Taiwanese Journal of Obstetrics & Gynecology 57 (2018) 616–617

Contents lists available at ScienceDirect

Taiwanese Journal of Obstetrics & Gynecology

journal homepage: www.tjog-online.com

Research Letter

Pregnancy with "mimicking placenta previa and large cervical leiomyoma" caused by incarcerated retroverted uterus

Hiroaki Soyama*, Morikazu Miyamoto, Hidenori Sasa, Masaya Nakatsuka, Masashi Yoshida, Masashi Takano, Kenichi Furuya

Department of Obstetrics and Gynecology, National Defense Medical College, Japan

ARTICLE INFO

Article history:
Accepted 2 November 2017

Dear Editor,

Persistent incarcerated retroverted uterus in the third trimester of pregnancy is extremely rare [1]. In addition, when complicated with cervical leiomyoma, placenta previa is difficult to diagnose because of the unclear cervical appearance [2]. Herein, we report a rare and interesting case complicated with incarcerated retroverted uterus, which misled us into diagnosing placenta previa and large cervical leiomyoma.

A 36-year-old nulliparous woman conceived naturally. In the first trimester of gestation, she had a 7-cm cervical leiomyoma, which caused the poor detection of the cervix on ultrasonography. She sometimes felt myoma-related pain but did not need any medications. At 32 weeks of gestation (WG), ultrasonographic examination revealed an unclear cervix but the placenta seemed to cover the internal os. At 32^{+4} WG, using magnetic resonance imaging (MRI), we detected her cervix and made a diagnosis of incarcerated retroverted uterus and total previa with large cervical leiomyoma (Fig. 1A). As the pain worsened owing to leiomyoma, she had repeated vomiting and frequent uterine contractions. At 35 WG, the pain, vomiting, and uterine contraction suddenly disappeared. Accordingly, transvaginal ultrasonography clearly revealed her cervix without placenta previa and cervical leiomyoma. MRI revealed the normal position of her placenta and the leiomyoma on the uterine body, which was diagnosed as cervical leiomyoma (Fig. 1B). Thus, we considered incarcerated retroverted uterus caused by the leiomyoma in the uterine body that mimicked placenta previa and cervical leiomyoma. At 37^{+5} WG, she underwent an elective cesarean section due to a breech presentation and delivered a male baby weighing 2766 g, with Apgar scores of 8 and 9 at 1 and 5 min, respectively. After the delivery, she had a normal clinical course.

The difficulty of diagnosing the present case was caused by three abnormal conditions, namely incarcerated retroverted uterus, placenta previa, and uterine body leiomyoma presenting as cervical leiomyoma. In pregnant women, all these factors are important for determining the risk of preterm labor, the decision on the delivery mode, and the management of massive postpartum hemorrhage. Thus, as early as possible in the gestational stage, the exact diagnosis should be determined for pregnant women with these factors [1–3].

Cervical leiomyomas and acoustical shadows cause the cervix to be poorly visualized on transvaginal ultrasonography [2]. MRI was superior to ultrasonography in accurately diagnosing incarcerated uterus [1,2]. In our case, ultrasonography was a poor study to detect the cervix and incarcerated retroverted uterus. However, one-time MRI could not detect her true condition. The incarcerated retroverted uterus was spontaneously restored before delivery. During this change, myoma in the uterine body appeared to be a cervical leiomyoma. The placenta was compressed and seemed to mimic placenta previa. Thus, for accurate diagnosis, these conditions should be understood clearly and successive examinations, such as ultrasonography and MRI, should be performed.

* Corresponding author. Department of Obstetrics and Gynecology, National Defense Medical College, 3-2 Namiki, Tokorozawa, Saitama, 359-8513, Japan. Fax: +81 4 2996 5210.
E-mail address: h.soyama55@gmail.com (H. Soyama).

https://doi.org/10.1016/j.tjog.2018.06.027
1028-4559/© 2018 Taiwan Association of Obstetrics & Gynecology. Publishing services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

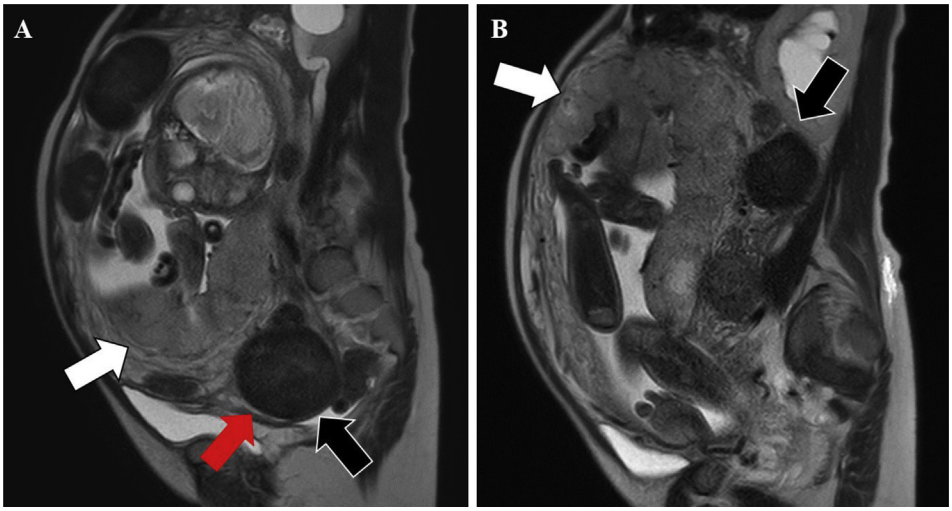

Fig. 1. A: Magnetic resonance imaging (MRI) scan at 32 weeks of gestation. The uterine cervix was detected (red arrow). The placenta was located on the lower uterine segment as if it was a placenta previa (white arrow). Uterine leiomyoma with a diameter of 7 cm appeared to be cervical leiomyoma (black arrow). B: MRI scan at 35 weeks of gestation showing that the incarcerated uterus had been restored.

Conflicts of interest

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

References

[1] Shnaekel KL, Wendel MP, Rabie NZ, Magann EF. Incarceration of the gravid uterus. Obstet Gynecol Surv 2016;71:613–9.

[2] Straub HL, Chohan L, Kilpatrick CC. Cervical and prolapsed submucosal leiomyomas complicating pregnancy. Obstet Gynecol Surv 2010;65:583–90.

[3] Baumfeld Y, Herskovitz R, Niv ZB, Mastrolia SA, Weintraub AY. Placenta associated pregnancy complications in pregnancies complicated with placenta previa. Taiwan J Obstet Gynecol 2017;56:331–5.