



Correspondence

Response to Correspondence: Marginal sinus placenta previa is a different entity in placenta previa: A retrospective study using magnetic resonance imaging

Keywords:

Placenta previa
Marginal sinus placenta previa
Magnetic resonance imaging

Dear Editor:

We thank you for the opportunity to address your comments, and we are obliged to reply to questions regarding our previous report [1]. Your question was why antenatal bleeding in patients with marginal sinus placenta previa developed less frequently in our report compared with a previous report by Hasegawa et al. [2].

We presume that the first reason for varying results was that the definition of marginal sinus was clearly different in the two studies as has been mentioned by you. In the study by Hasegawa et al., the definition of marginal sinus was “presence of an expanded marginal sinus with a hypochoic space showing flow at the placental margin.” Remarkably, the representative Fig. 2 showed an expanded marginal sinus at the internal os [2]. Furthermore, patients with a low-lying placenta were excluded. Thus, the marginal sinus in their study was expansive and over or just near the internal os. In our study, however, the definition of marginal sinus placenta previa was “placental marginal sinus just reaching the internal cervical os, and placental parenchyma might be >2 cm from the internal cervical os.” It did not matter whether the marginal sinus was expansive or not. Furthermore, 29.6% patients were diagnosed with a low-lying placenta, whereas no cases were diagnosed as total placenta previa before re-evaluation for marginal sinus placenta previa. Thus, patients with a marginal sinus completely over the internal os were not included, and patients with non-expansive marginal sinus were included in our study. We considered that expansive marginal sinus in the study by Hasegawa et al. had more blood flow. As a result, marginal sinuses with expansive blood flow and located nearer to or over the internal os were more frequently observed in the report by Hasegawa et al. than in our study. Therefore, we speculate that marginal sinus in their report bled more easily by a slight shearing stress such as slight uterine contraction. Similarly, Hasegawa et al. hypothesized that expanded marginal sinus showed retention of maternal blood flow, which collapsed occasionally due to uterine contraction, resulting in a large-volume hemorrhage during pregnancy [2].

Meanwhile, we considered that differences in medical devices for diagnosis of marginal sinus could also have led to the

differences between the two studies. In fact, no reports to examine which of the following two is an effective modality for detection of marginal sinus: magnetic resonance imaging (MRI) or ultrasound sonography (US). When vasa previa was discriminated from marginal sinus, MRI was particularly useful [3], possibly indicating that MRI could delineate the exact venous structure near the internal os more clearly than US. Therefore, our study using MRI could detect even small and non-expansive marginal sinuses not diagnosed with US, and marginal sinus placenta previa in our study might have had a lower risk of antenatal bleeding.

We thank Dr. Liangcheng for his interest in our report. As suggested by a previous report, we prospectively need to perform the same study using US for diagnosis.

Conflicts of interest

No conflicts of interest to declare.

References

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