the important parameters [7]. Therefore, we re-analyzed the sex gender of all newborns in the current study and found that there was no statistically significant difference of male gender between two groups (51.0% vs. 51.5%), suggesting that sex gender of newborns was not an independent factor for predicting the success of VBAC in our current study. We also agree with Dr. Tsai's opinion that percentile might be one of the best method to present the birth

weight of newborns, like our previous publication [5]. However, the use of mean  $\pm$  standard deviation to show the birth weight in the success and failure of trial of labor after previous cesarean section was found everywhere in the literature [8,9]. For example, the following best references for evaluation of factors affecting the success of VBAC derived from the MFMU (Maternal-Fetal Medicine Units) in 2005 and 2006, respectively also used the mean and standard deviation to compare the success and failure of VBAC [8,9], suggesting that this statistical method is acceptable for our previous study [2].

Third, there was no macrosomia (definition by over 4000 gm) in our previous study; therefore, we could not show the data. One study found that women with a history of second-stage labor dystocia were more likely to have successful VBAC compared with those with first-stage dystocia were [10]; however, the authors still concluded that a history of first-stage dystocia was not a reason to discourage women who attempt to have a VBAC [10], suggesting that the results of statistical analysis in the study cannot totally be considered as a disappointing issue for women who attempt to have a VBAC. That is why we would like to revise our conclusion as shown above.

Finally, we appreciated Dr. Tsai's interest and valuable comments.

## Conflicts of interest

The authors declare that they have no conflicts of interest related to the subject matter or materials discussed in this article.

## Acknowledgments

This article was supported by grants from the Ministry of Science and Technology, Executive Yuan (MOST 103-2314-B-010-043-MY3), and Taipei Veterans General Hospital (V105C-096; V106C-129; V106D23-001-MY2-1; and V106A-012). We further appreciate the Clinical Research Core Laboratory and the Medical Science & Technology Building of Taipei Veterans General Hospital for providing experimental space and facilities.

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