Cornual pregnancy is a challenging situation which may lead to massive hemoperitoneum and rupture of uterus. Cornual pregnancy can now be diagnosed early in many cases with transvaginal sonography and serum β-hCG assays, but definitive diagnosis could also be challenging. In this case, the patient was diagnosed with normal intrauterine pregnancy in the early stage, as well as with emergency bedside ultrasonography. MRI is an optional modality to improve the diagnosis, but limited to such emergency cases, CT was the preferred method to confirm the diagnosis and excluded hemorrhage of abdominal organs. 3D reconstruction techniques, such as multiplanar reconstruction, facilitate displaying the shape of uterine cavity and its relationship with amniotic sac. Although the present case did not apply contrast enhancement, iodine medium could be used under restricted indication to increase the contrast between the cavity and wall of uterus, and aid the imaging recognition and interpretation.

Cornual pregnancy may cause persistent uterine pain and bleeding, spontaneous abortion, ruptured uterus during delivery.
pregnancy. Deferential diagnosis in ultrasonography or radiography image should consider interstitial and Müllerian anomaly pregnancies. Interstitial pregnancies usually rupture following eight to 16 weeks of amenorrhea, while cornual pregnancies can sometimes be carried to term but within increased risk of abnormal placentation, and its consequence [2]. Laparoscopy or laparotomy may confirm the diagnosis. It is treated by cornual resection or even hysterectomy by laparotomy traditionally because of the delayed diagnosis; if future pregnancy is desired, fertility preservation surgery should be considered, while early diagnosis is crucial.

Placenta percreta defines villi that penetrate through the myometrium and to or through the serosa. It is encountered in an approximate ratio of 5% in placenta accreta syndromes [2], which are usually seen in women with a prior cesarean delivery and an associated previa. It will also lead to uterine rupture and could be life threatening. In the present case, placenta percreta may due to the previous induced abortion and abnormal placentation. There is evidence that women with accreta syndromes have an increased risk for recurrence, uterine rupture, hysterectomy, and previa in subsequent pregnancy [3]. The present authors totally resected the lesion before uterine construction to decrease the risk. When placenta percreta is the suspicious diagnosis by ultrasonography in the routine antenatal examination, MRI should also be applied for confirmation.

References


Corresponding Author:
QIANG YAO, M.D.
Department of Obstetrics and Gynecology
West China Second University Hospital
Sichuan University
610041 Sichuan (China)
e-mail: qiangyao@163.com